The Influence of Supplier Relationship Management on the Performance of Manufacturing Companies In Makassar City

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Article Info	ABSTRACT
	This study aims to examine the impact of Supplier Relationship Management (SRM) on the performance of manufacturing firms in Makassar. The research employed a descriptive design, collecting data from a sample of manufacturing firms through structured questionnaires. The analysis used regression techniques to explore the relationship between SRM practices, such as early supplier involvement, supplier development, and joint investment, and organizational performance. Findings revealed a significant positive correlation, indicating that enhanced SRM practices contribute to improved efficiency, reduced costs, and better alignment within the supply chain. The study also highlights the importance of government support in facilitating effective SRM strategies for sustainable industrial growth.
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INTRODUCTION

Supplier relationship management involves how organizations engage with their suppliers to achieve mutual benefits (Cavinato, 2012). Akitoye (2013) notes that supply chain risks arising from uncertainty threaten organizations that fail to recognize the importance of managing supplier relationships. Companies are increasingly turning to outsourcing and distribution services due to the complexity and uncertainty of modern supply chains (Smith et al., 2013). According to Miguel and Brito (2011), the main benefit of fostering long-term supplier partnerships is reducing transaction costs through trust. To maintain competitiveness, a deep understanding of buyer-supplier dynamics is essential (Berkowitz, 2004). Many organizations have realized that sustaining profitability and staying competitive over time requires maintaining strong relationships with suppliers, helping them navigate an unpredictable business environment (Shin et al., 2014). Olendo and Kavale (2016) further suggest that building these relationships requires trust and commitment, which motivates suppliers to share vital information with the company.

Managing relationships with suppliers focuses on the connections and interactions between organizations and their key suppliers (Cavinato, 2012). Olendo & Kavale (2016) argue that effective supplier management creates crucial links between organizations and end customers. Supplier Relationship Management (SRM) is regarded as a primary approach to enhancing the efficiency and effectiveness of an organization's supply chain. By improving SRM, procurement processes become more cost-effective and time-efficient, ensuring better alignment within the supply chain (Akech, 2010). Implementing a robust supplier management strategy involves leveraging supply market intelligence and understanding competitive dynamics while incorporating supplier performance evaluation and development (Barratt & Oliveira, 2011).

A competitive advantage in an organization is closely tied to its manufacturing performance, as the capacity to gain an edge in the market heavily depends on how well manufacturing processes are executed (World Bank, 2016). Various plant-specific factors, including competitive priorities, manufacturing decisions, and innovative practices, directly impact manufacturing performance, forming the core of a company's manufacturing strategy (Peng et al., 2011). The growth of manufacturing performance has become a significant factor driving transformational success in many

countries, contributing to sustainable per capita income growth (World Bank, 2016). A primary driver of India's rapid economic expansion since the early 1990s has been the productivity growth of its manufacturing sector, which experienced an annual growth rate of 5.7% from 1993 to 2005 (Reserve Bank of India, 2008). Similarly, manufacturing plays a crucial role in New Zealand's economy, as the largest sector contributing 14.6% to the nation's GDP in 2012, making New Zealand one of the world's manufacturing-focused economies (BusinessNZ, 2014; OECD, 2014).

In Makassar City, the manufacturing sector is recognized as the backbone of the economy due to its significant impact on long-term economic growth (Owuoth, 2010). Kariithi and Kihara (2017) note that Indonesia's manufacturing landscape has undergone numerous changes, influenced by shifts in domestic demand, evolving national policies, and global market trends. Although this sector's contribution to Indonesia's economy has varied over time since independence, recent years have shown an increasing trend in its role in national income and economic significance (Kariithi & Kihara, 2017).

