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Supplier management orientation, information integration, organizational culture and supplier delivery performance

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A B S T R A C T

This paper explores the association between supplier management orientation (SMO), information integration (II), organizational culture (OC) and supplier delivery performance (SDP). A systematic questionnaire survey was employed to gather cross-sectional data from 403 manufacturing firms in Uganda's Greater Kampala Metropolitan Area were analyzed using SmartPLS 4. The study shows a full mediating role of OC in the relationship between SMO, II and SDP. A positively significant relationship was established between II and OC, and between OC and SDP. Also, the relationship between SMO and OC was positively significant. Whereas the effect of SMO, II, OC on SDP is significant, related literature remains limited. This signifies a deficiency in the current literature that necessitates additional research to investigate other external factors that substantially impact SDP. Managers need to nurture cultural qualities, like teamwork, openness, and responsiveness, that enhance employees to effectively interpret information and act in a coordinated manner. This study extends the Resource-Based View Theory to the SDP domain, by drawing insights on the mediating role of OC in the relationship between SMO and SDP.

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1. Introduction

The growing interest in supplier delivery performance (SDP) has been intensified by the massive global spend through public, private procurement and COVID-19 pandemic that has exposed vulnerabilities and deficiencies in the global manufacturing supply chain (Qi *et al.*, 2025). SDP is the extent to which a supplier meets the customer's expectations regarding the quality, quantity, timing of the goods or services provided (Patrucco *et al.*, 2022). This involves measuring delivery time, quality and total cost (Burkhart & Bode, 2024). SDP strongly influences the performance and competitiveness of buyers, with better delivery reliability and quality linked to greater operational gains (Garcia-Buendia *et al.*, 2025). In developed and developing economies, successful manufacturing firms depend on strong supply chain stability and delivery performance, which boost the productivity and sustainable development of their host economies (Liu & Wang, 2024).

In the Ugandan context, the government's Vision 2040, considers the manufacturing sector as key to achieving socio-economic transformation and sustainable development goals (Government of Uganda, 2013). However, like many other African countries, Uganda still faces risks of poor SDP in manufacturing firms (World Bank, 2022). There has been remarkable endeavor to enhance timely delivery of supplies, products or services in Uganda's manufacturing firms, but deficiencies in SDP have remained evident, including inadequate supplies, delayed deliveries, poor quality products, poor operation and maintenance of physical assets, cost escalations, supply of wrong specifications, price variations and poor performance of suppliers (Zikusooka & Kalikola, 2024). Besides, reports on evaluation of SDP in Ugandan manufacturing

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sector indicate the occurrence of risks like inadequate supplies, delayed deliveries, poor quality products, cost escalations, product stock outs, demand-supply mismatch, supply of wrong specifications, price variations and poor supplier performance (Tukamuhabwa et al., 2023).

Past studies emphasize that even the best performing suppliers are potentially vulnerable to risk events, which potentially undermine their performance (Mwesiumo *et al.*, 2021). The challenge of supplier related risks and associated consequences in the manufacturing sector is not a novel phenomenon for either emerging or developed nations. From extant literature, it is noticeable that to date, studies on the predictors of SDP remain scanty (Tukamuhabwa et al., 2023). Whereas literature shows that SDP and supplier management orientation (SMO) are linked to supply chain management (Shin *et al.*, 2000), studies on the role of SMO on SDP outcomes have provided mixed results. For example, Kumar et al. (2020) argued that SMO facilitates SDP while Ofori et al. (2024) underscored the role of SMO on improving SDP in manufacturing firms. However, Alghababsheh et al. (2023) noted that SMO can directly improve SDP besides causing risks that are counterproductive to performance in buyer-supplier relationships.

SMO and its performance is an ongoing problem that needs SDP monitoring to meet standard requirements and continuous improvement in business (Darestani *et al.*, 2015). SMO through innovations is paramount for firms to stay competitive and ensure continued performance, given the existing innovative organizational culture (OC) (Khan *et al.*, 2020). Bhuiyan et al. (2020) demonstrate that results-oriented culture and team orientation OC influences financial and non-financial performance. However, Sinha and Dhall (2020) found a non-significant effect of OC on organizational performance. SDP initiatives can benefit from better communication and information technology capabilities, providing a platform for transacting parties to engage in supply chain coordination, participation, and problem-solving activities (Prajogo & Olhager, 2012). Empirical studies on SDP predictors have focused on collaboration (Zhong *et al.*, 2023) and reward-penalty mechanism (Sakhare *et al.*, 2024). Whereas studies on SDP are increasing (Bhattacharyya *et al.*, 2025; Sakhare *et al.*, 2024), there remains a research gap. Bhattacharyya et al. (2025) used a multinomial modeling approach for assessing SDP, utilizing generic historical delivery frequencies data. The current study used Structural Equation Modeling (SEM) to validate SDP antecedents, relying on a cross-sectional survey of manufacturing firms. Relatedly, Sakhare et al. (2024) expounded on SDP from a reward-penalty perspective, emphasizing that reward-penalty mechanism fosters SDP. Nevertheless, the study was done in a single manufacturer's supply chain, limiting the findings generalizability.

Prior studies (Bhattacharyya *et al.*, 2025; Sakhare *et al.*, 2024) pay less emphasis on proactive managerial perspectives and information drivers underlying SDP. To the best of our knowledge, the mediating role of OC in the relationship between SMO and SDP has not empirically been scrutinized. This study addresses the gaps using the Resource-Based View (RBV) Theory, by showing that SMO, II, and OC positively influence SDP in manufacturing firms. We demonstrate that OC mediates the relationship between II and SDP, and between SMO and SDP, thereby contributing to the limited empirical studies on the predictors of SDP. This research enhances the existing body of knowledge by examining these dynamics in underexplored developing economies and the manufacturing sector.

2. Theoretical and hypothesis development

2.1 Theoretical review

This study draws on the RBV Theory which posits that firms can secure competitive advantage by leveraging valuable, rare, inimitable, and non-substitutable resources (Barney, 1991). These resources include technology, infrastructure, knowledge-sharing routines, a strong OC and effective supplier management (Khan *et al.*, 2020; Tukamuhabwa *et al.*, 2024). Others are collaborative practices, knowledge sharing, and a flexible, resilient culture (Wang et al., 2020)**.** RBV enhances supply chain management and relational resources (Komakech *et al.*, 2025) like SMO, which are key RBV resources that boost firms' supply chain outcomes. This study puts RBV into practice by examining how firms use resources to improve SDP. RBV emphasizes the importance of II, the ability to share data quickly and seamlessly within the company and with suppliers (Huo *et al.*, 2016). This cuts lead times, improves demand forecasting and transparency, thus better SDP (Cao *et al.*, 2015). A strong OC built on trust, teamwork, and adaptability is another vital resource under RBV that boosts performance (Barney, 1991).

