



**PARTICIPATIVE MANAGEMENT AND ORGANISATIONAL
SUSTAINABILITY OF SMALL-SCALE MANUFACTURING FIRMS IN
CALABAR, NIGERIA**

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Abstract

This study examined participative management and organisational sustainability of small-scale manufacturing firms in Calabar, Nigeria. It sought to determine the relationship among decision-making involvement, collaborative information sharing, employee empowerment and organisational sustainability. A cross-sectional research design was adopted. Primary data were collected from 457 managers and operators of small-scale manufacturing firms in Calabar through a structured questionnaire. The data obtained were analyzed using descriptive statistics while the hypotheses were tested using Pearson's Product Moment Correlation method. The findings revealed statistically significant and positive relationships between all three participative management practices (decision-making involvement, collaborative information sharing, employee empowerment) and organisational sustainability. Among them, employee empowerment exhibited the strongest correlation, followed by decision-making involvement and then collaborative information sharing. Hence, the study concluded that participative management plays a vital role in enhancing the sustainability of small-scale manufacturing firms. On this basis, it was recommended that small-scale manufacturing firms should prioritize decision-making involvement by systematically including employees in strategic planning and operational problem-solving sessions to leverage their unique insights and foster a sense of shared ownership. It was also recommended that there is a need for small-scale manufacturing firms to improve employee empowerment by regularly providing training on decision-making, increasing access to relevant company information, and establishing clear feedback mechanisms for employee input on operational processes.

Keywords: Participative management, Organizational sustainability, Decision-making involvement, Collaborative information sharing, Employee empowerment



Introduction

Organizational sustainability has become an essential focus in contemporary management discourse, especially in the context of small-scale manufacturing firms striving to remain viable amidst increasing economic, social, and environmental uncertainties. Sustainability, in this regard, refers to the ability of an organization to maintain and improve its operational capacity, competitiveness, and resource utilization over the long term while balancing financial performance, environmental stewardship, and social equity (Amoako et al., 2021; Agyabeng-Mensah et al., 2020). For small-scale manufacturing firms in developing economies such as Nigeria, organizational sustainability is not only critical for survival but also for contributing to broader developmental goals, including employment creation, poverty reduction, and industrial innovation (Okorie et al., 2020). Despite their economic relevance, these firms are often plagued by sustainability challenges such as weak leadership structures, limited employee involvement, resource scarcity, and resistance to change, which compromise their long-term resilience (Eze et al., 2022). Recognizing the criticality of sustainability, small-scale manufacturing firms have explored various strategic interventions to improve their organizational resilience and adaptability. Among these interventions, participative management has emerged as

a widely advocated approach due to its potential to drive long-term organizational performance through inclusive and democratic leadership practices (Kassa & Raju, 2021; Falola et al., 2020). According to Abubakar and Ahmad (2020), participative management is a leadership and management approach that involves employees at various levels of the organization in the decision-making process, fostering a collaborative and inclusive work culture

While the concept is not entirely new, its application in small-scale manufacturing firms is increasingly being explored as a practical pathway for enhancing organizational sustainability (Kuye & Sulaimon, 2021). In operationalizing participative management, several subcomponents have emerged as essential in the small-scale manufacturing sector. This study focuses on three critical elements: decision-making involvement, collaborative information sharing, and employee empowerment. Decision-making involvement refers to the degree to which employees are consulted and engaged in organizational decisions that affect their roles or the strategic direction of the business (Alfayad & Arif, 2018). Collaborative information sharing emphasizes open communication channels and the free flow of information across hierarchies, promoting transparency and trust (Zainuddin et al., 2021). Employee empowerment, on the



other hand, pertains to giving employees the autonomy, resources, and support to make decisions and take initiative in their job roles (Adeoye et al., 2019). These components are gaining traction because they address the recurring challenges of low employee morale, poor communication, and top-down leadership in many Nigerian small enterprises (Nnaji-Ihedinmah & Egbunike, 2020; Ibidunni et al., 2020).