The manufacturing sector in Makassar City's Vision 2030 is primarily tasked with creating employment and economic growth. Historically dominated by subsidiaries of multinational companies, this sector contributed 13% to GDP in 2004. However, the GDP share decreased from 13.6% in the early 1990s to 9.2% in 2012, and the growth rate declined from 3.4% in 2011 to 3.1% in 2012. Between 2006 and 2013, this sector's real growth averaged 4.1% per year, lower than the overall GDP growth rate of 4.6%. Its contribution to GDP saw a slight increase to 10.3% in 2019, compared to 10% in 2020.

Over the past five years, the manufacturing industry in Makassar has faced stagnant growth and declining profitability, largely due to an unpredictable operating environment. This downward trend highlights the need for new business strategies in this sector. Implementing Strategic Alliances in the supply chain is viewed as a potential solution to reduce production and distribution costs, thus improving this sector's performance. This study focuses on the manufacturing sector due to its consistently low performance, averaging around 10% of GDP over the past decade.

Many companies heavily rely on the environment to access natural resources, which are becoming increasingly scarce and expensive (Cetinkaya, 2011). The Resource Dependence Theory (RDT) posits that organizations cannot operate independently and must navigate a network of relationships to manage the uncertainty and dependencies associated with resource acquisition (Pfeffer & Salancik, 1978). To mitigate risk, organizations may use buffering strategies by increasing inventory of critical resources while adopting bridging strategies to collaborate with suppliers of these scarce resources (Bode et al., 2011). This research uses RDT to explore how supplier relationship management impacts the performance of manufacturing companies in Makassar City. This theory asserts that companies must engage in exchanges with their environment to obtain the necessary resources for survival and growth (Scott, 1987). The theory emphasizes the importance of obtaining external resources as essential to a company's success (Barringer & Harrison, 2000).

Existing literature on supply chain management often assumes, without clear evidence, that buyers and suppliers are willing and able to develop mutually beneficial relationships (Hong et al., 2012). Supply chain alliances are complex and dynamic environments involving multiple stakeholders, with their effectiveness depending on the strength of these alliances to improve overall performance (Vijayasarathy, 2010; Prajogo & Olhager, 2012). According to Hofer et al. (2012), companies can succeed by increasing their reliance on other companies or by leveraging others' dependence on them to access critical resources. Although dependency does not always lead to conflict between buyers and suppliers, RDT emphasizes that companies need to manage these dependencies by controlling key resources to reduce their reliance on others and increase others' reliance on them (Min et al., 2005).

Organizations that maintain strong relationships with their external environment tend to have greater influence within their networks (Prajogo & Olhager, 2012). Building partnerships with suppliers, customers, and even competitors to collaboratively solve problems has become an essential element in business strategy and a major source of competitive advantage (Zacharia et al., 2011). By applying the principles of Resource Dependence Theory (RDT) beyond the supply chain to the corporate level, companies can reduce their dependency on external factors by sharing resources among supply chain partners. A responsive supply chain requires satisfied suppliers who collaborate with

downstream buyers to meet end-user needs (Benton & Maloni, 2005). Thus, RDT effectively serves as a framework for understanding the impact of supplier relationship management on manufacturing company performance.

METHODS

This research, based on the Positivism research philosophy, uses a descriptive research design. The target population consists of 499 manufacturing companies located in and around Nairobi. A stratified random sampling method was employed to ensure a representative sample, given the diverse population. This approach enables equal representation across different sectors within the target population. Out of the 499 companies, a sample of 217 respondents was selected, and 180 of them returned questionnaires for analysis.

The study follows a descriptive survey approach, with data collected through self-administered questionnaires whose validity and reliability were tested using 10% of the sample. Quantitative data analysis was conducted using descriptive and inferential statistics, facilitated by SPSS version 23, while qualitative data was analyzed descriptively. To test the relationship between dependent and independent variables, linear and multiple regression models were used. Findings were presented in the form of tables, charts, frequencies, percentages, and graphs.