When companies involve suppliers and encourage continuous improvement, knowledge sharing and joint problem-solving is promoted, creating competitive advantage (Cheng and Sheu, 2022). This culture rooted in trust acts as a bridge, connecting II and supplier management besides supporting open data sharing, leading to more transparent planning. It also enhances supplier management by encouraging joint performance reviews, shared risk management, and collaborative capability-building, thus strengthening SDP (Sukati *et al.*, 2020). SMO, shaped by RBV, focuses on building specialized skills to manage supplier relationships. This includes selecting reliable suppliers, evaluating their performance, and fostering strategic collaboration to align their efforts with the firm's goals. Firms that treat suppliers as strategic partners, offering technical support and performance incentives tend to achieve more reliable deliveries and consistent quality (Wang et al., 2021). A supportive OC amplifies this by reinforcing continuous improvement and collaboration values, encouraging supplier commitment and creating more flexible, resilient supply chains. The combined impact of these RBV-driven capabilities II, OC, and SMO form a strong foundation for improving SDP.

2.2 Hypothesis development

2.2.1 SMO and SDP

Prior studies acknowledge the importance of SDP in driving customer satisfaction (Tao *et al.*, 2024). SDP denotes a supplier's ability to meet customer expectations regarding quality, quantity, timing, and overall satisfaction with the goods or services provided (Rao *et al.*, 2011). Drawing from extant studies, SDP can receive strong boost from SMO, including buyer-supplier alignment (Li *et al.*, 2025). SMO refers to the strategic framework adopted by organizations to manage and optimize interactions with suppliers to enhance overall supply chain performance (SCP). This orientation involves fostering communication, collaboration, and resource sharing to build strong, coordinated buyer-supplier relationships (Shin *et al.*, 2000). Buyer-supplier alliance incentivizes suppliers towards continuous improvement in SDP through cost-sharing agreements (Li *et al.*, 2025). Firms that prioritize long-term supplier relationships, supplier involvement, and focus on quality development create competitive advantages that enhance supplier capabilities and, ultimately, SDP (Vijayaraghavan and Raju, 2008). Empirical literature underscores the positive impact of SMO on SDP: for instance, Ofori et al. (2024) found that supplier relationship management significantly boosts SCP. Men et al. (2023) reported a positive relationship between strategic supplier management and SCP in a sustainable context. While the relationship between SMO and SDP is well-documented, empirical literature presents significant gaps. Most studies have been conducted within Western settings, raising concerns over applicability and generalizability of the findings to developing countries or diverse industrial sectors. The cultural, economic, and operational differences in developing economies may significantly alter the dynamics of supplier relationships. Supplier management practices in developing economies may differ from developed markets (Vijayaraghavan and Raju, 2008). The RBV underpinning offers a robust framework to explain how SMO influences SDP by suggesting that SMO serves as a strategic, relational resource that organizations leverage to enhance SDP. This study aims to fill these gaps from the RBV lens and in developing economies' manufacturing context, by postulating as follows;

H_1: *SMO positively affects SDP.*

2.2.2 SMO and OC

OC is a set of values and underlying presumptions that underpin an organization's members' consistent behavior (Gunasekera, 2022). OC is shaped by SMO through innovations which are essential for firms to stay competitive and ensure continued performance (Khan *et al.*, 2020). SMO influences OC by stimulating innovation, influencing behavior, and subduing old cultures, leading to a more innovative, market-sensitive, and customer-focused culture (Hajipour and Ghanavati, 2012). Therefore, manufacturing firms should adopt a supplier management OC to enhance performance, strengthen relationships with suppliers, and capitalize on good supplier options (Hermawan *et al.*, 2022). Prior studies suggest that SMO promotes supplier integration, collaborative problem-solving, and the adoption of digital tools, which reinforce an innovative and adaptive OC and further improve SCP (Laulita, 2020; Longo *et al.*, 2022)**.** Cadden et al. (2022) reported significant cultural disparities are by firms with high-performing supply chain management orientations, indicating statistically significant variations across all cultural dimensions. Furthermore, SMO is a crucial aspect of OC, and its efficacy depends on a robust OC which influences employee behavior in information sharing, teamwork, and risk-taking (Hajipour and Ghanavati, 2012). However, the hierarchical culture can be detrimental to internal collaboration and external collaboration which hinders SMO due to limited communication and flexibility (Cao *et al.*, 2015). Moreover, Deshpandé & Farley (2004) observed a negative relationship between SMO and OC particularly in individualistic cultures where suppliers tend to overestimate their orientation. This leads to differing perspectives on SMO between suppliers and customers which adversely affects OC initiatives. In that repute the RBV theory is handy in linking SMO to OC as it suggests leveraging a firm's resources to alter supplier behavior. This leads to hypothesis two:

H_2: *SMO positively affects OC.*

2.2.3 OC and SDP

Since the 1980s, research has established a positive connection between organizational culture and performance (Minkov and Hofstede, 2011). For instance, Ouchi and Wilkins (1985) found a positive link between OC and productivity. Mello & Stank (2005) revealed the crucial role of OC in shaping suppliers' behaviors to deliver products and services to customers. OC focused on employees, action, and challenges enhances business performance indicators, including SCI with suppliers, achieving key goals of product, place, time, and cost delivery (Aćimović *et al.*, 2021), implying effective OC boosts SDP. However, Fine and Haskell (1992) found a minor positive correlation between OC and long-term economic performance whereas Corbett and Rastrick (2000) found insignificant correlation between OC and SDP. Also, Sinha & Dhall (2020) found an insignificant effect of OC on organizational performance. Empirical studies suggest that OC aligned with supplier integration and collaborative practices positively influences supply chain and supplier performance. For instance, Alamsjah and Yunus (2022) emphasized that an innovation-oriented culture, characterized by agility and ambidexterity, fosters high-performing supply chains, reinforcing the idea that OC can be leveraged as a strategic resource to improve SDP. In that

repute, the RBV theory is appropriate to offer explanation on how OC boosts SDP. By recognizing the influence of OC on supplier behavior and performance, firms can harness their resources to enhance SDP. This leads to hypothesis three:

H3: *OC positively affects SDP.*

2.2.4 II and SDP

II refers to the electric linking of enterprises with their allies to share critical information along the supply chain network and facilitate collaboration (Wong *et al.*, 2015). II enhances SDP by leveraging intelligent approaches to envisage demand quantities and prices (Kazemian *et al.*, 2023); and facilitating synchronization, participation, and solution based activities between the supply chain parties (Prajogo and Olhager, 2012). II augments SDP by providing a clear business vision, outlining the organization's direction, goals, and business model for project implementation (Fotache and Bucşă, 2019). Relatedly, information sharing, a core II activity, was empirically linked to better supply chain visibility, agility, and SCP (Baah *et al.*, 2022). Timely, accurate and effective information sharing between procurers and suppliers boosts SDP through improved coordination, reduced order fulfillment speed, and overall reduction of bullwhip effect (Garip *et al.*, 2025). Zhou & Benton Jr (2007) demonstrated that information sharing has a big impact on supply chain operations and delivery performance while Karagöz & Akgün (2015) found a positive correlation between II and firm performance. Besides, Jing & Fan (2024) show that digital technologies supporting integration significantly boost SCP, highlighting the integration of information systems as key in enhancing coordination, responsiveness, and delivery outcomes. However, Muhwezi et al. (2023) found a negative correlation between II and procurement performance, suggesting that despite II, firms may struggle to obtain timely, high-quality, and affordable goods and services. In that repute the RBV theory is regarded as appropriate to explain how II enhances SDP by understanding how II can be utilized to drive SDP improvements via improved communication and collaboration. Thus, we hypothesis that:

