

Customer Satisfaction and Logistics Company Reputation through Supply Chain Disruption Management

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ABSTRAK

Operasi dan rantai pasok perusahaan logistik dapat terganggu oleh adanya berbagai kejadian yang tidak terencana atau tidak dapat diantisipasi. Tujuan penelitian ini adalah mengetahui gambaran SCDM, kepuasan konsumen, dan reputasi perusahaan logistik di Jakarta, serta mengkonfirmasi pengaruh SCDM secara langsung maupun tidak langsung terhadap kepuasan konsumen dan reputasi perusahaan logistik di Jakarta. Penelitian ini menggunakan metode penelitian kuantitatif. Penelitian ini menggunakan kuesioner dengan skala Likert dengan interval 1-9. Data dikumpulkan melalui kuesioner dan dianalisis menggunakan Partial Least Square (PLS). Temuan penelitian ini adalah (1) SCDM secara positif memengaruhi kepuasan konsumen; (2) SCDM memengaruhi reputasi perusahaan secara langsung dan melalui kepuasan konsumen; dan (3) kepuasan konsumen memengaruhi reputasi perusahaan. Perusahaan logistik dapat fokus pada aspek flexibility dalam SCDM untuk beradaptasi secara cepat terhadap perubahan dalam aktivitas permintaan atau penawaran. Dalam memperkuat kepuasan konsumen, perusahaan logistik perlu menekankan pada aspek communication khususnya dalam memastikan efektivitas komunikasi dengan konsumen agar tingkat kepuasan konsumen dapat dipertahankan bahkan ditingkatkan. Reputasi perusahaan logistik dapat fokus pada aspek innovation dengan pemanfaatan teknologi canggih seperti kecerdasan buatan dan otomatisasi untuk meningkatkan efisiensi dan akurasi manajemen rantai pasok secara keseluruhan.

ABSTRACT

Operations and supply chains of logistics companies can be disrupted by unplanned or unanticipated events. The purpose of this study is to determine the description of SCDM, customer satisfaction, and reputation of logistics companies in Jakarta, and to confirm the direct and indirect effects of SCDM on customer satisfaction and reputation of logistics companies in Jakarta. This research uses quantitative research methods. This study uses a questionnaire with a Likert scale with intervals of 1-9. Data were collected through questionnaires and analyzed using Partial Least Square (PLS). The findings of this study are (1) SCDM positively affects customer satisfaction; (2) SCDM affects corporate reputation directly and through customer satisfaction; and (3) customer satisfaction affects corporate reputation. Logistics companies can focus on the flexibility aspect of SCDM to adapt quickly to changes in demand or supply activities. In strengthening customer satisfaction, logistics companies need to emphasize the communication aspect, especially in ensuring the effectiveness of communication with consumers so that the level of customer satisfaction can be maintained and even improved. Reputation logistics companies can focus on the innovation aspect by utilizing advanced technologies such as artificial intelligence and automation to improve the efficiency and accuracy of overall supply chain management.

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INTRODUCTION

The supply chain in the industry today is an interconnected network of various suppliers in different locations, with several production plants and distribution centers. Multiple products from that place are then distributed to consumers. Logistics companies can operate supply chains under stable and predictable conditions. However, logistics companies' operations and supply chains can be disrupted by unplanned and unanticipated events (Macdonald and Corsi 2013).

The business world did not expect the emergence of the Covid-19 pandemic as a major disaster that has disrupted various supply chain activities as a whole, such as disruptions in transportation (Purwoko, Chotib, and Yola 2022), logistics operations, and supply chain networks (Dolgui and Ivanov 2021). Those incidents at least had a significant impact on business, consumers, and the global economy during and after the pandemic. Regardless of predictable and unforeseen events, logistics company management needs to ensure that supply chain operations can run smoothly and continuously strive to respond to various uncertainties, ensure supply security, reduce financial problems, overcome company reputation risks, maintain customer relations, and navigate market uncertainty (Saleheen and Habib 2022).

Logistics companies need to devise solutions for adjusting to supply chain dynamics and reduce disruption, which is often neglected at the planning and control stage (Ivanov, Mason, and Hartl 2016). In today's rapidly changing business environment, logistics companies face several challenges in managing supply chains, which are related to the need to adapt to supply chain dynamics, including changes in market demands, market trends, and technological developments (Pal and Altay 2023).

At the same time, logistics companies must also take appropriate steps to reduce disruption in their supply chains, which can be caused by a variety of reasons, including natural catastrophes, geopolitical events, and economic downturns (Fatorachian and Smith 2022). Unfortunately, many logistics companies are currently negligent in addressing these challenges at their operations' planning and control stages, so companies are vulnerable to unexpected disruptions that can significantly impact their business activities (Barreto, Amaral, and Pereira 2017). All of those needs to be overcome by the logistics company by developing a solid strategy and considering the supply chain's diversity and the potential dangers (Zhao, Ji, and Feng 2020). Some of the strategies commonly adopted by logistics companies today are investing in new technologies, collaborating with supply chain partners, and developing contingency plans to manage emerging disruptions (Cleary and McLarney 2021; Hohenstein 2022; Sudan and Taggar 2021). At least, by implementing the right strategy, logistics companies can better position themselves to adapt to changing market conditions and maintain a competitive advantage in related industries (Ozbekler and Ozturkoglu 2020).

This research focuses on supply chain disruption management (SCDM) as part of supply chain management (SCM). Referring to the theory, SCM can be seen as a function and an approach (Stadtler 2015). SCM works as a link that brings together the important parts of a company, making the workings of the company itself more organized and efficient. SCM can be explained as a way to seamlessly combine suppliers, manufacturers, storage, and point of sale. The goal is for goods to be made and delivered correctly, to the right place, and on time, while cutting overall costs. to satisfy consumers at a specified level (Chamekh, Hamdi, and Asmi 2017). In this

case, SCM can be described as the management of the movement of products and services from their starting point to their final destination of use, which involves coordinating the activities of various stakeholders, including suppliers, producers, distributors, and consumers.