Their application has been associated with positive outcomes such as increased productivity, higher employee retention, and improved organizational learning—all of which are crucial to sustainability (Asaolu et al., 2020). However, despite growing interest, empirical studies examining the effect of these participative management practices on organizational sustainability in the context of small-scale manufacturing firms in Nigeria, remain sparse. Much of the existing literature focuses either on large organizations or general business performance without sufficiently analyzing the nuanced impact on long-term sustainability outcomes (Edeh et al., 2023; Adeoye et al., 2019; Falola et al., 2020; Kuye & Sulaimon, 2021). This gap is particularly troubling considering the unique socio-economic and structural challenges faced by manufacturing SMEs in Nigeria. Moreover, inconsistencies in findings across organizational size and industries underscore the need for more targeted investigations that consider contextual dynamics (Onukogu & Adedoyin, 2022). Understanding these

relationships is crucial for designing practical interventions that enhance the resilience and viability of these firms. Hence, the purpose of this study was to examine the relationship between participative management and organizational sustainability in small-scale manufacturing firms in Calabar, Nigeria. Specifically, it sought to determine how decision-making involvement, collaborative information sharing, and employee empowerment influence organizational sustainability. The findings offer practical insights for managers, policymakers, and development actors seeking to support small-scale manufacturing firms in building sustainable and adaptive organizational structures in volatile operating environments.

Literature review

Participative management in a manufacturing setting

Participative management, also referred to as participatory decision-making, is an organizational approach that involves employees across hierarchical levels in the decision-making process to enhance efficiency, commitment, and innovation. According to Klein and Shapiro (2019), participative management is a collaborative framework where managers intentionally delegate authority to subordinates to influence policies, operational procedures, and performance strategies. Meanwhile, Lemoine and Vial (2020) describe it as a decentralized system of leadership that facilitates



democratic engagement in managerial affairs, aiming to align organizational goals with employee motivations. In a manufacturing setting, where operational success hinges on coordination, precision, and adaptability, participative management offers unique benefits and exposes subtle complexities. For instance, by integrating frontline workers in decisions concerning production workflows or safety measures, firms can harness localized expertise that may be inaccessible to top-level managers (Carlsen & Müller, 2021). However, while this model can increase motivation and foster a culture of ownership, it is not without friction. As Varga and Eberhardt (2023) contend, manufacturing environments often operate under tight timelines and rigid quality controls, and democratizing decision-making may introduce delays or conflicting views that obstruct rapid execution. Furthermore, participative models can be challenged by hierarchical rigidity or cultural resistance, particularly in organizations historically structured around top-down control (Thomsen & Alberti, 2024). Nonetheless, empirical observations by Johansson and Keller (2022) indicate that when properly managed, participative frameworks increase productivity, lower error rates, and elevate worker satisfaction. This is particularly evident in lean manufacturing environments, where team input on continuous improvement strategies is integral to waste minimization and process optimization. Thus, participative management in manufacturing is not a panacea but a

complex intervention whose success depends on leadership agility, clarity of purpose, and an organizational culture receptive to shared governance.

Organizational sustainability in the manufacturing industry

Organizational sustainability in the manufacturing industry refers to the strategic integration of environmental stewardship, social responsibility, and economic viability into core business operations to ensure long-term value creation and resilience (Hendrickson & O'Connell, 2020). According to Müller and Jensen (2021), sustainability in manufacturing extends beyond compliance to include proactive innovation that minimizes ecological footprints, fosters workforce well-being, and sustains competitiveness amid shifting regulatory and market dynamics. This multidimensional orientation is rooted in the belief that organizational viability is inseparable from ecosystem and societal health. Bergström and Keller (2019) emphasize that sustainable manufacturing systems must institutionalize circular economy practices—such as waste reduction, energy efficiency, and product lifecycle redesign—within supply chains and operational models. However, embedding sustainability in manufacturing often reveals a paradox: while firms are pressured to prioritize profitability, long-term sustainability demands upfront investments that may not yield immediate financial returns



(Fukushima & Morales, 2022). This tension underscores the need for integrated sustainability governance that aligns performance metrics with non-financial indicators, such as carbon intensity, ethical sourcing, and workforce equity (Schreiber & Tanaka, 2023). Furthermore, as Anderson and Lemoine (2024) argue, organizational sustainability cannot be siloed as a technical function but must become a cultural ethos, reflected in leadership behaviour, innovation practices, and stakeholder engagement strategies. Yet, despite growing discourse on sustainability, many manufacturers adopt a superficial “greenwashing” approach to meet stakeholder expectations without structurally transforming their practices (Walters & Kwon, 2025). These shortcomings highlight the limitations of voluntary sustainability frameworks and reinforce the argument for institutionalized mandates that enforce genuine commitment. Thus, organizational sustainability in manufacturing must evolve from peripheral strategy to systemic imperative, where ecological and social responsibility are intrinsic to economic survival.