H4: *II positively affects SDP.*

2.2.5 II and OC

II enhances OC by implementing systems that create value, improve quality, and enhance processes based on Plan-Do-See and safety culture (Ha and Lee, 2019). Weber and Pliskin (1996) established a positive correlation between information systems integration and effectiveness, provided that these factors are considered when joining firms. Ricciardi et al. (2018) found that II, including information technology function integration with top management, business units, customers, non-IT suppliers, and providers, positively impacts a firm's performance and OC. II significantly impacts OCs, influenced by information technologies that shape organizational structures, processes, activities, and human relations (Erdurmazlı, 2020). However, Nasrin and Isik (2021) found a negative relationship between some aspects of OC particularly because of information leakage and lack of control on II leading to differing perspectives on II which adversely affects OC. Besides, Birhanu et al. (2022) demonstrated that effective information sharing and integration across supply chain partners enhance organizational routines and culture, fostering coordination, trust, and shared norms. Similarly, an innovation-oriented culture is strengthened when digital information systems are integrated with business units and supply chain partners, supporting cultural values that promote agility and adaptability (Alamsjah and Yunus, 2022). In that regard, the RBV theory is appropriate to offer an explanation on how II explains OC. By examining how II, as a resource is managed and integrated, RDT helps explain how cultural values and norms are shaped. Thus, we hypothesize that:

H5: *II positively affects OC.*

2.2.6 Mediating role of OC in the relationship between SMO and SDP

Drawing from Barney (1986), OC can mediate the relationship between SMO and SDP by helping firms identify critical suppliers, shape interactions with them, drive improvement initiatives besides aligning supplier management practices with organizational goals. By understanding the mediating role of OC, firms can optimize their SMO practices to improve SDP. The socialization mechanisms in supply chains enable partners to learn each other's culture, create shared norms and understand where suppliers actively influence buyer behavior to enhance SDP (Cousins *et al.*, 2008). Nevertheless, the mediating role of OC in the link between SMO and SDP remains fragmented despite increasing empirical studies on the mediating role of OC. For example, Sung & Kim (2019) established that OC mediates the relationship between environmental uncertainty and supply chain management antecedents, with internally focused firms fostering strategic partnerships as an effective way to protect those partnerships against uncontrolled risks or difficulties resulting from environmental uncertainty. We attempt to fill the research gap by using the RBV lens to offer explanations on how OC mediates the association between SMO and SDP. Thus, we hypothesize as follows;

H6: *OC mediates the relationship between SMO and SDP.*

2.2.7 Mediating role of OC in the relationship between II and SDP

OC mediates the connection between II and SDP by shaping employee mindsets, actions and behaviors which enhance business performance across the board, including SCI, ultimately boosting SDP (Aćimović *et al.*, 2021). Several academicians have investigated how OC mediates the relationship between II and SDP. For instance, Damian-Okoro (2022) found a moderate significant effect of OC on SCI, and a strong significant effect of OC on SCP of bottle water manufacturing firms in Nigeria's River state. This supports Yudhistira & Habiburochman (2017) finding that OC moderates the link between SCI and operational performance. In that context, the RBV Theory is regarded as appropriate to explain how OC mediates the connection between II and SDP by leveraging resources and shaping the way the employees think, react, and behave in relation to information sharing and collaboration, thus improving SDP. Thus, we hypothesize as below:

H_7: *OC mediates the relationship between II and SDP.*

3. Methodology

3.1 Research philosophy, approach and design

A quantitative research methodology was combined with a positivist mindset. Primary data was gathered using cross-sectional and descriptive approaches. The choice of the positivist philosophical orientation was motivated by its emphasis on the importance of empirical data and scientific methods in the learning process, which is consistent with the idea that knowledge should be verified by empirical evidence (Kabbera *et al.*, 2024). Data were analyzed using SEM, yielding evidence-based conclusions and suggestions designed for manufacturing firms that use agricultural inputs. To save time, enhance the credibility of the research, and increase the likelihood of applying the findings in a wider context, data were collected from manufacturing firms that use agricultural inputs.

3.2 Population and sample size determination

This study investigated manufacturing firms within the Greater Kampala Metropolitan Area (GKMA) across Kampala, Mukono, Wakiso and Jinja districts (Uganda Bureau of Statistics (UBOS), 2021). Most Ugandan manufacturing firms are situated in GKMA (UBOS, 2021), highlighting the region's notable concentration of firms. UBOS (2021) categorizes manufacturing firms according to their organizational age, type of manufacturing sector, business ownership, annual sales, and employee count. Due to the difficulty in ascertaining the exact number of manufacturing firms in the GKMA, we resorted to Cochran (1977) approach for determining the sample size. We assumed a maximum variability of the population being estimated to be 50%, margin of error of 0.05, and 95% confidence interval (Israel, 1992). We obtained a sample of 384, of which we added an extra 10% to account for non-response bias as recommended by Israel (1992). To choose the final 416 participants, simple random sampling was used after stratified sampling.

3.2.1 Unit of analysis characteristics

A response rate of 96.9% (403) firms was realized for the unit of inquiry. The bulk of the firms had operated for 2-10 years, implying they had ability to develop SDP monitoring skills due to their extensive operational experience. Most firms employed between 5-100 people, implying they have sufficient staff to implement procurement related activities. The most prevalent occupations were publishing and printing.

3.2.2 Unit of inquiry characteristics

Over half of the participants had worked in the corresponding firms for over 5 years, implying they had more knowledge about the supply chain operations of their firms and could respond more informedly. Most respondents were between 31-40 years, indicating expertise and reliability in their respective fields. Also, most respondents had a bachelor's degree, implying that they possessed the necessary knowledge for effective job performance.

3.3 Instrument development and validity

A 7-point Likert scale from 7=strongly agree to 1=strongly disagree was developed. Likert scales are common in quantitative research to effectively gather large amounts of precise data (Creswell & Creswell, 2018). SDP and OC were assessed as second-order formative-reflective constructs. We used costs, quality and delivery time to measure SDP (Aberdeen Group, 2002) while SMO was measured by long-term supplier-buyer relationship, involvement in product development, quality focus and reduced supplier base (Shin *et al.*, 2000; Vijayaraghavan and Singh, 2009). Additionally, information sharing and collaborative planning were used to quantify II (Cai *et al.*, 2010). OC was measured by norm, employee, process, open, tight and market, (Hofstede, 2011). Experts were engaged to assess the suitability of the measurement items. The reliability of the instrument over time was assessed using Cronbach's alpha coefficient and composite reliability to produce consistent findings, 0.7 as the threshold (Hair Jr *et al.*, 2022). The results verify the reliability and validity of all the constructs, except for norm, process, market, tight, delivery time, quality, and II, whose values were below 0.7.