Meanwhile, supply chain disruption management (SCDM) is part of SCM which specifically focuses on managing disruption in the supply chain due to the emergence of various factors that cannot be directly controlled (Fatorachian and Smith 2022). Like SCM, SCDM also involves managing the movement of products and services across the entire supply chain, which requires effective coordination between various stakeholders in the supply chain, namely suppliers, producers, distributors, and consumers (Sawik 2020). The goals of SCM and SCDM are the same, namely optimizing the supply chain to reduce costs, increase efficiency, maintain company reputation, and maximize customer satisfaction (Ivanov, Das, and Choi 2018).

Thus, it can be said that SCDM focuses exclusively on disruption management, while SCM focuses on daily supply chain management. The preparation and implementation of the supply chain are part of SCM, while SCDM involves planning and controlling contingencies (Gunessee and Subramanian 2020). SCM is concerned with optimizing the supply chain for efficiency and cost-effectiveness, while SCDM is concerned with minimizing the impact of disruptions on the supply chain and maintaining the continuity of operations. SCDM is indeed interrelated with SCM, especially when various special events arise and during the company's recovery during disaster mitigation (Macdonald and Corsi 2013).

The SCDM construct can be reflected in five dimensions: (1) risk management related to the ability to recognize and minimize potential dangers that could cause interruptions in the supply chain; (2) technological innovation and digitization, which includes supply chain visibility related to the ability to track inventory and shipments in real-time; (3) flexibility refers to the capacity to swiftly adjust to fluctuations in either the demand for or supply of goods or services; (4) collaboration, namely the ability to work together with suppliers, consumers, and other parties in managing disruption; and (5) resilience, namely the ability to recover quickly from disruptions and reduce their impact (Katsaliaki, Galetsi, and Kumar 2022; Pujawan and Bah 2022; Dolgui and Ivanov 2021).

The effectiveness of SCM and SCDM allows logistics companies to maintain and improve their reputation (Saleheen and Habib 2022). Through effective SCDM and the reliability of the company's reputation, logistics companies can fulfill their customer satisfaction (Fu et al. 2016). For logistics companies, customer satisfaction and reputation are two important factors contributing to business success. An effective SCDM can help logistics companies build a positive reputation regarding reliability, efficiency, and responsiveness (Gunessee and Subramanian 2020; Sudan and Taggar 2021). Effective disruption management and consistency in service by logistics companies can contribute to increasing customer satisfaction and building trust with partners in the supply chain, which in turn can enhance the company's positive reputation (Blom and Niemann 2022). Consumer satisfaction is considered an essential factor because it directly impacts company growth, revenue, and reputation (Panigrahi et al. 2018).

Referring to previous theories and research related to customer satisfaction in logistics companies, there are five dimensions to measure it (Hänninen and Smedlund 2018; Michalski and Montes-Botella 2021; Gunasekaran, Subramanian, and Papadopoulos 2017): (1) delivery performance, which includes on-time delivery and order accuracy expected by consumers

according to the quantity and specifications; (2) responsiveness, related to consumer expectations so that logistics companies can respond quickly and efficiently to consumer questions and complaints and resolve any problems that arise effectively; (3) communication, related to the effectiveness of communication with consumers and the availability of communication channels; (4) customization, related to consumer perceptions regarding the ability of logistics companies to customize their services to meet specific needs and preferences of consumers; and (5) overall value, which includes fulfilling customer satisfaction related to value for money (high-quality service at a reasonable price) and post-purchase support.

Thus, an effective SCDM can have a positive impact on efforts to increase customer satisfaction and reduce disruption to consumers so that it can lead to higher levels of customer satisfaction, which in turn can improve the company's reputation. An effective SCDM can also assist logistics companies in developing greater operational resilience and agility, which will enable the company to respond to disruptions quickly and minimize the impact on the operation to enhance the company's reputation in terms of reliability and efficiency (Altay and Pal 2022).

SCDM effectiveness involves collaboration and communication with many partners in the supply chain (Ramanathan & Gunasekaran, 2014). Logistics companies can establish transparent communication channels and work closely with these partners to manage disruptions reflecting a positive reputation as a trustworthy and reliable partner (Chen et al., 2019). Effective SCDM also involves close collaboration and communication with partners in the supply chain. By establishing transparent communication channels and working with partners to manage disruptions, a logistics company can enhance its reputation as a trustworthy and reliable partner (Min, Zacharia, and Smith 2019). Suppose a logistics company can effectively manage disruption. In that case, the company can diminish the possibility of supply chain interruptions and financial losses to improve its reputation as a financially stable and accountable company (Kwak et al. 2018). Effective disruption management in logistics is vital for operational smoothness, financial resilience, and reputation upkeep. Skillful handling of challenges like transportation delays and natural disasters minimizes supply chain interruptions, ensuring punctual deliveries and bolstering customer satisfaction. Furthermore, curtailing financial losses reinforces the company's financial robustness. A logistics provider renowned for adept disruption management fosters trust among stakeholders, nurturing loyalty, repeat business, and competitive advantage (Chen et al., 2019).

Referring to previous theories and research related to the reputation of logistics companies, there are six dimensions to measure company reputation, especially in logistics companies (Park 2017; Agyabeng-Mensah, Afum, and Baah 2022; Islam et al. 2021; Ghorbani et al. 2022), namely: (1) trust, which relates to the company's reputation for being honest, reliable, and trustworthy in building long-term relationships with consumers, employees, and other parties; (2) corporate social responsibility, which refers to the priority of corporate responsibility towards society and the environment; (3) innovation, which shows the company's standing as a pioneer or trailblazer in innovation and driving forward to attract the best talent and help the company stay ahead of competitors; (4) quality, which of course is related to the company's consistency in producing quality products and services that lead to consumer loyalty; (5) customer service, which reflects the company's reputation for providing friendly customer service; and (6) financial performance, which is related to the company's reputation in terms of financial stability, profitability, and growth to attract more investors and other stakeholders.

Based on the description of the relationship between Supply Chain Disruption Management (SCDM), customer satisfaction, and logistics company reputation, the problems in this study can be formulated as follows: (1) what is the description of SCDM, customer satisfaction, and logistics company reputation in Jakarta; (2) what is the effect of SCDM on customer satisfaction in logistics companies in Jakarta; (3) how does SCDM directly influence company reputation and through customer satisfaction at logistics companies in Jakarta. Thus, the purpose of this study is to determine the description and influence of SCDM on customer satisfaction, and the reputation of logistics companies in Jakarta. The hypotheses proposed are: (1) SCDM has an effect on customer satisfaction in logistics companies; (2) SCDM affects the storage of logistics companies directly or through customer satisfaction; and (3) customer satisfaction affects the reputation of logistics companies.