Decision-making involvement and organizational sustainability

Decision-making involvement as a component of participative management refers to the degree to which employees at various levels within an organization are allowed or encouraged to take part in

the formulation of decisions that affect their work, organizational processes, or strategic direction (Wilkinson et al., 2020). It is fundamentally about empowering workers with the authority, knowledge, and freedom to influence outcomes. According to Bhatti et al. (2019), decision-making involvement is the systematic inclusion of employees in organizational decision processes, promoting shared responsibility and mutual respect. Similarly, Boxall and Purcell (2021) define it as a participatory mechanism that facilitates worker input into core managerial decisions, ranging from operational matters to policy formulation.

Decision-making involvement holds strategic value for manufacturing firms because it nurtures employee commitment, minimizes resistance to change, and leverages frontline expertise for improved problem-solving. The manufacturing environment thrives on continuous improvement, efficiency, and precision—areas where workers' insights are indispensable. According to Kim et al. (2020), involving employees in decision-making leads to higher morale, better job satisfaction, and reduced turnover, all of which are essential for maintaining productivity in manufacturing settings.

Moreover, participative decision-making enhances communication and trust between management and staff, which is crucial for coordinating complex workflows and implementing lean manufacturing practices (Zahraei et al., 2022). In an era of rapid technological



advancement and shifting market dynamics, manufacturing firms that actively engage employees in decision-making can respond more quickly and effectively to production challenges and innovation needs (Tariq et al., 2021). It also aligns with Total Quality Management (TQM) principles, which emphasize employee involvement as a cornerstone of sustained quality improvement (Goetsch & Davis, 2021). Implementation of decision-making involvement in manufacturing firms typically takes the form of structured mechanisms such as quality circles, suggestion systems, cross-functional teams, and shared governance boards (Liker & Convis, 2020). Training and capacity-building are also integral to implementation, as equipping employees with decision-making skills ensures that their participation is informed and constructive (Bratton & Gold, 2022). These participative practices not only enrich the decision-making process but also translate into measurable performance improvements, such as reduced error rates, faster cycle times, and higher product quality (Mensah et al. (2023). The foregoing viewpoint suggests that decision-making involvement, a core element of participative management, can substantially enhance organisational sustainability in the manufacturing sector. This viewpoint is backed by the study of Baykal (2023), which revealed that decision-making involvement had a significant positive correlation with organisational sustainability outcomes in Turkish firms. The viewpoint is also

backed by the study of Abrar (2024), which revealed that decision-making involvement had a significant positive influence on employee performance in Pakistani education sector. Moreover, it was also found in the study by Khassawneh and Elrehail (2022) that decision-making involvement had a significant positive influence on organizational performance in the UAE. Based on the scholarly positions of scholars, this study presents the following hypothesis:

H₁: Decision-making involvement has a significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar.

Collaborative information sharing and organizational sustainability

Collaborative information sharing is the structured and transparent exchange of relevant operational, strategic, and technical information among employees, departments, and management within manufacturing organizations. It is rooted in the principle that open communication empowers employees at all levels to make informed contributions to decision-making processes, ultimately enhancing operational efficiency (Chung et al., 2021). In manufacturing, where complex interdependencies exist across the production line, supply chain, and quality assurance, the sharing of real-time and accurate information fosters agility and coordination (Panahifar et al., 2020). Collaborative information sharing also



supports the alignment of organizational goals, facilitates problem-solving, and strengthens trust among team members, which are essential features of participative management (Liu et al., 2022). The importance of collaborative information sharing in manufacturing is underscored by its direct impact on productivity, innovation, and quality management. In high-velocity manufacturing environments, timely information exchange enhances responsiveness to operational disruptions and market changes, thereby reducing downtime and waste (Ghobakhloo & Fathi, 2020). It also enables employees to contribute valuable insights drawn from their on-the-ground experiences, fostering continuous improvement and innovation (Albers et al., 2019). Moreover, collaborative information sharing helps harmonize cross-functional teams, reducing silos and ensuring consistency in production targets, quality standards, and resource allocation (Kusi-Sarpong et al., 2023). By promoting transparency and inclusivity, it also improves job satisfaction and employee morale, which are critical drivers of engagement and retention in manufacturing contexts (de Jong et al., 2020).

