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Exploring grocery small- and medium-sized enterprise owners' perceptions of shared outsourced transportation as a strategy for reducing delivery costs and improving competitiveness

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Background: Grocery small and medium-sized enterprises (SMEs) operate in highly competitive retail environments where transportation and delivery costs constitute a substantial proportion of operating expenses. Limited economies of scale, increasing fuel prices and frequent replenishment requirements place significant pressure on logistics operations, reducing SMEs' ability to compete with larger retailers that possess more sophisticated distribution networks. Shared outsourced transportation has emerged as a potential strategy to improve logistics efficiency and reduce delivery costs. However, limited qualitative evidence exists on how grocery SME owners perceive the value and practicality of shared transportation within their operational contexts.

Objectives: This study explored grocery SME owners' perceptions of shared outsourced transportation as a strategic approach to reducing delivery costs and improving competitiveness in the grocery retail sector.

Method: An interpretivist research philosophy and qualitative exploratory design were adopted. Data were collected through semi-structured interviews with 12 grocery SME owners and senior managers responsible for transportation and logistics decisions. The data were analysed using thematic analysis to identify recurring patterns and perceptions regarding shared transportation practices.

Results: Four themes emerged: Perceived cost-saving benefits of shared outsourced transportation, improved operational flexibility and risk-sharing, coordination and service reliability challenges, and the perceived influence of shared transportation on competitiveness and market positioning.

Conclusion: Participants perceived shared outsourced transportation as a viable strategy for reducing delivery costs and improving operational efficiency. These findings represent participants' experiences and perceptions rather than objectively measured organisational performance.

Contribution: The study contributes qualitative insights into collaborative transportation practices and demonstrates how shared outsourced transportation may strengthen the competitiveness of grocery SMEs.

Keywords: competitiveness; grocery SMEs; shared outsourced transportation; SME logistics; transportation cost management.

Introduction

Transportation constitutes a critical element of supply chain management (SCM), particularly for grocery small- and medium-sized enterprises (SMEs), where logistical efficacy can significantly influence cost structures and overall market competitiveness.

As competition within the grocery industry becomes increasingly fierce, especially with the growth of e-commerce and globalisation, comprehending the significance of transportation is essential for SME owners seeking strategies such as shared outsourced transportation to lower delivery expenses and strengthen their market position.

Grocery SMEs generally function with narrower profit margins in comparison to larger corporations. The primary components of their cost structure are logistics expenses, specifically transportation, warehousing and inventory management. Transportation costs can represent a significant component of overall operating expenses, especially during peak periods when demand increases, and logistical resources are under increased pressure (Tianming, Erokhin & Arskiy 2019).

Within the evolving landscape of grocery retailing, the operation of internal transport fleets may engender elevated expenditures during periods of peak demand, concurrently fostering underutilisation during periods of diminished demand. This duality can contribute to logistical inefficiencies (Tianming et al. 2019). By delegating transportation functions to third-party logistics (3PL) providers, SMEs can alleviate these challenges. For example, a recent study demonstrated that SMEs can achieve cost reductions of approximately 40% in transportation expenses through the effective utilisation of outsourced logistics, in addition to improvements in labour and warehousing costs (Zulkarnain 2025).

Third-party logistics providers significantly contribute to the optimisation of transportation for SMEs within the grocery sector. The incorporation of 3PL services improves the scalability and responsiveness of logistical functions, thereby enabling SMEs to accommodate fluctuating demands without the fixed expenditures related to owning and operating dedicated transportation fleets (Kgwadi & Samuels 2025; Zulkarnain 2025). Specifically, the capacity of 3PLs to rapidly expand operations enables SMEs to avoid the risks associated with excess capacity during off-peak periods while ensuring they can accommodate abrupt surges in demand (Zulkarnain 2025).

Furthermore, utilising 3PL can improve stock availability by fostering more effectively managed supplier and customer relationships, which has been demonstrated to improve operational efficiency within the grocery industry (Kgwadi et al. 2025; Monnagaaratwe & Mathu 2022). The partnership between 3PL providers and SMEs not only reduces expenses but also has the potential to improve service quality, given that 3PLs frequently possess advanced technology and greater expertise in logistics management (Bista, Bhattarai & Kafle 2025; Hatti & Karpagavalli 2023).