Literature Review

Customer Satisfaction

Customer satisfaction is how content a customer feels after evaluating what they received against their initial expectations (Siwi & Nawawi, 2023). When customers are content with the value offered by a product or service, they're highly likely to remain loyal customers for an extended period. Customers will feel comfortable with what is offered and even customers will buy more than needed (Sapada, 2021). According to (Isa et al., 2019) basically, three types of customer groups are known in modern quality systems, namely: a) Internal Customers: These individuals work within the company and impact job or company performance. b) Intermediate Customers: They serve as intermediaries and aren't end users of the product. c) External Customers: These are buyers or end users of products, often termed real customers, who pay to use the products manufactured.

Logistics Company Reputation

A logistics company is one type of company that has an important role in shipping goods and running a business efficiently. In this era of globalization, where the delivery of goods is becoming increasingly complex and growing rapidly, understanding the definition of a logistics company is very relevant for you to know (Anwar, 2013). A logistics company's reputation refers to the image or perception that customers, business partners, and the general public have of a company's performance and integrity in managing and optimizing logistics processes. A good reputation can help increase customer trust and loyalty and strengthen a company's position in the market.

Supply Chain Disruption Management

Supply chain disruption management refers to efforts to identify, prevent, and address disruptions or risks that may affect the efficient movement of goods and services throughout the supply chain. It involves coordination between various parties in the supply chain, including suppliers, manufacturers, distributors, and customers, as well as the use of appropriate technology and risk management strategies (Bantacut, 2018). The goal of supply chain disruption management is to minimize the negative impact of disruptions on company performance and customer satisfaction. The main activity in supply chain management is procurement management, which is an activity to provide

inputs or the need for raw materials and components needed in the operational functions involved in manufacturing within the company (Suwandi et al., 2020). Procurement management in the non-manufacturing sphere is slightly different, for example in the retail sector procurement activities are activities to purchase goods or merchandise for resale by stores. And some companies that have complex production activities sometimes in the process of procuring goods also need to outsource consulting services or logistics and warehousing management to manage finished or semi-finished goods (Kusmantini et al., 2021).

The significance of this research lies in its exploration of the interplay between customer satisfaction, logistics company reputation, and supply chain disruption management. Customer satisfaction, as defined by Siwi & Nawawi (2023), is pivotal for fostering loyalty and encouraging repeat purchases. Sapada (2021) highlights how satisfied customers tend to buy more than necessary, underscoring the importance of meeting or exceeding customer expectations. Understanding the various customer groups outlined by Isa et al. (2019) further emphasizes the multifaceted nature of customer satisfaction.

Logistics company reputation, as elucidated by Anwar (2013), is essential in shaping customer perceptions and fostering trust. A positive reputation not only enhances customer loyalty but also strengthens the company's market position. Therefore, investigating the relationship between customer satisfaction and logistics company reputation can provide insights into how service quality impacts brand perception and customer loyalty.

Furthermore, supply chain disruption management, as discussed by Bantacut (2018), is crucial for ensuring the smooth flow of goods and services. Effective management of disruptions minimizes their negative impact on company performance and, consequently, customer satisfaction. Understanding the intricate processes involved in procurement management, as highlighted by Suwandi et al. (2020), is essential for mitigating risks and maintaining operational efficiency within the supply chain.

Overall, this research delves into the complex dynamics between customer satisfaction, logistics company reputation, and supply chain disruption management, shedding light on how these factors intersect to influence overall business performance and customer loyalty in the context of logistics distribution companies in Jakarta.

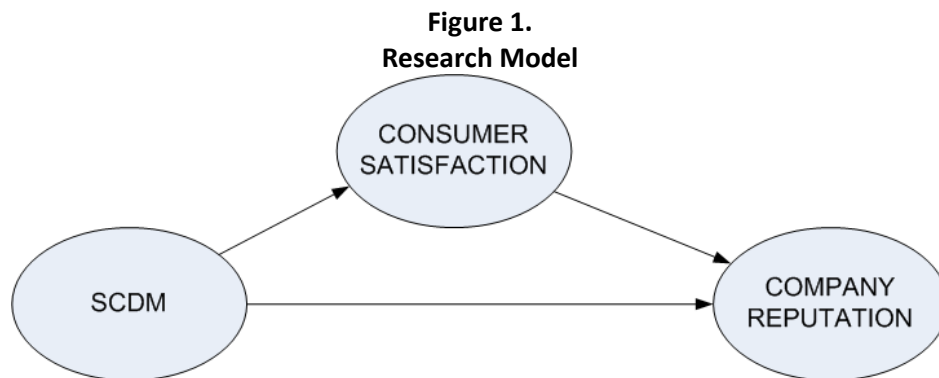
RESEARCH METHODS

Partial Least Squares (PLS) analysis is used in this research to test hypotheses and identify relationships between the variables studied. Partial Least Squares (PLS) analysis is a statistical method for understanding the relationship between two sets of variables: independent variables (X) and dependent variables (Y). It's commonly used in multivariate data analysis, especially in regression and structural modeling, to develop accurate predictive models. PLS operates on the principal component principle, seeking components that best explain variance while considering the X-Y relationship. Its procedure includes structural modeling, principal component extraction, and model evaluation. PLS can handle latent variables, allowing for modeling complex relationships. Validation techniques like cross-validation ensure reliability. Interpretation involves understanding X's impact on Y and vice versa. Despite advantages like

handling large datasets, PLS has limitations in parameter estimation. Careful consideration of these aspects enables accurate predictions.

The loci of research were carried out at logistics distribution companies in Jakarta that carried out logistics activities. The quantitative approach employs a questionnaire as the primary tool for data collection (Sugiyono, 2016). Once collected and encoded, the dataset undergoes analysis. Within this study, each variable within the model is described using a descriptive method, aiming to understand its characteristics, while the verification method explores the relationships between these variables (Murjani 2022). The study's design is descriptive, aiming to accurately portray the characteristics of the variables and their connections to the phenomena under investigation. The verification hypothesis in this study will be answered by surveys included in exploratory research to help describe the causal relationship between the variables studied as a whole and individually.