Manufacturing companies implement collaborative information sharing through various digital platforms, participatory forums, and integrated information systems. The adoption of Industry 4.0 technologies—such as cloud computing, enterprise resource planning

(ERP) systems, and digital dashboards—facilitates real-time data access and communication across departments (Srai & Lorentz, 2019). Regular cross-functional meetings, team huddles, and suggestion schemes are also utilized to gather and disseminate input from workers, ensuring a two-way flow of information (Wang et al., 2021). Furthermore, training programs that build information literacy and foster a culture of knowledge sharing are integral to sustaining collaborative practices (Zhang et al., 2022). The implementation of these strategies significantly enhances organizational performance by improving decision-making accuracy, accelerating innovation cycles, and enabling more responsive and cost-effective production processes (Papadopoulos et al., 2020). Ultimately, collaborative information sharing acts as a catalyst for strategic alignment, employee empowerment, and continuous operational excellence within manufacturing firms. The foregoing viewpoint suggests that collaborative information sharing, a core element of participative management, can substantially enhance organisational sustainability in the manufacturing sector. This viewpoint is backed by the study of Manzoor et al. (2019), which revealed that collaborative information sharing had a significant effect on organisational performance of hospitals in Pakistan. The viewpoint is also backed by the study of Juma et al. (2023), which revealed that collaborative information sharing had a significant effect on the performance of private hospitals in



Kenya's healthcare sector. Moreover, it was found in the study by Kim (2022), which revealed that collaborative information sharing had a significant positive impact on employee-level performance of hospitality firms in South Korea. Based on the scholarly positions of scholars, this study presents the following hypothesis:

H₂: Collaborative information sharing has a significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar.

Employee empowerment and organizational sustainability

Employee empowerment, as a critical component of participative management in the manufacturing industry, refers to the process of granting workers greater autonomy, authority, and responsibility to make decisions regarding their work processes and tasks (Ahmad & Cheng, 2018). It involves decentralizing decision-making, encouraging employee input, and fostering a sense of ownership over outcomes, particularly in operational areas such as quality control, production planning, and process improvement (Wang et al., 2021). This empowerment is rooted in the belief that employees closest to production activities possess valuable insights and are well-positioned to contribute meaningfully to problem-solving and innovation (Kim et al., 2020). The philosophy of participative management, which supports

empowerment, promotes collaborative leadership styles, flatter organizational structures, and open communication channels, all aimed at harnessing human capital to improve performance and efficiency (Zhang & Bartol, 2019). The importance of employee empowerment in manufacturing cannot be overstated. It leads to increased motivation, job satisfaction, and a higher sense of accountability, which are essential in the high-pressure, precision-driven context of industrial production (Ali et al., 2022). Empowered employees are more likely to demonstrate proactive behavior, take initiative in identifying inefficiencies, and suggest process innovations, thereby enhancing continuous improvement strategies such as Lean Manufacturing and Total Quality Management (Park & Kim, 2023). Furthermore, by involving employees in decision-making, organizations benefit from enhanced employee commitment and reduced resistance to change (Jain & Moreno, 2020). Empowerment also plays a key role in reducing hierarchical delays in problem resolution, leading to faster response times and improved operational agility—a vital capability in today's dynamic manufacturing environments (Torres et al., 2024).

Manufacturing companies implement empowerment through structured mechanisms such as cross-functional teams, suggestion schemes, autonomous work groups, and continuous training programs that build employee capacity and confidence (Nguyen et al., 2022). For



example, the use of quality circles and team-based production cells enables workers to participate actively in monitoring and improving production processes (Chowdhury & Endres, 2020). Additionally, digital tools and performance dashboards are employed to provide employees with real-time data, fostering informed decision-making and transparency (Alkhuraji et al., 2021). The impact of such empowerment on organizational performance is profound. Studies have consistently linked empowerment with enhanced productivity, higher product quality, reduced waste, and improved employee retention in manufacturing settings (Ghosh et al., 2019; Ouyang et al., 2021). Empowerment creates a culture of continuous learning and innovation, which is crucial for maintaining competitiveness in an era of rapid technological advancement and global supply chain pressures (Singh & Kathuria, 2023). The foregoing viewpoint suggests that employee empowerment, a core element of participative management, can substantially enhance organisational sustainability in the manufacturing sector. This viewpoint is backed by the study of Khassawneh and Elrehail (2022), which revealed that employee empowerment had a significant positive influence on organizational performance in the UAE. The viewpoint is also backed by the study of Uribetxebarria et al. (2021), which revealed that employee empowerment had a significant positive impact on the performance of construction firms in