The purpose of this research is to determine the impact of supplier relationship management on the performance of manufacturing companies in Makassar City. This is evaluated using the coefficients from a linear regression model that examines the relationship between supplier relationship management and the performance outcomes of these companies. The analysis begins by testing the relevant research hypothesis regarding the effect of supplier relationship management on the performance of manufacturing companies in Makassar City.

Ha: Supplier relationship management improves the performance of manufacturing companies in Makassar City.

RESULTS AND DISCUSSION

The research results indicate that as the level of Supplier Relationship Management (SRM) increases, performance management levels also improve. This suggests that SRM is a key solution for enhancing the efficiency and effectiveness of an organization's supply chain network. Effective SRM can streamline the procurement process, making it more cost- and time-efficient, thus ensuring better alignment within the supply chain, as noted by Akech (2010). These findings align with Barratt and Oliveira (2011), who found that having a reliable system to evaluate supplier performance is directly related to the overall performance management of manufacturing companies.

The respondents involved in the pilot study were not included in the main research. The pilot study consisted of 18 participants, with the response distribution shown in Tables 1 and 2. Reliability analysis was conducted to assess the survey constructs using Cronbach's alpha. Table 1 presents the reliability results for the pilot study.

Table 1. Reliability

Variables	Cronbach's Alpha	Number of Items	Conclusion
Supplier Relationship Management	0.782	9	Reliable
Performance	0.788	3	Reliable

*) data source SPSS software version 23.

Based on Table 1, the pilot study results indicate that the variable statements are highly reliable, with a Cronbach's Alpha of 0.782 for Supplier Relationship Management and 0.788 for organizational performance. Sekaran and Bougie (2013) state that a coefficient of 0.7 or higher is acceptable for basic research. Bagozzi (1991) further explains that reliability can be assessed in terms of accuracy (reliability) and inaccuracy (unreliability). The most commonly used reliability coefficient is

Cronbach's alpha, which measures internal consistency by examining how all items in a test correlate with each other and with the overall test, indicating the internal coherence of the data. Reliability coefficients range from 0 to 1.00, with higher values indicating greater test reliability.

This study employs the Kaiser-Meyer-Olkin (KMO) test to assess construct validity. According to Field (2005), KMO values, indicating the level of common variance, are categorized as follows: 0.90 to 1.00 is considered "Marvelous," 0.80 to 0.89 is "Meritorious," 0.70 to 0.79 is "Middling," 0.60 to 0.69 is "Mediocre," 0.50 to 0.59 is "Miserable," and 0.00 to 0.49 is "Unacceptable." For this study, a KMO value above 0.800 is considered "Marvelous." The evaluation is conducted as shown in Table 2, which presents the KMO and Bartlett's test results for construct validity for both dependent and independent variables.

Table 2. Factorial Test Results for Construct Validity

	KMO	Bartlett's Test of Sphericity			Validity
		Approx. Chi-Square	df	Sig.	
Supplier Relationship Management	0.638	75.29	36	0.000	Valid
Performance	0.666	16.403	3	0.001	Valid

*) data source SPSS software version 23.

Table 2 shows that the KMO Measure of Sampling Adequacy values for all variables are above 0.500, indicating an acceptable level for factor analysis. The significance of the KMO coefficient was assessed using the Chi-Square test, with a critical probability value (p-value) set at 0.05. Chi-Square coefficients of 16.403 and 75.29, with p-values less than 0.05, indicate that the results are statistically significant. These findings suggest a significant correlation between Supplier Relationship Management and the organizational performance of companies. Respondents were asked to rate the supplier relationship management indicators based on perceived importance, using a scale where 1 = Least Important, 2 = Fairly Important, 3 = Neutral, 4 = Important, and 5 = Very Important. The results were then analyzed and are presented in the following subsections.