Based on the hypotheses proposed, this research model can be presented in Figure 1.



Source: Researcher (2023)

This model examines three variables, as shown in Figure 1. First, SCDM is an exogenous variable with the dimensions of risk management, technological innovation, digitization, flexibility, collaboration, and resilience. Second is Consumer Satisfaction (CS) as a mediating variable with dimensions of delivery performance, responsiveness, communication, customization, and overall value. The third is Corporate Reputation (CR), an endogenous variable reflected in trustworthiness, corporate social responsibility (CSR), innovation, quality, customer service, and financial performance.

The population in this study were distribution logistics companies that provide goods delivery services to retailers in Jakarta, totaling 274 companies registered with the Indonesian Logistics & Forwarders Association (ALFI) and active in carrying out activities, especially distribution activities in Jakarta. From the total population, samples were taken by proportional random sampling so that 160 company samples were obtained. Consumers in this research are supermarkets, retail stores, or department stores that require merchandise supplies from logistics companies. This study used a questionnaire with a Likert scale with intervals of 1-9 to make it easier for respondents to give a subjective assessment of the dimensions and indicators of the variables used in this study. Before being distributed to the field, the instrument was tested for validity and reliability.

The data analysis used descriptive analysis and hypothesis testing (verification). Descriptive analysis in this study provides a more in-depth discussion of the variables used. Descriptive analysis will refer to the average value of respondents' responses to variables divided into five answer categories (from a minimum average score of 1 and a maximum of 9). In this study, verification analysis is employed to address hypotheses regarding the connections and impact among the variables. These relationships will be examined using Partial Least Squares with assistance from the SmartPLS application.

RESULTS AND DISCUSSIONS

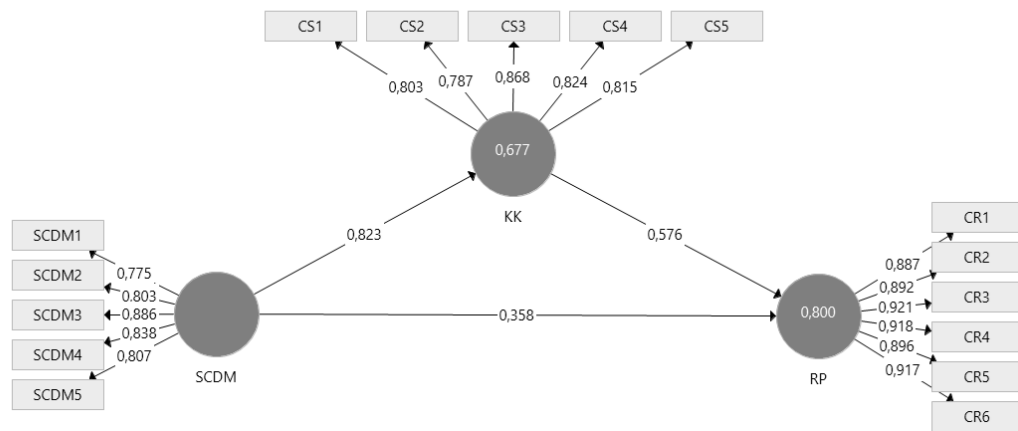
SmartPLS output reports the estimation from the measurement model and the structural model based on variable modeling and analysis. This model involves the influence of SCDM on CS, SCDM on CR (directly and through CS), and CS on CR, as presented in Figure 2.

Based on the output of the estimation model, the path coefficient of SCDM → CS is 0.823, SCDM → CR = 0.357, and CS → CR = 0.578. The effect of SCDM on CR through CS is 0.474. Thus, the equations in the model are:

$$CS = 0,823 SCDM, \text{ with } R^2 = 0,677 \quad (1)$$

$$CR = 0,358 SCDM + 0,576 CS, \text{ with } R^2 = 0,800 \quad (2)$$

Figure 2.
Overall Estimation Model



Source: Researcher (2023)

Equation (1) shows that the coefficient of determination or R^2 of SCDM to CS is 0.677, which means that supply chain disruption management can explain 67.7% of the variance in customer satisfaction. Equation (2) shows that the value of $R^2 = 0.800$ means that supply chain disruption management and customer satisfaction can explain 80.0% of the variance in the logistics company's reputation.

Table 2 presents the outer model matrix explaining each construct's loading values.

Table 2.
Outer loadings matrix for each construct

	CS	CR	SCDM
CS1	0.803		
CS2	0.787		
CS3	0.868		
CS4	0.824		
CS5	0.815		
CR1		0.887	
CR2		0.892	
CR3		0.921	
CR4		0.918	
CR5		0.896	
CR6		0.917	
SCDM1			0.775
SCDM2			0.803
SCDM3			0.886
SCDM4			0.838
SCDM5			0.807

Source: SmartPLS Result 2023

Referring to the PLS quality criteria, all variables' Cronbach's Alpha (CA) value is greater than 0.7, and the composite reliability (CR) value is greater than 0.7. The Average Variance Extracted (AVE) value of all latent variables is greater than 0.5 (see Table 3). These values indicate that all constructs are reliable and valid, consistent with the reliability and validity of the constructs.

Table 3.
Construct's Reliability and Validity

	Cronbach's Alpha	Composite Reliability	AVE
CS	0.878	0.911	0.672
CR	0.956	0.964	0.819
SCDM	0.880	0.913	0.677

Source: SmartPLS Result 2023

To estimate the effect size, the value of f-squared (f^2) is used to measure the practical significance concerning the effect size. This effect size value indicates that the local effect size of each construct in the context of a multivariate regression model is significant. Table 4 reports the effect size values of each pathway.

Table 4.
Interpretation of f^2

Construct	CS	Effect	CR	Effect
SCDM	2,100	Substantial	0,207	Moderate
CS			0,536	Substantial

Source: SmartPLS Result 2023

Table 5 presents the recapitulation of the results of hypothesis testing using bootstrapping.