Spain. Similarly, the viewpoint also finds support in the study of Muchiri and Gatobu (2023), which revealed that employee empowerment had a significant positive effect on organisational performance of Kenyan manufacturing companies. Based on the scholarly positions of scholars, this study presents the following hypothesis:

H3: Employee empowerment has a significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar.

Theoretical framework

This study is based on the stakeholder theory, originally developed by R. Edward Freeman in 1984. The theory posits that the success of an organization is best achieved by considering the interests and well-being of all its stakeholders, not just shareholders. This theory fundamentally redefines the purpose of business from one of maximizing shareholder value to one of creating value for a wide array of stakeholders, including employees, customers, suppliers, communities, and investors. The central premise of stakeholder theory is that businesses function within a web of relationships, and maintaining the trust, commitment, and engagement of all stakeholders is essential for long-term success, sustainability, and ethical legitimacy (Freeman, 1984). Relevant empirical studies have reaffirmed the relevance and



applicability of stakeholder theory. For instance, Harrison et al. (2019) emphasized that firms practicing stakeholder engagement strategies tend to outperform others in innovation and employee satisfaction. Similarly, Jones et al. (2020) found that companies which institutionalize stakeholder-centric governance structures enjoy greater long-term profitability and resilience, particularly during crises. More recent evidence by Sun and Zhang (2021) highlights the increasing importance of stakeholder alignment in driving sustainable environmental practices, noting that firms with strong stakeholder dialogues reported significantly higher ESG (Environmental, Social, and Governance) ratings. In the African context, Okoye and Nwankwo (2022) observed that stakeholder-inclusive strategies in Nigerian manufacturing firms positively impacted both employee retention and community relations, further substantiating Freeman's proposition in developing economies.

Moreover, in the context of this study, the relevance of the stakeholder theory is that it provides a foundational lens through which the dynamics of participative management can be understood in relation to organizational sustainability within small-scale manufacturing firms in Calabar, Nigeria. Originally, the stakeholder theory emphasizes the importance of recognizing and addressing the interests of all parties who affect or are affected by organizational decisions—including employees,

managers, and the community—rather than focusing solely on shareholder value. This perspective aligns with the study's specific objectives by underscoring how employee involvement in decision-making, collaborative information sharing, and empowerment are not merely internal managerial practices but are integral stakeholder-focused strategies that foster mutual trust, commitment, and long-term viability. The theory implies that involving employees as key stakeholders in participative management processes promotes transparency, shared accountability, and enhanced motivation, all of which are critical to sustaining productivity and adaptability in resource-constrained small-scale firms. Therefore, stakeholder theory supports the premise that inclusive and communicative organizational practices can significantly enhance sustainability outcomes by aligning business goals with the expectations and contributions of internal stakeholders.

Method

The research employed a cross-sectional survey approach, gathering data once from employees of small-scale manufacturing companies in Calabar to investigate how participative management influenced organizational sustainability. The study's population comprised 488 managers and operators of several small-scale manufacturing firms in Calabar with valid registration status



with the Corporate Affairs Commission (CAC) as of 2025. Given that the population of 488 was considerably manageable and not too large, the study adopted the population as sample. Hence, a census sampling procedure was applied. This sampling procedure enhanced the representativeness of the sample by including every member of the population, thereby eliminating sampling bias and ensuring that the findings accurately reflect the characteristics and diversity of the entire population. Primary data were collected from the employees through the administration of a structured questionnaire. Before the questionnaire was deployed in the field, its reliability was verified using the Cronbach's alpha method, with all scale coefficients exceeding the 0.7 threshold (see Table 1). The gathered data were then analyzed using descriptive statistics, while the study's hypotheses were tested employing Pearson's Product Moment Correlation (PPMC).