3.4 Data analysis

The study utilized Structural Equation Modeling (SEM) for data analysis, a technique preferred for evaluating the alignment between observed data and the theoretical model (Hair Jr *et al.*, 2022). SEM is preferred because it permits the execution of a wide range of statistical methods and their combination (Hair Jr *et al.*, 2022). Specifically, SmartPLS 4.9.06 was used for analysis because it has inbuilt models that support the evaluation of the measurement and structural models, including its predictive accuracy in evaluating complex models requiring mediation test.

3.5 Measurement model

The measurement model was evaluated using PLS Algorithm to assess the reliability and validity of the measurement items (Hair Jr *et al.*, 2022). The results revealed significant loadings, ranging between 0.713 to 0.890 for all the latent constructs. (Table 1). These results indicate that OC is positively associated with SDP. We followed quality standards in SEM analysis like item loading's reliability and multicollinearity to guarantee model validity and the extraction of significant results (Hair Jr *et al.*, 2022).

3.5.1 Reliability and validity tests

The reliability of the data and the validity of the latent constructs were evaluated. Data reliability was tested using Cronbach's coefficient alpha (α). (See Table 1). Given 0.70 as the minimum accepted internal consistency reliability threshold (Hair Jr *et al.*, 2022), our results verify the validity and reliability of all the constructs, except for norm, process, market, tight, delivery time, quality, and II. Nonetheless, they were retained in the analysis since their average extracted variance exceeded 0.5 and the composite reliability exceeded 0.7, signifying their validity and reliability. The convergent validity of the instrument was established, with AVE ranging between 0.564 to 0.751.

Table 1
Construct reliability and validity

Constructs	Item codes	Standardized Item loading	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Market	SCCM05	0.851**	0.571	0.573	0.823	0.699
	SCCM06	0.822**				
Employee	SCCEC04	0.753**	0.716	0.719	0.841	0.638
	SCCEC06	0.840**				
	SCCEC07	0.802**				
Norm	SCCN01	0.857**	0.490	0.505	0.795	0.660
	SCCN02	0.766**				
Process	SCCOP02	0.863**	0.630	0.631	0.844	0.730
	SCCOP03	0.845**				
Tight	SCCT03	0.760**	0.630	0.632	0.802	0.575
	SCCT04	0.789**				
	SCCT07	0.725**				
Delivery Time	SDPDT3	0.890**	0.670	0.683	0.858	0.751
	SDPDT4	0.842**				
Quality	SDPQS1	0.713**	0.619	0.629	0.795	0.564
	SDPQS3	0.802**				
	SDPQS4	0.734**				
Costs	SDPTC1	0.764**	0.770	0.776	0.867	0.686
	SDPTC2	0.861**				
	SDPTC3	0.856**				
Information Integration	SMOIICP	0.738**	0.633	0.644	0.801	0.573
	SMOIIIS4	0.793**				
	SMOIIIS5	0.739**				
Supplier Management Orientation	SMOIPD	0.716**	0.704	0.846	0.822	0.608
	SMOLTR	0.885**				
	SMOLTR	0.727**				

Source(s): Authors' compilation

3.5.2 Discriminatory Validity

Discriminant validity was examined using the Heterotrait Monotrait ratio of correlations (HTMT), with 0.90 as the threshold (Hair Jr *et al.*, 2022). Table 2 shows that the dimensional constructs are unique from one another because the coefficients are below 0.90.

Table 2
Discriminant validity

	1	2	3	4	5	6	7	8	9
Costs (1)									
Delivery Time (2)	0.404								
Employee (3)	0.617	0.566							
Market (4)	0.271	0.387	0.632						
Norm (5)	0.450	0.246	0.593	0.525					
Open (6)	0.230	0.093	0.343	0.113	0.344				
Process (7)	0.487	0.519	0.507	0.449	0.634	0.310			
Quality (8)	0.382	0.278	0.291	0.299	0.378	0.241	0.512		
Tight (9)	0.434	0.529	0.672	0.766	0.573	0.219	0.768	0.152	

Source(s): Authors' compilation

3.5.3 Endogeneity bias test using Gaussian Copula method

To examine whether endogeneity posed a threat to the validity of the model, the Gaussian Copula approach was applied to all estimated paths. All paths showed that endogeneity is not a matter of concern since the p values were non-significant (ranging between 0.051 to 0.798), except SMO→SDP)→SDP, OC→SDP, SMO→OC, and SMO→SDP. Overall, the analysis provides little indication of endogeneity concerns. (See Table 3).

Table 3
Summary of hypotheses testing

Paths	Original sample	Sample mean	Standard deviation	T statistics	P values
GC (II→OC)→OC	0.072	0.059	0.282	0.256	0.798
GC (II →SDP)→SDP	-0.156	-0.068	0.352	0.443	0.658
GC (OC→SDP)→SDP	-0.414	-0.386	0.212	1.952	0.051
GC (SMO→OC)→OC	-0.323	-0.317	0.204	1.58	0.114
GC (SMO→SDP)→SDP	0.476	0.454	0.187	2.539	0.011
II→OC	0.175	0.185	0.306	0.57	0.569
II→SDP	0.256	0.164	0.388	0.66	0.509
OC→SDP	0.879	0.85	0.206	4.26	0
SMO→OC	0.647	0.639	0.263	2.457	0.014
SMO→SDP	-0.438	-0.399	0.219	1.996	0.046

Source(s): Authors' computation

3.5.4 Effect size

The effect size evaluated the study's magnitude of relationships, offering practical insights beyond mere statistical significance. (See Table 4). We assessed the effect ($f2$) size of II and OC and the findings indicate that these variables influence each other; their practical impact on each other is relatively small $f2$ of 0.068 on the relationship between the two variables. Conversely, the impact of impact of OC on SDP was significant ($f2$=0.271). We established a small f2 (0.115) on SMO and SDP, suggesting a negligible impact of SMO on SDP. The $f2$ for the relationship between II and SDP is 0.015, indicating a very small $f2$ (Cohen, 1988), implying a minimal non-significant impact of II on SDP. We evaluated the $f2$ of SMO and OC, which indicates a very small $f2$ (0.001), suggesting that, while the relationship is statistically significant, its practical impact is minimal.

4. Results

4.1 Zero-order correlations

A correlation analysis was performed to ascertain connections among the variables. The results show positive relationships between SMO and OC, OC and SDP, and II and OC. Contrary, the relationships between SMO and SDP (β=0.033 p=0.689), and II and SDP (β=0.107, p=0.285) are non-significant (See Table 4).