Table 5.
Recapitulation of the results of hypotheses testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
CS → CR	0,576	0,572	0,064	8,947	0,000*
SCDM → CS	0,823	0,824	0,031	26,841	0,000*
SCDM → CR	0,358	0,362	0,062	5,802	0,000*

Source: SmartPLS Result 2023

Note: * $p < 0,05$

The output reports the results of the structural equation model using SmartPLS.

Based on the t-statistics and p-values, all three path coefficients appear to be significant. The path coefficient from "KK" to "RP" has a t-statistic of 8.947 and a p-value of 0.000, the path coefficient from "SCDM" to "KK" has a t-statistic of 26.841 and a p-value of 0.000, and the path coefficient from "SCDM" to "RP" has a t-statistic of 5.802 and a p-value of 0.000. In summary, the results suggest that all three path coefficients are statistically significant, indicating that there are significant relationships between the constructs "KK," "SCDM," and "RP".

Based on the results of testing the hypothesis, the SCDM hypothesis can be accepted to influence consumer satisfaction. In the corporate reputation model, this construct is significantly influenced by SCDM and customer satisfaction. In this model, customer satisfaction can mediate the effect of SCDM on the company's reputation. The nature of this mediating effect is *full mediation* because the indirect effect of SCDM on CR is greater than its direct effect. So, SCDM is better if it focuses on customer satisfaction first to improve the company's reputation.

Discussion

The research results prove that SCDM has a significant effect on customer satisfaction. This finding aligns with the outcomes reported in earlier studies, which confirmed the significance of the effect of SCDM on customer satisfaction in logistics companies (Blom and Niemann 2022; Ivanov, Das, and Choi 2018). The emergence of disruptions needs to be quickly anticipated by SCDM because, if left unchecked, it will cause delays in product delivery, deficiencies, and other problems that can make consumers feel frustrated and dissatisfied (Scheidt and Chung 2019).

The most dominant dimension in SCDM is flexibility, as the capability of logistics firms to swiftly adapt to fluctuations in production volumes, simultaneously producing various products or changing quickly from one product to another so that they can be more competitive (Siagian, Tarigan, and Jie 2021). One of the important aspects of SCDM is risk management, which in this case is in the weakest position, especially in risk assessment. Failure to identify and assess risks in the supply chain will hurt the implementation of SCDM as a whole. (Sawik 2020). Therefore, planning in risk management needs to go hand in hand with planning in SCDM and, in doing so, deploying plans to lessen the effects of unexpected incidents that interrupt the smooth flow of goods, services, and information across the entire supply chain.

To effectively handle supply chain disruptions and minimize their impact on customer satisfaction, logistics firms should strengthen their supply chains by diversifying their range of

suppliers, increasing inventory levels, and developing contingency plans related to potential disruptions (Cleary and McLarney 2021; Hohenstein 2022; Sudan and Taggar 2021). When supply chain disruptions arise, logistics companies need to have clear and timely communications with consumers, be transparent about the situation, provide regular updates, and be willing to answer any questions or concerns that consumers may have (Scheidt and Chung 2019).

Through SCDM, logistics companies can also prioritize customers who are important to the company when a disruption occurs, especially consumers who are most affected by major disruptions such as the emergence of the formerly Covid-19 pandemic (Butt 2021). That way, consumer loyalty can be maintained, and the impact of disruption on consumer dissatisfaction can at least be reduced (Brandtner et al. 2021). Consumer satisfaction can be maintained by offering alternative products or services during disruptions to meet consumer needs when companies try to solve these disruption problems with SCDM (Modgil et al. 2021).

SCDM can direct the level of customer satisfaction and the increase in satisfaction experienced by consumers after interacting with logistics companies. Thus, consumers tend to be loyal and try to provide recommendations to other consumers regarding logistics company products or services, and what is certain is that consumers will continue to make repeat purchases. (Burity 2021). If consumers are unsatisfied, logistics companies will struggle to keep current customers satisfied and entice new ones to join, leading to decreased revenue and profitability (Pettit, Croxton, and Fiksel 2019). On the other hand, a strong company reputation can help build trust and belief in the brand, which in turn can contribute to customer satisfaction and loyalty on an ongoing basis (Chen 2018). In essence, the influence of SDCM on customer satisfaction needs to focus on managing disrupted flows in the supply chain that lead to consumer interests (Sawik 2020).

The most dominant dimension in the construct of consumer satisfaction is communication, while the weakest is responsiveness. Under these conditions, customer satisfaction from the logistics company will appear in the effectiveness of the communication that occurs between the company and its customers. The more effective the communication, the higher the level of customer satisfaction. Effective communication is indeed important in logistics companies because accurate and timely communication can have a significant impact on customer satisfaction. Logistics companies need to constantly ensure the effectiveness of communication with their customers to maintain a level of customer satisfaction (Mariia et al. 2020).

The research results also prove that SCDM has a significant effect on the reputation of logistics companies. This condition indicates that if the logistics company's SCDM is running effectively, then companies with certain strategies need to overcome supply chain disruptions to prevent delays, cost increases, consumer dissatisfaction, and decreased company reputation. These findings confirm various previous studies regarding the importance of SCDM in logistics companies in maintaining and even increasing the company's reputation (Park 2017; Blom and Niemann 2022; Saleheen and Habib 2022).

The most prominent dimension of the logistics company's reputation is innovation. The company's reputation can be seen from the existence of a culture and innovative practices in enhancing its reputation (Agyabeng-Mensah, Afum, and Baah 2022). A logistics company with a strong reputation is one that consistently keeps its promises to customers, vendors, and others, including meeting delivery deadlines, providing accurate tracking information, and offering responsive customer service. A company's reputation can also be enhanced by its commitment to ethical and sustainable practices, such as promoting fair employment practices throughout its supply chain (Villena and Gioia 2020). Innovation in logistics can take many forms, from using

advanced technologies such as artificial intelligence and automation to increase efficiency and accuracy to developing new delivery methods or services. Companies that prioritize innovation are often able to stay ahead of the competition and adapt to changing consumer needs and industry trends (Dash et al. 2019).

So, to build a strong reputation and develop a culture of innovation, logistics companies should be able to focus on forging strong relationships with consumers and suppliers, invest in employee training and development, and actively seek opportunities to collaborate with other companies and organizations in the industry. Companies must also be willing to take predictable risks and experiment with new approaches while maintaining a commitment to quality and reliability in their core business (Kwak et al. 2018).