Outsourcing transport enables grocery SMEs to concentrate on their primary business activities while leveraging the logistical expertise offered by 3PL providers. This strategic transition has the potential to confer a competitive advantage by enabling cost efficiencies, improving service quality and decreasing time to market. Through the adoption of sophisticated technologies and methodologies, including data analytics and demand forecasting, 3PL providers support grocery SMEs in improving their SCM, thereby directly influencing profitability and market positioning (Mangiaracina et al. 2019; Zulkarnain 2025).

In addition, the utilisation of 3PL providers encourages advancements in delivery methodologies, thereby improving the efficacy of last-mile delivery, which is a crucial determinant of customer contentment within the grocery retail sector (Mangiaracina et al. 2019; Zulkarnain 2025). Studies demonstrate that the adoption of 3PL providers yields financial benefits and supports an organisation's sustainability objectives by minimising carbon emissions through route optimisation and improved cargo utilisation (Tianming et al. 2019; Zulkarnain 2025).

A significant problem encountered by grocery SMEs in last-mile delivery is the rising consumer demand for swift and dependable delivery services. Alverhed et al. (2024) emphasise that operational restrictions and developing urban infrastructures can hinder efficient last-mile logistics, placing pressure on grocery SMEs that generally function with narrower margins than larger entities (Alverhed et al. 2024). These SMEs frequently lack the requisite resources to adopt new logistics technology and may encounter difficulties in coordinating deliveries efficiently, leading to elevated operating expenses relative to their bigger counterparts (Han et al. 2020; Mittal et al. 2022).

The uncertainty caused by urban population development and traffic congestion intensifies the inefficiencies in last-mile logistics. Studies reveal that coronavirus disease 2019 (COVID-19) pandemic and the subsequent transition to e-commerce have necessitated rapid adaptation by SMEs; yet, numerous enterprises have institutional and physical challenges that constrain their logistics capacities (Švadlenka et al. 2023). The infrastructure for efficient delivery frequently lacks support, compelling grocery SMEs to traverse intricate logistics without adequate assistance.

To tackle these issues, some supermarket SMEs are progressively contemplating shared outsourced transportation as a feasible approach. The emergence of the shared economy, together with improvements in digital connectivity, offers SMEs a chance to lower logistics expenses while bolstering their competitiveness (Shanakar & Balaji 2024). Through collaboration with 3PL and 4PL providers, supermarket SMEs can utilise established logistics networks, gaining advantages from the cost efficiencies these alliances present (Yahya 2020).

The research examines many designs of last-mile logistics that may be advantageous for grocery SMEs.

Hybrid systems provide participation from both vendors and customers in the logistics process, improving flexibility and reactivity (Odo, Gulma & Audi 2024). This model assists SMEs in optimising expenses while fulfilling customer delivery time expectations. The incorporation of technology in shared logistics can improve operational transparency and optimise delivery procedures, which is essential for sustaining consumer happiness in the competitive e-commerce environment (Orji & U-Dominic 2024). Collaborative transport systems enable grocery SMEs to pool

resources, so alleviating the logistical challenges encountered by each SME, leading to reduced prices and improved service accessibility (Zennaro et al. 2022). Implementing shared logistics methods necessitates careful consideration of variables such as reliability, cost reduction and overall service quality, which can profoundly affect consumer perceptions (Raj & Thandayudhapani 2024).

Small- and medium-sized enterprises continue to encounter enduring challenges related to delivery cost pressures, which undermine their operational efficiency and long-term competitiveness in increasingly price-sensitive and volatile markets.

While these challenges are widely acknowledged across SME sectors, they manifest differently depending on the operational characteristics of the industry. Small- and medium-sized enterprises in the grocery sector operate in a logistics environment that is qualitatively distinct from that of numerous other SMEs. Grocery businesses are distinguished by the continuous movement of time-sensitive goods, which impose strict temporal constraints on distribution activities because of the product freshness and expiration life, in contrast to manufacturing or non-perishable retail contexts. This requires high-frequency replenishment cycles, frequently occurring on a daily or near-daily basis, which restricts the capacity for inventory buffering and exerts sustained pressure on transportation systems. Furthermore, the planning of routes and the coordination of deliveries are further complicated by the highly volatile and locally determined demand patterns that are prevalent in grocery retail.