TABLE 1

Table 1: Cronbach alpha coefficient reliability estimate (N =50)

Variables	No of items	Cronbach Alpha
Decision-making involvement	7	.891
Collaborative information sharing	5	.780
Employee empowerment	4	.775
Organisational sustainability	6	.861

Source: SPSS Output 2025

Analysis and interpretation

A total number of four hundred and eighty-eight (488) questionnaire copies were administered to managers and operators of small-scale manufacturing firms in Calabar, Cross River State. Out of the 488 copies administered, 457 copies (or 93.6 percent) were properly filled and returned, while 31 copies (or 6.4 percent) were not properly filled and returned. Hence, from the data obtained from 457 respondents, the hypotheses of this study were tested thus:

Hypothesis one:

Ho₁: Decision-making involvement has no significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar.

Ha₁: Decision-making involvement has a significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar.

Hypothesis two:

Ho₂: Collaborative information sharing has no significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar.

Ha₂: Collaborative information sharing has a significant relationship with organizational sustainability of



small-scale manufacturing firms in Calabar.

Hypothesis three:

H₀₃: Employee empowerment has no significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar.

H_{a3}: Employee empowerment has a significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar.

Decision Rule: If the p-value is less than 0.05, reject the null hypothesis; otherwise, accept it.

Table 2: Product moment correlation showing the relationship between decision-making involvement and organizational sustainability of small-scale manufacturing firms in Calabar

		Decision-making involvement	Organisational sustainability
Decision-making involvement	Pearson Correlation	1	.692**
	Sig. (2-tailed)		.001
	N	457	457
Organisational sustainability	Pearson Correlation	.692**	1
	Sig. (2-tailed)	.001	
	N	457	457

**. Correlation is significant at the 0.05 level (2-tailed)

Source: Authors' analysis via SPSS 2025

Table3 : Product moment correlation showing the relationship between collaborative information sharing and organizational sustainability of small-scale manufacturing firms in Calabar

		Collaborative information sharing	Organisational sustainability
Collaborative information sharing	Pearson Correlation	1	.578**
	Sig. (2-tailed)		.000
	N	457	457
Organisational sustainability	Pearson Correlation	.578**	1
	Sig. (2-tailed)	.000	
	N	457	457

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Authors' analysis via SPSS 2025

Table 4: Product moment correlation showing the relationship between employee empowerment and organizational sustainability of small-scale manufacturing firms in Calabar

		Employee empowerment	Organisational sustainability
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Employee empowerment	Pearson	1	.714**
	Correlation		
	Sig. (2-tailed)		.000
Organisational sustainability	N	457	457
	Pearson	.714**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	457	457

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Authors' analysis via SPSS 2025

Tables 2, 3, and 4 present the Pearson's product moment correlation results showing the relationship among participative management practices: decision-making involvement, collaborative information sharing and employee empowerment and organisational sustainability of small-scale manufacturing firms in Calabar. In Table 2, the Pearson correlation coefficient (r) between decision-making involvement and organisational sustainability is 0.692, with a significance value of 0.001, which is below the critical threshold of 0.05. This indicates a strong positive and statistically significant relationship between decision-making involvement and organisational sustainability. The positive direction of the coefficient suggests that as employees' involvement in decision-making increases, the sustainability of their organisations also improves. The decision rule set for this study is to reject the null hypothesis if the p -value is less

than 0.05; thus, since the p -value here is 0.001, H_{01} is rejected and H_{a1} is accepted, confirming that decision-making involvement significantly influences the sustainability of these firms. Similarly, Table 3 shows a Pearson correlation coefficient of 0.578 between collaborative information sharing and organisational sustainability, with a significance value of 0.000, also below the 0.05 threshold. This means there is a moderately strong positive and statistically significant relationship between collaborative information sharing and organisational sustainability. The correlation implies that when information is openly and collaboratively shared among team members, it contributes positively to sustaining the firms' operations. Given the p -value of 0.000, H_{02} is also rejected, and H_{a2} is accepted, supporting the assertion that collaborative information sharing enhances organisational sustainability.