The findings highlight a strong correlation between SCDM, customer satisfaction, and the reputation of the logistics company. Effectively handling supply chain disruptions positively influences customer satisfaction, consequently impacting the reputation of the logistics company. In this case, the consumer expects the shipment to arrive on time and in good condition. Through an effective SCDM, disruptions related to predictable events (delays, lost goods during delivery, or damage during transit) can be anticipated immediately.

Therefore, logistics companies need to prioritize supply chain disruption management to maintain their company's reputation. Through investing in contingency planning, monitoring supply chain risks, and developing strong relationships with suppliers and consumers, logistics companies can build a reputation for reliability and responsiveness, along with increased customer satisfaction and loyalty. Again, to manage supply chain disruptions effectively, a logistics company must have a contingency plan that outlines how the company plans to deal with unforeseen events, including identifying alternative suppliers, transportation routes, and warehouses. By implementing this plan, logistics companies can quickly adapt to disruptions and minimize the impact on the company's operations and its customers.

It can be said that consumer satisfaction and corporate reputation are closely related, and customer satisfaction has a significant impact on corporate reputation. Logistics companies with a reputation for displaying high-quality service and products tend to have more satisfied customers than those with a reputation for poor quality or unreliable service. Therefore, although customer satisfaction and company reputation are important factors for logistics companies to consider, customer satisfaction should be given higher priority to maintain a strong customer base and promote business growth.

CONCLUSIONS

This study has explained the relationship between SCDM, customer satisfaction, and logistics company reputation in Jakarta and confirmed the effect of SCDM on customer satisfaction and logistics company reputation. The reputation of logistics companies in Jakarta can be boosted by increasing customer satisfaction through SCDM strengthening carried out by logistics companies in stages or all at once in anticipation of disruptions. The results show that there is a close relationship between SCDM, customer satisfaction, and logistics company reputation. The ability to manage supply chain disruptions leads to customer satisfaction and, in turn, to the reputation a logistics company can sustainably maintain. Logistics companies can focus on flexibility in SCDM to swiftly adjust to shifts in supply or demand dynamics. In strengthening customer satisfaction, logistics companies need to emphasize the communication aspect, especially in ensuring the effectiveness of communication with consumers so that the level of customer satisfaction can be maintained and even increased. The reputation of a logistics

company can focus on aspects of innovation by utilizing advanced technology such as artificial intelligence and automation to increase the efficiency and accuracy of overall supply chain management. Logistics companies that can manage supply chain disruptions effectively can take advantage of relationships with consumers to increase customer satisfaction to achieve the expected company reputation.

Limitations of this research include limited generalization to logistics companies in Jakarta, limitations in variable coverage, potential bias from the research methods used, and limitations in establishing definite cause-and-effect relationships. For further development, this study can detail the SCDM strategy, analyze the relationship between variables in depth, and test hypotheses with more comprehensive methods. Additionally, building predictive models and field studies can provide practical insights, while focus group discussions with stakeholders can enrich understanding of their expectations. Focusing on innovative technology solutions is also important to improve the efficiency and accuracy of overall supply chain management. Following these suggestions can provide more concrete guidance for logistics companies to improve their performance in supply chain disruption management.

REFERENCES

- Agyabeng-Mensah, Yaw, Ebenezer Afum, and Charles Baah. 2022. "Green Corporate Reputation and Innovation: The Role of Non-Supply Chain Learning and Green Supply Chain Knowledge." *International Journal of Emerging Markets* ahead-of-print (ahead-of-print). <https://doi.org/10.1108/IJOEM-08-2021-1277>.
- Altay, Nezih, and Raktim Pal. 2022. "Coping in Supply Chains: A Conceptual Framework for Disruption Management." *The International Journal of Logistics Management* 34 (2): 261–79. <https://doi.org/10.1108/IJLM-05-2021-0305>.
- Anwar, S. N. (2013). *Manajemen Rantai Pasokan (Supply Chain Management): Konsep dan Hakikat*.
- Bantacut, T. (2018). LOGISTIK 4.0 dalam Manajemen Rantai Pasok Beras Perum BULOG. *Jurnal Pangan*, 27(2), 141-154.
- Barreto, L., A. Amaral, and T. Pereira. 2017. "Industry 4.0 Implications in Logistics: An Overview." *Procedia Manufacturing*, Manufacturing Engineering Society International Conference 2017, MESIC 2017, 28-30 June 2017, Vigo (Pontevedra), Spain, 13 (January): 1245–52. <https://doi.org/10.1016/j.promfg.2017.09.045>.
- Blom, Tanja, and Wesley Niemann. 2022. "Managing Reputational Risk during Supply Chain Disruption Recovery: A Triadic Logistics Outsourcing Perspective." *Journal of Transport and Supply Chain Management* 16 (0): 13. <https://doi.org/10.4102/jtscm.v16i0.623>.
- Brandtner, Patrick, Farzaneh Darbanian, Taha Falatouri, and Chibuzor Udokwu. 2021. "Impact of COVID-19 on the Customer End of Retail Supply Chains: A Big Data Analysis of Consumer Satisfaction." *Sustainability* 13 (3): 1464. <https://doi.org/10.3390/su13031464>.
- Burity, Jasminea. 2021. "The Importance of Logistics Efficiency on Customer Satisfaction." *Journal of Marketing Development and Competitiveness* 15 (3): 26–35.
- Butt, Atif Saleem. 2021. "Strategies to Mitigate the Impact of COVID-19 on Supply Chain Disruptions: A Multiple Case Analysis of Buyers and Distributors." *The International Journal of Logistics Management* ahead-of-print (ahead-of-print). <https://doi.org/10.1108/IJLM-11-2020-0455>.
- Chamekh, Marwa, Mohamed Hamdi, and Sadok El Asmi. 2017. "A New Architecture for Supply-Chain Management." In *2017 14th IEEE Annual Consumer Communications & Networking Conference (CCNC)*, 77–82. <https://doi.org/10.1109/CCNC.2017.7983085>.