4.2 Hypothesis results

The results reveal a clear and coherent pattern on how SMO, II, and OC shape SDP. II showed a significant positive influence on OC (β=0.240, p=0.001), suggesting that firms with stronger information-sharing practices and better coordination tend to cultivate cultures that encourage collaboration and adaptability. However, II did not directly affect SDP (β=0.107, p=0.285), implying that information capabilities alone are insufficient to produce immediate operational improvements. Rather, their benefits appear to unfold indirectly, through cultural mechanisms that help firms translate information into more coherent supplier-facing actions. OC emerged as the strongest predictor of SDP (β=0.485, p=0.000), underscoring the critical role of shared norms, openness, and teamwork in driving execution within firms. SMO also significantly influenced OC (β=0.312, p=0.002), indicating that firms that strategically engage with their suppliers are more likely to embed cultural attributes that support cooperation, responsiveness, and collective problem-solving. However, SMO did not show a direct

effect on SDP (β=0.033, p=0.689), reinforcing the idea that supplier-oriented managerial practices only contribute to SDP when they are grounded in a strong internal cultural foundation.

The mediation analysis highlights the pivotal role of OC. The indirect effect from II→OC→SDP was significant (β=0.116, p=0.010), with a variance accounted for (VAF) of 52.02%, indicating partial mediation. This shows that over half of II's influence on SDP is channeled through its impact on OC. The indirect effect of SMO through OC was even more pronounced (β=0.151, p=0.001), with a VAF of 82.07%, pointing to full mediation. This means that SMO enhances SDP almost entirely by strengthening the cultural attributes that facilitate coordinated and supplier-focused behaviors. The total effects provide additional support for these dynamics. II had a significant total effect on SDP (β=0.223, p=0.032), despite its non-significant direct path, reinforcing the mediating role of OC. Similarly, SMO demonstrated a significant total effect (β=0.184, p=0.021), again driven mainly by the cultural pathway. The model's explanatory power was moderate, with R^2 values of 0.182 for OC and 0.291 for SDP, and Q^2 values of 0.156 and 0.059, indicating acceptable predictive relevance. Taken together, these findings point to OC as the central mechanism through which II and SMO translate into improved SDP.

Table 4
Direct, indirect and total effects

Direct	β	T stat	P values	Bca	Effect Size (f^2)	VIF	Decision
II→OC	0.240	3.266	0.001	.108; .391	0.068	1.034	Supported
II→SDP	0.107	1.069	0.285	-.087; .303	0.015	1.105	Rejected
OC→SDP	0.485	4.876	0.000	.242; .643	0.271	1.223	Supported
SMO→OC	0.312	3.048	0.002	.117; .516	0.001	1.034	Supported
SMO→SDP	0.033	0.401	0.689	-.130; .190	0.115	1.153	Rejected
Indirect	β	T stat	P values	Bca	VAF%		
II→OC→SDP	0.116	2.583	0.010	.045; .226	52.02%		Supported
SMO→OC→SDP	0.151	3.281	0.001	.071; .225	82.07%		Supported
Total	β	T stat	P values	Bca			
II→OC	0.240	3.266	0.001	.108; .391			
II→SDP	0.223	2.140	0.032	.018; .421			
OC→SDP	0.485	4.876	0.000	.242; .643			
SMO→OC	0.312	3.048	0.002	.117; .516			
SMO→SDP	0.184	2.308	0.021	.029; .342			
Predictive Criteria	R2	Adj. R2	Q^2				
OC	.182	.170	.156				
SDP	.291	.275	.059				

Source(s): Authors' compilation

5. Discussion

The study examined a link between SMO, II, OC and SDP of manufacturing firms. Our findings confirm that SMO positively affects SDP, although the effect was non-significant. This indicates that long-term supplier-buyer relationship does not guarantee SDP. This is because social capital and interactions between buyers and suppliers can negatively impact a company's relationships, potentially compromising long-term profitability through the facilitation of opportunistic behavior, subjective decision-making, and poor supplier selection (Sombultawee and Pasunon, 2022). Besides, some teams may not always incorporate supplier feedback into their product development efforts and prioritize other variables like cost over quality, so involvement in quality emphasis and product development may not result in SDP (Falahat *et al.*, 2024). Furthermore, a reduced supplier base might not boost supplier performance because it might have unfavorable effects like increased expenses, worse service quality, less flexibility, or perhaps no cost savings at all if the remaining suppliers grow accustomed to providing their services (Böris and Hall, 2015). This aligns with Vijayaraghavan & Singh (2009) who observed that while SMO facilitates productive collaboration with direct suppliers, the absence of extension to the next layer of suppliers restricts the overall SDP. We affirm that SMO positively affects OC, consistent with Khan et al. (2020) assertion that SMO-related activities, like long-term connections between suppliers and buyers, participation in product development and quality focus, and reduced supplier base foster OC. Long term buyer-supplier relationships emerged as a crucial element in these approaches, highlighting its essential significance in aligning OC. This aligns with Mello and Stank (2005) who acknowledged SMO as a vital resource vital for cultivating OC in firms. The findings reveal that firms have adopted significant practices, including long term relationship, supply base reduction and involvement in product development all of which cultivate OC. Despite the notable success of SMO, Deshpandé & Farley (2004) established a negative relationship between SMO and OC particularly in individualistic cultures where suppliers tend to overestimate their orientation, leading to differing perspectives on SMO between suppliers and customers which adversely affects OC initiatives.

Additionally, a positive significant relationship between OC and SDP was established. The presence of OC practices like norms, market, employee, process, market, and tight in firms substantially impacts SDP. Such practices suggest a proactive strategy for OC, supporting the assertion that although OC presents difficulties, the incorporation of these practices can enable firms to improve their efficacy. Despite the challenges faced by emerging nations, the correlation between these

activities and the expansion of manufacturing enterprises indicates that operational capabilities enhance company performance. Our findings support Corbett & Rastrick (2000) who acknowledge that OC determines the success or failure SDP. Notably, Isa et al. (2016) identified inflexibility and bureaucracy as critical factors undermining how OC influences SDP.

Conversely, there is a non-significant positive relationship between II and SDP. This indicates that information sharing may not always result in improved SDP because firms are hesitant to share information with suppliers due to their desire to keep things secret and the possibility of information quality issues and private information leakage, which erodes partner trust, thus undermining SDP (Ahmed, 2022). While collaborative planning influences SDP, its effectiveness depends on the degree of socialization as over-reliance on collaborative planning in the absence of sufficient socialization can lower performance (Cousins and Menguc, 2006). This resonates with Afrifa et al. (2021) who found a non-significant relationship between customer integration and operational performance because they lack the appropriate II mechanisms to increase customer integration, which could boost operational performance. Muhwezi et al. (2023) discovered that II is negatively related to procurement performance because even with information sharing and collaborative planning, they might not be able to obtain goods and services that are reasonably priced, of high quality, and delivered on time. Furthermore, the study established a positive significant relationship between II and OC. This aligns with Erdurmazlı (2020) who acknowledges that activities and processes related to II like information sharing and collaborative planning are essential for cultivating OC. Information sharing emerged as a pivotal factor in these processes underscoring its critical role in firms. This aligns with previous literature that reveals the significance of information sharing in cultivating OC in manufacturing firms (Nasrin and Isik, 2021) through collaboration. The findings reveal that firms have adopted significant practices including information sharing and collaborative planning all of which considerably cultivate OC. Despite the notable success of II, Nasrin & Isik (2021) found a negative relationship between some aspects of OC particularly because of information leakage and lack of control on II leading to differing perspectives on II which adversely affects OC. Therefore, implementing II initiatives becomes essential to maintaining OC. By placing a high priority on II, firms enhance collaboration and information sharing which boosts collaborative OC.