In Table 4, the relationship between employee empowerment and organisational sustainability is shown to be the strongest among the three examined practices, with a Pearson correlation coefficient of 0.714 and a significance value of 0.000. This high correlation value signifies a very strong positive and statistically significant relationship, suggesting that empowering employees, through granting autonomy, recognising competencies, and involving them in strategic functions, has a pronounced effect on the sustainability of the firm. The strength of this relationship



surpasses that of decision-making involvement ($r = 0.692$) and collaborative information sharing ($r = 0.578$), indicating that among the participative management practices studied, employee empowerment has the most substantial relationship with organisational sustainability. This could be attributed to the fact that empowered employees are more motivated, innovative, and committed to their organizations' long-term goals. Following the established decision rule, the p-value of 0.000 means that H_{03} is rejected and H_{a3} is accepted, validating the significant contribution of employee empowerment to organisational sustainability. In conclusion, the findings across all three tables reveal that participative management practices have significant positive relationships with the sustainability of small-scale manufacturing firms in Calabar, suggesting that management's emphasis on inclusiveness and support for employees plays a critical role in ensuring long-term viability.

Discussion of findings

Decision-making involvement and organisational sustainability

The test of hypothesis one revealed that decision-making involvement has a significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar. This finding is backed by the study of Baykal (2023), which revealed that

decision-making involvement had a significant positive correlation with organisational sustainability outcomes in Turkish firms. The finding is also backed by the study of Abrar (2024), which revealed that decision-making involvement had a significant positive influence on employee performance in Pakistani education sector. Moreover, it was also found in the study by Khassawneh and Elrehail (2022) that decision-making involvement had a significant positive influence on organizational performance in the UAE.

This finding underscores the critical role of participatory decision-making in fostering the organisational sustainability of small-scale manufacturing firms in Calabar, highlighting how inclusive managerial practices contribute meaningfully to long-term viability and resilience. It signifies that when employees at various levels are actively involved in the decision-making process, it enhances collective ownership of organisational goals, facilitates better alignment between individual and corporate objectives, and promotes a culture of transparency and shared responsibility. The statistical significance of this relationship suggests that such involvement is not merely a procedural formality but a substantive determinant of sustainability, affecting the firm's ability to adapt to market changes, manage internal resources efficiently, and maintain operational continuity amidst challenges. Moreover, this result reflects broader socio-economic dynamics in the



Nigerian small-scale manufacturing sector, where organisational longevity often hinges on the strength of internal collaboration and the capacity to harness diverse perspectives for strategic planning. By empirically validating the connection between decision-making involvement and sustainability, the study provides a deeper understanding of how internal governance structures influence the long-term success and institutional stability of manufacturing enterprises in a developing economy context.

Collaborative information sharing and organisational sustainability

The test of hypothesis two revealed that collaborative information sharing has a significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar. This finding is backed by the study of Manzoor et al. (2019), which revealed that collaborative information sharing had a significant effect on organisational performance of hospitals in Pakistan. The finding is also backed by the study of Juma et al. (2023), which revealed that collaborative information sharing had a significant effect on the performance of private hospitals in Kenya's healthcare sector. Moreover, it was found in the study by Kim (2022), which revealed that collaborative information sharing had a significant positive impact on employee-level performance of hospitality firms in South Korea.

This finding underscores the critical importance of collaborative information

sharing as a fundamental driver of organisational sustainability among small-scale manufacturing firms in Calabar. It highlights that the extent to which these firms engage in the mutual exchange of relevant, timely, and accurate information, whether internally among departments or externally with supply chain partners, stakeholders, or peer firms, directly influences their ability to maintain operational continuity, adapt to environmental changes, and achieve long-term viability. Within the Nigerian context, where small-scale manufacturers often face systemic challenges such as resource scarcity, infrastructural deficits, and market volatility, the establishment of collaborative communication channels emerges as a strategic enabler of resilience. The significant relationship identified through empirical testing suggests that information-sharing practices are not merely supportive functions but are intrinsically linked to core sustainability outcomes such as resource optimization, innovation, risk mitigation, and market responsiveness. Therefore, this finding situates collaborative information sharing as an indispensable organisational capability that reinforces strategic coherence, strengthens inter-organisational linkages, and enhances the adaptive capacity of small-scale manufacturing enterprises in a complex and evolving business environment.

Employee empowerment and organisational sustainability



In testing hypothesis three, it was revealed that employee empowerment has a significant relationship with organizational sustainability of small-scale manufacturing firms in Calabar. This finding is backed by the study of Khassawneh and Elrehail (2022), which revealed that employee empowerment had a significant positive influence on organizational performance in the UAE. The finding is also backed by the study of Uribetxebarria et al. (2021), which revealed that employee empowerment had a significant positive impact on the performance of construction firms in Spain. Similarly, the finding also draws support in the study of Muchiri and Gatobu (2023), which revealed that employee empowerment had a significant positive effect on organisational performance of Kenyan manufacturing companies.