- Chen, Chih-Jou. 2018. "Developing a Model for Supply Chain Agility and Innovativeness to Enhance Firms' Competitive Advantage." *Management Decision* 57 (7): 1511–34. <https://doi.org/10.1108/MD-12-2017-1236>.
- Chen, H. Y., Das, A., & Ivanov, D. (2019). Building resilience and managing post-disruption supply chain recovery: Lessons from the information and communication technology industry. *International Journal of Information Management*, 49, 330-342.
- Cleary, Shannon, and Carolan McLarney. 2021. "How Logistics Is Evolving: Why It Is Appropriate for Today and the Next Decade." *IUP Journal of Supply Chain Management* 18 (1): 7–24.
- Dash, Rupa, Mark McMurtrey, Carl Rebman, and Upendra K. Kar. 2019. "Application of Artificial Intelligence in Automation of Supply Chain Management." *Journal of Strategic Innovation and Sustainability* 14 (3): 43–53.
- Dolgui, Alexandre, and Dmitry Ivanov. 2021. "Ripple Effect and Supply Chain Disruption Management: New Trends and Research Directions." *International Journal of Production Research* 59 (1): 102–9. <https://doi.org/10.1080/00207543.2021.1840148>.
- Fatorachian, Hajar, and Chase Smith. 2022. "Impact of CPS on Enhancing Supply Chain Resilience, with a Focus on Solutions to Pandemic Challenges." In *Cyber-Physical Systems*. CRC Press.
- Fu, Dongfei, Clara M. Ionescu, El-Houssaine Aghezaf, and Robin De Keyser. 2016. "A Constrained EPSAC Approach to Inventory Control for a Benchmark Supply Chain System." *International Journal of Production Research* 54 (1): 232–50. <https://doi.org/10.1080/00207543.2015.1070214>.
- Ghorbani, Mohammad, Michele Acciaro, Sandra Transchel, and Pierre Cariou. 2022. "Strategic Alliances in Container Shipping: A Review of the Literature and Future Research Agenda." *Maritime Economics & Logistics* 24 (2): 439–65. <https://doi.org/10.1057/s41278-021-00205-7>.
- Gunasekaran, Angappa, Nachiappan Subramanian, and Thanos Papadopoulos. 2017. "Information Technology for Competitive Advantage within Logistics and Supply Chains: A Review." *Transportation Research Part E: Logistics and Transportation Review* 99 (March): 14–33. <https://doi.org/10.1016/j.tre.2016.12.008>.
- Gunessee, Saileshsingh, and Nachiappan Subramanian. 2020. "Ambiguity and Its Coping Mechanisms in Supply Chains Lessons from the Covid-19 Pandemic and Natural Disasters." *International Journal of Operations & Production Management* 40 (7/8): 1201–23. <https://doi.org/10.1108/IJOPM-07-2019-0530>.
- Hänninen, Mikko, and Anssi Smedlund. 2018. "On Retail Digital Platforms Suppliers Have to Become Responsive Customer Service Organizations." *Strategy & Leadership* 47 (1): 37–43. <https://doi.org/10.1108/SL-04-2018-0036>.
- Hohenstein, Nils-Ole. 2022. "Supply Chain Risk Management in the COVID-19 Pandemic: Strategies and Empirical Lessons for Improving Global Logistics Service Providers' Performance." *The International Journal of Logistics Management* 33 (4): 1336–65. <https://doi.org/10.1108/IJLM-02-2021-0109>.
- Isa, M., Lubis, H. A., & Chaniago, M. (2019). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Penumpang Menggunakan Jasa Angkutan Penyeberangan PT. ASDP Indonesia Ferry (Persero) Cabang Sibolga. *Jesya (Jurnal Ekonomi Dan Ekonomi Syariah)*, 2(2), 164-181.
- Islam, Tahir, Rauf Islam, Abdul Hameed Pitafi, Liang Xiaobei, Mahmood Rehmani, Muhammad Irfan, and Muhammad Shujaat Mubarak. 2021. "The Impact of Corporate Social Responsibility on Customer Loyalty: The Mediating Role of Corporate Reputation, Customer Satisfaction, and Trust." *Sustainable Production and Consumption* 25 (January): 123–35. <https://doi.org/10.1016/j.spc.2020.07.019>.