5.1 Mediation test

The mediation tests results show that OC partially mediates the relationship between II and SDP. This implies that OC proactively responds to II and SDP, enabling suppliers to optimize their delivery schedules and consistently deliver high-quality products. Also, OC plays a pivotal role in fostering process improvements by encouraging collaborative planning, and information sharing, leading to cost reductions and enhanced SDP. The findings concur with Böris & Hall (2015) who revealed that OC significantly influences successful implementation of SDP, often leading to II through collaborative planning and information sharing. The findings support the RBV Theory by highlighting how OC serves as a catalyst for resource allocation and utilization, ultimately improving SDP via effective internal processes. Additionally, OC fully mediates the relationship between SMO and SDP. This implies that OC actively aligns with supplier management strategies and responds to SDP by taking initiatives to ensure timely and high-quality deliveries from suppliers. Furthermore, OC shapes norms, market dynamics, employee behavior, processes, and efficient activities by driving cost reductions, fostering collaborative planning, and encouraging information sharing, ultimately enhancing SDP. The findings align with Cousins & Menguc (2006) who revealed that OC significantly influences SDP, resulting into SMO that emphasizes building long term relationships and involvement in product development. The findings support the RBV Theory by highlighting the crucial role of OC as a resource in shaping SMO and SDP.

6. Conclusion, policy and future research implications

6.1 Conclusion

This study emphasizes the role of SMO, II, OC and SDP of firms. The study paves away for firms to integrate SDP into their operations. The results offer a useful pattern and coherent combination of RBV characteristics that managers can leverage to implement effective SPD in their firms. Effective SDP will promote suppliers' compliance with organizational requirements like cost, quality and delivery timelines which improves supply chain and firm performance. Generally, this study furthers the academic discourse on the connection of SMO, II, OC and SDP. It lays the groundwork for upcoming studies that will go into previously undiscovered areas of this field. Policymakers and business leaders are encouraged to heed these findings and recognize the strategic value of SMO, II and OC in fostering SDP firms.

6.2 Theoretical Implications

This research contributes to theory by positioning OC as a mediating capability. It challenges traditional, direct-effect models in supply chain research, showing that information or supplier practices do not always lead directly to performance, they need to operate through culture. This finding enriches dynamic capability theory and contingency-based perspectives, indicating that the success of II or supplier management routines depends on cultural conditions that facilitate shared meaning and coordinated action.

6.3 Policy Implications

Policymakers and SME support agencies should pair digitization efforts with interventions aimed at strengthening OC. Capacity-building programs should include not just technical training but also modules on leadership, change management, and collaborative norms. Policies that foster clusters, supplier development programs, and knowledge-sharing platforms can embed cooperative cultural norms across SME-supplier networks. By doing so, digital and relational upgrades will be more likely to yield long-term performance gains.

6.4 Practical Implications

For SME practitioners, these findings underscore that investing in information systems or building stronger supplier relationships alone is not enough to enhance SDP. Managers need to cultivate cultural qualities, such as teamwork, openness, and responsiveness, that enable employees to interpret information effectively and act in a coordinated manner. Practical approaches include promoting cross-functional communication, empowering frontline staff to make informed decisions, establishing consistent information-sharing routines, and fostering relational norms that encourage collaboration. Importantly, supplier management efforts should be closely aligned with internal cultural development, ensuring that external engagement translates into tangible operational improvements.

6.5 Future research implications and limitations of the study

The study recognizes that the role of SMO, II, OC on SDP though vital is limited. This observation lays ground for further research to identify additional and external factors that could significantly influence SDP. Furthermore, there are certain restrictions associated with the SEM data technique that may cause one to doubt the validity of the results and there is a chance of bias because the data was gathered through a cross-sectional study.

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Ethical Compliance

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Data availability statement

Upon reasonable request, the supporting data for our findings can be availed by the corresponding author.

References

Aberdeen Group. (2002). *The supplier performance measurement benchmarking report: Measuring supply chain success*.

Aćimović, S., Mijušković, V., & Spasenić, A. T. (2021). The influence of organizational culture on supply chain integration. *Serbian Journal of Management*, *16*(1), 161–180.

Afrifa, S., Amoah, N., Fianko, S. K., & Dzogbewu, T. C. (2021). Supply chain integration and operational performance in health institutions: A structural model for mediation effects. *Polish Journal of Management Studies*, *24*.

Ahmed, M. A. (2022). Impact of information sharing on supply chain performance with mediation of trust: Information sharing and supply chain management. *South Asian Journal of Social Review*, *1*(2), 56–79.

Alamsjah, F., & Yunus, E. N. (2022). Achieving supply chain 4.0 and the importance of agility, ambidexterity, and organizational culture: A case of Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, *8*(2), 83.

Alghababsheh, M., Gallear, D., & Saikouk, T. (2023). Justice in supply chain relationships: A comprehensive review and future research directions. *European Management Review*, *20*(3), 367–397.

Baah, C., Opoku Agyeman, D., Acquah, I. S. K., Agyabeng-Mensah, Y., Afum, E., Issau, K., Ofori, D., et al. (2022). Effect of information sharing in supply chains: Understanding the roles of supply chain visibility, agility, collaboration on supply chain performance. *Benchmarking: An International Journal*, *29*(2), 434–455.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.

Barney, J. B. (1986). Organizational culture: Can it be a source of sustained competitive advantage? *Academy of Management Review*, *11*(3), 656–665.

Bhattacharyya, K., Guiffrida, A. L., Soto-Ferrari, M. R., & Schikora, P. (2025). A multinomial modeling approach to assess supplier delivery performance for buyer-supplier alignment. *Journal of Global Operations and Strategic Sourcing*, *18*(2), 251–266.

Bhuiyan, F., Baird, K., & Munir, R. (2020). The association between organizational culture, CSR practices and organizational performance in an emerging economy. *Meditari Accountancy Research*, *28*(6), 977–1011.

Birhanu, Y., Gizaw, T., Teshome, D., Boche, B., & Gudeta, T. (2022). The mediating effect of information sharing on pharmaceutical supply chain integration and operational performance in Ethiopia: An analytical cross-sectional study. *Journal of Pharmaceutical Policy and Practice*, *15*(1), 44.

Böris, E., & Hall, V. (2015). *Developing a methodology for supplier base reduction: A case study at Dynapac GmbH*.

Burkhart, D., & Bode, C. (2024). On supplier resilience: How supplier performance, disruption frequency, and disruption duration are interrelated. *Journal of Purchasing and Supply Management*, *30*(3), 100921.