Respondents rated the impact of joint product development in improving lead time positively, with a mean score of 4.02 and a standard deviation of 1.196. This indicates that most respondents consider joint product development important for enhancing lead time, and the low standard deviation reflects general consensus on this view. For joint planning, the mean score was 3.86, with a standard deviation of 1.346, suggesting that most respondents regard joint planning as important for improving lead time. The relatively low standard deviation again shows alignment among respondents. Regarding the effectiveness of customer support systems in improving lead time, the mean score was 3.79, with a standard deviation of 1.345. This shows that the majority of respondents view customer support systems as important for improving lead time, with a small standard deviation reflecting general agreement on its importance.

Respondents rated early supplier involvement highly regarding its role in improving lead time, with a mean score of 4.15 and a standard deviation of 1.033, indicating consensus that early supplier involvement is beneficial for manufacturing organizations in this area. Similarly, to enhance productivity, early supplier involvement received the same mean score of 4.15 and a standard deviation of 1.126, reflecting broad agreement on its positive impact. On the role of joint investment in boosting productivity, the mean score was 4.00, with a standard deviation of 1.087, indicating that most respondents consider it important for enhancing productivity in manufacturing, with low variability in responses. For quality improvement, joint investment was also rated positively, with a mean of 4.01 and a standard deviation of 1.114, showing general agreement on its effectiveness.

The impact of supplier development on productivity was deemed significant, with a mean score of 4.00 and a standard deviation of 1.135, showing common belief among respondents that supplier development plays a key role. When evaluating the role of supplier development in improving lead time, a mean score of 4.01 and a standard deviation of 1.116 once again indicate broad consensus. Additionally, joint investment in improving lead time had a mean score of 3.95 and a standard deviation

of 1.150, indicating general agreement on its significance. The role of early supplier involvement in quality improvement was rated with a mean score of 3.89 and a standard deviation of 1.101, while the impact of supplier development on cost and quality improvement had a mean score of 3.88 and a standard deviation of 1.122. In both cases, the relatively low standard deviation shows consistent responses, affirming these factors are considered important in the manufacturing sector.

ANOVA analysis showed that the regression model, using training and development as predictors, was not significant (F = 52.079, p-value = 0.071). However, the results still indicate a significant influence of supplier relationship management on the performance of manufacturing companies in Makassar City, leading to a decision not to reject the research hypothesis: Supplier relationship management improves the performance of manufacturing companies in Makassar City. These findings are consistent with Miguel and Brito (2011), who state that the main benefit of building long-term supplier relationships is the reduction of transaction costs through trust, which in turn facilitates improved supply for manufacturing companies. As noted by Berkowitz (2004), a deep understanding of buyer-supplier relationships is essential for manufacturing companies to remain competitive.

Table 3. ANOVA Supply Relationship Management

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.478	1	9.478	52.079	.071[b]
	Residual	32.428	178	.182		
	Total	41.906	179			

*) data source SPSS software version 23.

Based on the regression model and Table 5, the coefficient of determination (R-squared) value of 0.226 indicates that 22.6% of the variation in the performance of manufacturing companies in Makassar City can be explained by supplier relationship management. The adjusted R-squared of 0.221 shows that, excluding the constant variable, supplier relationship management accounts for 22.1% of the variation in performance, with the remaining percentage attributable to other factors not included in the model.

The correlation coefficient (R) of 0.476 indicates a positive relationship between performance management and supplier relationship management, suggesting that effective supplier management enhances organizational performance. This aligns with Cavinato (2012), who noted that managing supplier relationships involves strengthening connections between an organization and its key suppliers. Olendo and Kavale (2016) further emphasized that supplier management acts as a link between the organization and its customers, thereby building strong supply relationships that can improve organizational performance. The standard error of the estimate (0.453) reflects the average deviation of the independent variable from the best-fit line. This low value indicates that the model can predict performance management based on supplier relationship management with minimal error.

The study results indicate that as the level of Supplier Relationship Management (SRM) increases, performance management levels also improve. This suggests that SRM is a key solution for enhancing the efficiency and effectiveness of an organization's supply chain network. Effective SRM can streamline the procurement process, making it more cost- and time-efficient, thus ensuring better alignment within the supply chain, as noted by Akech (2010). These findings are consistent with Barratt and Oliveira (2011), who found that having a reliable system for evaluating supplier performance is directly linked to the overall performance management of manufacturing companies.