- Ivanov, Dmitry, Ajay Das, and Tsan-Ming Choi. 2018. "New Flexibility Drivers for Manufacturing, Supply Chain and Service Operations." *International Journal of Production Research* 56 (10): 3359–68. <https://doi.org/10.1080/00207543.2018.1457813>.
- Ivanov, Dmitry, Scott J. Mason, and Richard Hartl. 2016. "Supply Chain Dynamics, Control and Disruption Management." *International Journal of Production Research* 54 (1): 1–7. <https://doi.org/10.1080/00207543.2015.1114186>.
- Katsaliaki, K., P. Galetsi, and S. Kumar. 2022. "Supply Chain Disruptions and Resilience: A Major Review and Future Research Agenda." *Annals of Operations Research* 319 (1): 965–1002. <https://doi.org/10.1007/s10479-020-03912-1>.
- Kusmantini, T., Guritno, A. D., & Rustamaji, H. C. (2021). Manajemen Risiko Rantai Pasok.
- Kwak, Dong-Wook, Vasco Sanchez Rodrigues, Robert Mason, Stephen Pettit, and Anthony Beresford. 2018. "Risk Interaction Identification in International Supply Chain Logistics: Developing a Holistic Model." *International Journal of Operations & Production Management* 38 (2): 372–89. <https://doi.org/10.1108/IJOPM-03-2016-0121>.
- Macdonald, John R., and Thomas M. Corsi. 2013. "Supply Chain Disruption Management: Severe Events, Recovery, and Performance." *Journal of Business Logistics* 34 (4): 270–88. <https://doi.org/10.1111/jbl.12026>.
- Mariia, Hryhorak, Trushkina Natalia, Tadeusz Popkowski, and Molchanova Kateryna. 2020. "Digital Transformations of Logistics Customer Service Business Models." *Intellectualization of Logistics and Supply Chain Management*, no. 1: 57–75.
- Michalski, Marek, and José Luis Montes-Botella. 2021. "Logistics Service Quality in an Emergent Market in Latin America." *The International Journal of Logistics Management* 33 (1): 79–101. <https://doi.org/10.1108/IJLM-11-2020-0433>.
- Min, Soonhong, Zach G. Zacharia, and Carlo D. Smith. 2019. "Defining Supply Chain Management: In the Past, Present, and Future." *Journal of Business Logistics* 40 (1): 44–55. <https://doi.org/10.1111/jbl.12201>.
- Modgil, Sachin, Shivam Gupta, Rébecca Stekelorum, and Issam Laguir. 2021. "AI Technologies and Their Impact on Supply Chain Resilience during COVID-19." *International Journal of Physical Distribution & Logistics Management* 52 (2): 130–49. <https://doi.org/10.1108/IJPDLM-12-2020-0434>.
- Murjani, M. (2022). Prosedur Penelitian Kuantitatif. Cross-border, 5(1), 687-713.
- Ozbekler, Turkan Muge, and Yucel Ozturkoglu. 2020. "Analysing the Importance of Sustainability-Oriented Service Quality in Competition Environment." *Business Strategy and the Environment* 29 (3): 1504–16. <https://doi.org/10.1002/bse.2449>.
- Pal, Raktim, and Nezh Altay. 2023. "The Missing Link in Disruption Management Research: Coping." *Operations Management Research* 16 (1): 433–49. <https://doi.org/10.1007/s12063-022-00282-8>.
- Panigrahi, Shrikant Krupasindhu, Foo Weng Kar, Tan Ai Fen, Lam Kah Hoe, and Melvin Wong. 2018. "A Strategic Initiative for Successful Reverse Logistics Management in Retail Industry." *Global Business Review* 19 (3_suppl): S151–75.
- Park, SeHyun. 2017. "Corporate Social Responsibility, Visibility, Reputation and Financial Performance: Empirical Analysis on the Moderating and Mediating Variables from Korea." *Social Responsibility Journal* 13 (4): 856–71. <https://doi.org/10.1108/SRJ-01-2017-0012>.
- Pettit, Timothy J., Keely L. Croxton, and Joseph Fiksel. 2019. "The Evolution of Resilience in Supply Chain Management: A Retrospective on Ensuring Supply Chain Resilience." *Journal of Business Logistics* 40 (1): 56–65. <https://doi.org/10.1111/jbl.12202>.
- Pujawan, I Nyoman, and Alpha Umaru Bah. 2022. "Supply Chains under COVID-19 Disruptions: Literature Review and Research Agenda." *Supply Chain Forum: An International Journal* 23 (1): 81–95. <https://doi.org/10.1080/16258312.2021.1932568>.

- Purwoko, Budi Aji, Chotib Chotib, and Lin Yola. 2022. "Strategi Integrasi Layanan Transportasi Di Stasiun Kereta Api Bekasi Pasca Pandemic Covid-19." *Jurnal Transportasi Multimoda* 20 (1): 8–18. <https://doi.org/10.25104/mtm.v20i1.2142>.
- Ramanathan, U., & Gunasekaran, A. (2014). Supply chain collaboration: Impact of success in long-term partnerships. *International Journal of Production Economics*, 147, 252-259.
- Saleheen, Ferdoush, and Mohammad Mamun Habib. 2022. "Global Supply Chain Disruption Management Post Covid 19." *American Journal of Industrial and Business Management* 12 (3): 376–89. <https://doi.org/10.4236/ajibm.2022.123021>.
- Sapada, M. I. A. (2021). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Konsumen Pada Magic Cell Oppo Store Parepare. *Jurnal Ilmiah Manajemen & Kewirausahaan*, 8(1), 10-19.
- Sawik, Tadeusz. 2020. *Supply Chain Disruption Management: Using Stochastic Mixed Integer Programming*. Vol. 291. International Series in Operations Research & Management Science. Cham: Springer International Publishing. <https://doi.org/10.1007/978-3-030-44814-1>.
- Scheidt, Scott, and Q. B. Chung. 2019. "Making a Case for Speech Analytics to Improve Customer Service Quality: Vision, Implementation, and Evaluation." *International Journal of Information Management* 45 (April): 223–32. <https://doi.org/10.1016/j.ijinfomgt.2018.01.002>.
- Siagian, Hotlan, Zeplin Jiwa Husada Tarigan, and Ferry Jie. 2021. "Supply Chain Integration Enables Resilience, Flexibility, and Innovation to Improve Business Performance in COVID-19 Era." *Sustainability* 13 (9): 4669. <https://doi.org/10.3390/su13094669>.
- Siwi, T. P. U., & Nawawi, Z. (2023). Building Citizen Satisfaction Towards E-Government Services: A Conceptual Framework. *Jurnal Manajemen Pelayanan Publik*, 6(2), 253-265. <https://doi.org/10.24198/jmpp.v6i2.46471>
- Stadtler, Hartmut. 2015. "Supply Chain Management: An Overview." In *Supply Chain Management and Advanced Planning: Concepts, Models, Software, and Case Studies*, edited by Hartmut Stadtler, Christoph Kilger, and Herbert Meyr, 3–28. Springer Texts in Business and Economics. Berlin, Heidelberg: Springer. https://doi.org/10.1007/978-3-642-55309-7_1.
- Sudan, Tapas, and Rashi Taggar. 2021. "Recovering Supply Chain Disruptions in Post-COVID-19 Pandemic Through Transport Intelligence and Logistics Systems: India's Experiences and Policy Options." *Frontiers in Future Transportation* 2. <https://www.frontiersin.org/articles/10.3389/ffutr.2021.660116>.
- Suwandi, I., Maulina, E., & Herawati, T. (2020). Supply Chain Integration (SCI) Fashion Products Made By SMEs In Response to Improve Performance Development Of Tourism In West Java. *Jurnal Manajemen Pelayanan Publik*, 4(1), 25-34.
- Villena, Verónica H., and Dennis A. Gioia. 2020. "A More Sustainable Supply Chain." *Harvard Business Review* 98 (2): 84–93.
- Zhao, Jixin, Meng Ji, and Bo Feng. 2020. "Smarter Supply Chain: A Literature Review and Practices." *Journal of Data, Information and Management* 2 (2): 95–110. <https://doi.org/10.1007/s42488-020-00025-z>.