Cadden, T., Dennehy, D., Mantymaki, M., & Treacy, R. (2022). Understanding the influential and mediating role of cultural enablers of AI integration to supply chain. *International Journal of Production Research*, *60*(14), 4592–4620.

Cai, S., Jun, M., & Yang, Z. (2010). Implementing supply chain information integration in China: The role of institutional forces and trust. *Journal of Operations Management*, *28*(3), 257–268.

Cao, Z., Huo, B., Li, Y., & Zhao, X. (2015). The impact of organizational culture on supply chain integration: A contingency and configuration approach. *Supply Chain Management: An International Journal*, *20*(1), 24–41.

Cheng, C. C. J., & Sheu, C. (2022). Leveraging supplier involvement for fueling manufacturers' firm creativity. *Industrial Marketing Management*, *107*, 353–367.

Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). John Wiley & Sons.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Corbett, L. M., & Rastrick, K. N. (2000). Quality performance and organizational culture: A New Zealand study. *International Journal of Quality & Reliability Management*, *17*(1), 14–26.

Cousins, P. D., Lawson, B., & Squire, B. (2008). Performance measurement in strategic buyer-supplier relationships: The mediating role of socialization mechanisms. *International Journal of Operations & Production Management*, *28*(3), 238–258.

Cousins, P. D., & Menguc, B. (2006). The implications of socialization and integration in supply chain management. *Journal of Operations Management*, *24*(5), 604–620.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Damian-Okoro, I. R. P. (2022). Organizational culture and supply chain integration of oil and gas companies in Rivers State. *International Journal of Academic Research*.

Darestani, S. A., Azizi, M., & Qavami, S. (2015). Solving multi-objective supplier selection model using a compensatory approach. *Journal of Industrial and Production Engineering*, *32*(6), 387–395.

Deshpandé, R., & Farley, J. U. (2004). Organizational culture, market orientation, innovativeness, and firm performance: An international research odyssey. *International Journal of Research in Marketing*, *21*(1), 3–22.

Erdurmazlı, E. (2020). Effects of information technologies on organizational culture: A discussion based on the key role of organizational structure. In *A closer look at organizational culture in action*. IntechOpen.

Falahat, M., Chong, S. C., & Liew, C. (2024). Navigating new product development: Uncovering factors and overcoming challenges for success. *Heliyon*, *10*(1).

Fine, E. C., & Haskell, J. (1992). *Performance, culture, and identity*. Bloomsbury Publishing.

Fotache, G., & Bucşă, R.-C. (2019). Managing costs: Tools used for achieving the cost advantage. *Economy Transdisciplinarity Cognition*, *22*(2), 104–111.

Garcia-Buendia, N., Moyano-Fuentes, J., Maqueira-Marín, J. M., Romano, P., & Molinaro, M. (2025). Strategic supplier performance in a competitive landscape: Enhancing organizational performance through lean supply chain management. *BRQ Business Research Quarterly*, *28*(2), 474–490.

Garip, B., Tunahan, H., & Jahangir, R. (2025). Drivers and barriers of supply chain integration: A two-phase email-based analytical approach. *Business Process Management Journal*, *31*(8), 223–243.

Government of Uganda. (2013). *Uganda Vision 2040*.

Gunasekera, M. (2022). *The mediating role of organizational culture in the relationship between region-based firm ownership type (RBFOT) and manufacturing performance: A test on the apparel industry in Sri Lanka* [Master's thesis, Massey University].

Ha, H., & Lee, O. (2019). A study on maturity model of information integration system. *Journal of the Korea Academia-Industrial Cooperation Society*, *20*(8), 570–578.

Hair, J. F., Jr., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE.

Hajipour, B., & Ghanavati, M. (2012). The impact of market orientation and organizational culture on the performance: Case study of SMEs. *Journal of Contemporary Management*, *15*(1), 83–95.

Hermawan, I., Inayah, S., Khakim, L., Nugroho, J., & Adah, N. N. (2022). The role of entrepreneurial orientation, organizational culture, and technology resources in encouraging supply chain management. In *Proceedings of the 3rd Asia Pacific International Conference on Industrial Engineering and Operations Management* (pp. 3242–3250). IEOM Society International.

Hofstede, G. (2011). National cultures, organizational cultures, and the role of management. *Values and Ethics for the 21st Century*, *459*(81), 385–402.

Huo, B., Han, Z., & Prajogo, D. (2016). Antecedents and consequences of supply chain information integration: A resource-based view. *Supply Chain Management: An International Journal*, *21*(6), 661–677.

Isa, M. F. M., Ugheoke, S. O., & Noor, W. S. W. M. (2016). The influence of organizational culture on employees' performance: Evidence from Oman. *Journal of Entrepreneurship and Business*, *4*(2), 1–12.

Israel, G. D. (1992). *Determining sample size*. University of Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences.

Jing, H., & Fan, Y. (2024). Digital transformation, supply chain integration and supply chain performance: Evidence from Chinese manufacturing listed firms. *Sage Open*, *14*(3), 21582440241281616.

Kabbera, S., Tibaingana, A., Kiwala, Y., & Mugarura, J. T. (2024). Environmental practices and the growth of small and medium agro-processing enterprises in Uganda. *Cleaner and Circular Bioeconomy*, *8*, 100090.

Karagöz, I. B., & Akgün, A. E. (2015). The roles of IT capability and organizational culture on logistics capability and firm performance. *Journal of Business Studies Quarterly*, *7*(2), 23.

Kazemian, M., Afsharkazemi, M. A., Fathi Hafashjani, K., & Motadel, M. (2023). Presenting smart steel pricing model: An integration of game theory and machine learning algorithms. *Industrial Management Journal*, *15*(3), 478–507.

Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The interplay of leadership styles, innovative work behavior, organizational culture, and organizational citizenship behavior. *Sage Open*, *10*(1).

Komakech, R. A., Ombati, T. O., Kikwatha, R. W., & Wainaina, M. G. (2025). Resource-based view theory and its applications in supply chain management: A systematic literature review. *Management Science Letters*, *15*(4), 261–272.

Kumar, V., Jabarzadeh, Y., Jeihouni, P., & Garza-Reyes, J. A. (2020). Learning orientation and innovation performance: The mediating role of operations strategy and supply chain integration. *Supply Chain Management: An International Journal*, *25*(4), 457–474.

Laulita, N. B. (2020). The effect of organizational culture and supplier integration to supply chain performance. *MEC-J (Management and Economics Journal)*, *4*(3), 295–306.

Li, A., Sethi, S. P., Wang, X., & Chang, S. (2025). Cost-sharing agreements for the financing of customized product purchase orders under asymmetric information. *IEEE Transactions on Engineering Management*, *72*, 2611–2630.

Liu, J., & Wang, G. (2024). Supply chain stability and enterprises' total factor productivity: From the perspective of development sustainability. *Sustainability*, *16*(23), 10265.