This finding underscores the critical role that employee empowerment plays in driving the organisational sustainability of small-scale manufacturing firms in Calabar, Nigeria. It highlights that when employees are granted greater autonomy, authority, and involvement in decision-making processes, there is a measurable and statistically significant positive effect on the long-term viability and stability of their organisations. In the present context, where many small-scale firms face volatile economic conditions, resource limitations, and infrastructural challenges, the empowerment of employees emerges not merely as a human resource practice but as a strategic

imperative that reinforces organisational resilience. The finding reflects an intrinsic linkage between human capital engagement and the ability of these firms to maintain continuous operations, adapt to changing market conditions, and uphold competitiveness. Moreover, it reveals that empowering employees contributes to a stronger organisational culture, enhances morale, and fosters a sense of ownership, all of which are pivotal in sustaining productivity and continuity. Therefore, within the structural and socio-economic landscape of Calabar's manufacturing sector, employee empowerment is not incidental but foundational to sustaining the performance and endurance of small-scale manufacturing enterprises.

Conclusion, recommendations and future studies

This study set out to examine the relationship between participative management and organisational sustainability among small-scale manufacturing firms in Calabar, Nigeria. It was conducted in response to the increasing need for sustainable practices in the face of economic, social, and operational uncertainties affecting small enterprises. Grounded in stakeholder theory, the research focused on three dimensions of participative management: decision-making involvement, collaborative information sharing, and employee empowerment. Using a cross-sectional survey of 457 managers and



operators of small-scale manufacturing firms, the study employed Pearson's Product Moment Correlation to analyze the data. The findings revealed statistically significant and positive relationships between all three participative management practices and organisational sustainability. Among them, employee empowerment exhibited the strongest correlation, followed by decision-making involvement and then collaborative information sharing. Hence, the study concludes that participative management plays a vital role in enhancing the sustainability of small-scale manufacturing firms. This is because inclusive leadership practices that involve employees in decision-making, promote open communication, and empower staff contribute meaningfully to the long-term viability, resilience, and adaptability of these firms in a volatile operating environment. These insights underscore the need for managers and policymakers to prioritise participative strategies as essential tools for sustaining small-scale manufacturing enterprises. As such, the following recommendations are presented:

1. Small-scale manufacturing firms should prioritize decision-making involvement by systematically including employees in strategic planning and operational problem-solving sessions to leverage their unique insights and foster a sense of shared ownership. This will specifically enhance organizational

sustainability in Nigeria by increasing employee commitment, improving the quality of decisions through diverse perspectives, and building a more adaptable workforce capable of responding effectively to local market dynamics and challenges.

2. It is important for small-scale manufacturing firms to enhance collaborative information sharing by implementing secure, accessible digital platforms for real-time data exchange and fostering a culture of open communication across all departmental levels. This will specifically enhance their organisational sustainability by enabling quicker, more informed decision-making, improving resource allocation, and fostering innovation, thereby increasing competitiveness and business resilience.
3. There is a need for small-scale manufacturing firms to improve employee empowerment by regularly providing training on decision-making, increasing access to relevant company information, and establishing clear feedback mechanisms for employee input on operational processes. This will specifically enhance their organisational sustainability by fostering a more engaged workforce, leading to increased innovation, efficiency,



and adaptability to market challenges and opportunities.

Suggestions for further studies

For future research, it would be beneficial to investigate the direct cause-and-effect link between how companies involve their employees in decisions and how well they succeed long-term. This could be done using studies that track companies over time or controlled experiments. Also, comparing different industries within Nigeria could reveal important differences in how these practices work. Talking directly to employees through interviews or detailed company case studies might uncover insights that quantitative studies miss, like what employees truly think and feel. Finally, future research should also investigate other factors that might moderate the relationship between participative management and organisational sustainability, such as the company's overall culture, the leadership style, or even external market conditions. This will provide deeper insights into how contextual factors like leadership approaches, organizational values, and market volatility interact with participative decision-making to either strengthen or hinder sustainability outcomes in small-scale manufacturing firms.

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