CONCLUSION

This study aims to examine the impact of Supplier Relationship Management (SRM) on the performance of manufacturing companies in Makassar City. Regression analysis shows a positive and significant effect, with a coefficient (β = 0.295) and a p-value less than 0.05. This indicates that as SRM increases, the performance of manufacturing companies in Makassar City also improves significantly.

The study concludes that early supplier involvement, supplier development, and joint investment are key SRM practices that enhance the performance of these companies. These findings provide evidence that SRM, as a strategic alliance, plays an important role in influencing organizational performance. Additionally, the study highlights the need for the Makassar City government to raise awareness and provide training for key stakeholders, as 53.17% of respondents indicated that current government policies and strategies are ineffective. The significant influence of SRM on organizational performance implies that manufacturing companies should improve their supplier relationship practices to enhance product quality and reduce lead times. Given that product quality has not seen substantial improvement over the past five years, it is crucial to implement additional strategies, including integrating technology, to improve quality and maintain the necessary lead times within these organizations.

REFERENCE

Achuka, V. (2016). Bribes you have to pay 'to survive' in Kenya. *Africa Review*, March 20.

Arani, W., Mukulu, E., Waiganjo, E., & Wambua, J. (2016). Strategic Sourcing an Antecedent of Supply Chain Resilience in Manufacturing Firms in Kenya. *International Journal of Academic Research in Business and Social Science, 6*(10), 1-18.

Bagozzi, R. P., Yi, Y., & Phillips, L. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly, 36*, 421-458.

Barringer, B. R., & Harrison, J. S. (2000). Walking a tightrope: Creating value through interorganizational relationships. *Journal of Management, 26*(3), 367-403.

Bode, C., Wagner, S. M., Petersen, K. J., & Ellram, L. M. (2011). Understanding responses to supply chain disruptions: Insights from information processing and resource dependence perspectives. *Academy of Management Journal, 54*(4), 833-856.

Cetinkaya, B., Cuthbertson, R., Ewer, G., Klaas-Wissing, T., Piotrowicz, W., & Tyssen, C. (2011). *Sustainable supply chain management: Practical ideas for moving towards best practice*. Springer.

Flynn, B. B., Huo, B., & Zhao, X. (2010). The impact of supply chain integration on performance: A contingency and configuration approach. *Journal of Operations Management, 28*(1), 58-71.

Kamau, J. N. (2013). Buyer-supplier relationships and organizational performance among large manufacturing firms in Nairobi, Kenya (Doctoral dissertation, University of Nairobi).

Kariithi, J. N. (2017). Factors affecting performance of manufacturing firms in Kenya: A case of pharmaceutical firms in Nairobi county. *Strategic Journal of Business & Change Management, 4*(2), 234-257.

Orodho, A. J. (2012). *Techniques of Writing Proposals and Research Reports in Education and Social Science Research Methods*. Maseno: Kanezja Publishers.

Prajogo, D., & Olhager, J. (2012). Supply chain integration and performance: The effects of long-term relationships, information technology and sharing, and logistics integration. *International Journal of Production Economics, 135*(1), 514-522.

Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly, 224*-253.

Sekaran, U., & Bougie, R. (2009). *Research Method for Business: A Skill-Building Approach*. Wiley.

Sundram, V. P. K., Ibrahim, A. R., & Govindaraju, V. C. (2011). Supply chain management practices in the electronics industry in Malaysia: Consequences for supply chain performance. *Benchmarking: An International Journal*.

Tseng, S. M. (2014). The impact of knowledge management capabilities and supplier relationship management on corporate performance. *International Journal of Production Economics, 154*, 39-47.

World Bank. (2016). *Kenya Economic Update*. Washington, DC: World Bank.

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