Longo, F., Mirabelli, G., Solina, V., Alberto, U., De Paola, G., Giordano, L., & Ziparo, M. (2022). A simulation-based framework for manufacturing design and resilience assessment: A case study in the wood sector. *Applied Sciences*, *12*(15), 7614.

Mello, J. E., & Stank, T. P. (2005). Linking firm culture and orientation to supply chain success. *International Journal of Physical Distribution & Logistics Management*, *35*(8), 542–554.

Men, F., Yaqub, R. M. S., Yan, R., Irfan, M., & Haider, A. (2023). The impact of top management support, perceived justice, supplier management, and sustainable supply chain management on moderating the role of supply chain agility. *Frontiers in Environmental Science*, *10,* 1006029.

Minkov, M., & Hofstede, G. (2011). The evolution of Hofstede's doctrine. *Cross Cultural Management: An International Journal*, *18*(1), 10–20.

Muhwezi, M., Mutebi, H., Mayanja, S. S., Tukamuhabwa, B., Namagembe, S., & Kalema, R. (2023). Information integration, procurement internal controls, material and purchasing procedure standardization and procurement performance in humanitarian organizations. *Journal of Humanitarian Logistics and Supply Chain Management*, *13*(4), 410–432.

Mwesiumo, D., Nujen, B. B., & Buvik, A. (2021). Driving collaborative supply risk mitigation in buyer-supplier relationships. *Supply Chain Forum: An International Journal*, *22*(4), 347–359.

Nasrin, M. L., & Isik, C. (2021). The effects of organizational culture on information sharing attitude. *University of South Florida (USF) M3 Publishing*, *5*(2021), 63.

Ofori, I., Aidoo-Acquah, K., & Dadzie Boafo, E. (2024). The influence of supplier relationship management on supply performance: The moderating effect of employee commitment. *African Journal of Procurement, Logistics & Supply Chain Management*, *7*(8), 55–71.

Ouchi, W. G., & Wilkins, A. L. (1985). Organizational culture. *Annual Review of Sociology*, 11(1), 457–483.

Patrucco, A., Frattini, F., & Di Benedetto, A. (2022). Characteristics of supplier performance measurement systems in collaborative innovation projects: The role of the purchasing department. *Supply Chain Management: An International Journal*, *27*(2), 207–231.

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.

Qi, B., McCauley, E., Baxter, K., Poo, M. C.-P., & Lau, Y. (2025). A manufacturing industry perspective on pandemic-induced supply chain disruptions. *Businesses*, *5*(1), 8.

Rao, C. M., Rao, K. P., & Muniswamy, V. V. (2011). Delivery performance measurement in an integrated supply chain management: Case study in batteries manufacturing firm. *Serbian Journal of Management*, *6*(2), 205–220.

Ricciardi, F., Zardini, A., & Rossignoli, C. (2018). Organizational integration of the IT function: A key enabler of firm capabilities and performance. *Journal of Innovation & Knowledge*, *3*(3), 93–107.

Sakhare, C. S., Chakraborty, S., Sarmah, S. P., & Singh, V. (2024). Improvement of supplier delivery performance under uncertain capacity allocation and delivery time window. *International Journal of Quality & Reliability Management*, *41*(1), 324–359.

Shin, H., Collier, D. A., & Wilson, D. D. (2000). Supply management orientation and supplier/buyer performance. *Journal of Operations Management*, *18*(3), 317–333.

Sinha, N., & Dhall, N. (2020). Mediating effect of TQM on relationship between organizational culture and performance: Evidence from Indian SMEs. *Total Quality Management & Business Excellence*, *31*(15–16), 1841–1865.

Sombultawee, K., & Pasunon, P. (2022). Long-term buyer-supplier relationships in IT services. *Journal of Business & Industrial Marketing*, *37*(3), 629–642.

Sukati, I., Sanyal, S., & Awaain, A. M. B. (2020). Supply chain management practices and organizational performance: An investigation from service industry. *International Journal of Supply Chain Management*, *9*(3), 207–213.

Sung, H., & Kim, S. (2019). The effect of organizational culture on supply chain management in uncertain environments. *Asia Pacific Journal of Marketing and Logistics*, *31*(4), 1003–1026.

Tao, L., Liang, A., & Bushuev, M. A. (2024). Supply chain delivery performance improvement: A white-box perspective. *International Journal of Production Research*, *62*(6), 2202–2219.

Tukamuhabwa, B., Mutebi, H., & Isabirye, D. (2023). Supplier performance in the public healthcare: Internal social capital, logistics capabilities and supply chain risk management capabilities as antecedents in a developing economy. *Journal of Business and Socio-Economic Development*, *3*(1), 50–68.

Tukamuhabwa, B. R., Mutebi, H., & Ojok, B. A. (2024). Supply chain performance in the wooden furniture industry: The effect of institutional pressures and supply chain integration in a developing country context. *Journal of African Business*, *25*(2), 349–370.

Uganda Bureau of Statistics. (2021). *Annual statistical abstract*.

Vijayaraghavan, T. A. S., & Raju, S. B. (2008). Supply management orientation and its effect on buyer/supplier performance: Some insights from automobile industry in India. *Great Lakes Herald*, *2*(1), 20–35.

Vijayaraghavan, T. A. S., & Singh, P. (2009). Extending the model of supply management orientation and its effect on supplier buyer performance. In *Proceedings of the 20th POMs Annual Conference*.

Wang, M., Wu, Y., Chen, B., & Evans, M. (2020). Blockchain and supply chain management: A new paradigm for supply chain integration and collaboration. *Operations and Supply Chain Management: An International Journal*, *14*(1), 111–122.

Wang, Y., Modi, S. B., & Schoenherr, T. (2021). Leveraging sustainable design practices through supplier involvement in new product development: The role of the suppliers' environmental management capability. *International Journal of Production Economics*, *232*, 107919.

Weber, Y., & Pliskin, N. (1996). The effects of information systems integration and organizational culture on a firm's effectiveness. *Information & Management*, *30*(2), 81–90.

Wong, C. W. Y., Lai, K., & Bernroider, E. W. N. (2015). The performance of contingencies of supply chain information integration: The roles of product and market complexity. *International Journal of Production Economics*, *165*, 1–11.

World Bank. (2022). *The World Bank annual report 2022: Helping countries adapt to a changing world*.

Yudhistira, R. A., & Habiburochman, H. (2017). The influence of organizational culture, professional commitment and level of religiosity to ethical judgement of the auditor: Indonesia evidence. *The Indonesian Journal of Accounting Research*, *20*(2).

Zhong, J., Jia, F., Chen, X., Hong, Y., & Yu, Y. (2023). Internal and external collaboration and supply chain performance: A fit approach. *International Journal of Logistics Research and Applications*, *26*(10), 1267–1284.

Zhou, H., & Benton, W. C., Jr. (2007). Supply chain practice and information sharing. *Journal of Operations Management*, *25*(6), 1348–1365.

Zikusooka, E., & Kalikola, J. (2024). Metropolitan Journal of Academic Multidisciplinary Research. *Metropolitan Journal of Academic Multidisciplinary Research*, *10*(3), 81–92.



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