In the grocery sector, the profit margins are typically narrow, which further exacerbates these operational conditions. Even minor inefficiencies in transportation can substantially reduce profitability. The capacity of these enterprises to tolerate supply disruptions is further restricted by their limited storage capacity, which emphasises the necessity of dependable and responsive logistics arrangements. Consequently, transportation decisions in this context are not limited to cost considerations; they also directly impact customer satisfaction, product quality and availability. The intersection of perishability, delivery frequency and margin sensitivity renders grocery SMEs particularly dependent on efficient and coordinated transportation systems, despite the fact that SMEs across sectors face logistics challenges. This establishes the sector as an analytically significant context for studying the potential of shared outsourced transport as a cost-cutting strategy that preserves operational responsiveness.

Transportation expenditures, especially within the context of last-mile distribution, represent a substantial component of overall logistics expenses for grocery SMEs. These businesses frequently encounter challenges in securing cost-effective delivery solutions because of limitations in scale, infrastructure and negotiating leverage. In response, shared outsourced transportation has arisen as a potentially effective approach to decrease delivery expenses and improve logistical efficiency. Nevertheless, despite its increasing significance, there is still limited qualitative understanding of how grocery SME proprietors perceive and experience the implementation of shared outsourced transportation arrangements. Existing research primarily employs quantitative or cost-focused methodologies, providing limited insight into the lived experiences, decision-making motivations and contextual challenges encountered by SME proprietors. This deficiency in comprehensive, perception-based understanding restricts the formulation of contextually suitable logistics strategies and policy interventions aligned with the specific circumstances of grocery SMEs. The urgency of identifying alternative strategies that are both operationally feasible and economically sustainable within resource-constrained environments is emphasised by the fact that many grocery SMEs continue to operate under persistent cost pressures without access to scalable and context-appropriate logistics solutions, despite the increasing recognition of these challenges.

The study aims to explore grocery SME owners' perceptions of shared outsourced transportation as a strategy for reducing delivery costs and improving competitiveness. The research objective for this study is to explore grocery SME owners' perceptions of how shared outsourced transportation contributes to delivery cost efficiency and adds value in improving their competitiveness. It is important to note that this study does not seek to empirically measure cost reduction or competitiveness outcomes, but rather to explore how these outcomes are perceived, interpreted and evaluated by SME decision-makers within their operational contexts.

The significance of the study advances the literature on SME logistics and transportation by offering qualitative insights into the perceptions of grocery SME proprietors regarding shared outsourced transportation as a strategy for cost management and competitiveness. Practically, the findings provide practical guidance for SME owners, logistics service providers (LSPs) and policymakers in developing collaborative, context-aware transportation solutions that improve efficiency, sustainability and competitive advantage.

This article is structured as follows: the initial section presents the research context, delineates the problem, outlines the objectives and emphasises the significance of the study. The Literature Review section examines pertinent literature concerning grocery SMEs, transportation outsourcing, shared logistics and competitiveness, and delineates the research gap. The Research Methodology section delineates the qualitative research methodology, encompassing the research design, sampling approach, data acquisition methods and analytical procedures. The Findings section delineates and examines the empirical data via emergent themes. The results are examined in the Results section considering current theory and literature. The concluding section summarises the article by emphasising key insights, acknowledging limitations and outlining potential directions for future research.

Literature review

In this study, shared outsourced transportation is defined as a collaborative logistics (CL) arrangement in which multiple independent SMEs jointly utilise 3PL transportation services to execute delivery activities.

Outsourcing, which entails the delegation of transport functions to external logistics providers, and sharing, which involves the consolidation of delivery demand across multiple firms to enable collective utilisation of transport resources, are two distinct but interrelated dimensions that these arrangements integrate. This concept must be distinguished from associated logistics configurations. In contrast to traditional outsourcing, which involves a single firm contracting with a logistics provider, shared outsourced transportation involves the coordinated participation of multiple SMEs within a common distribution framework. Similarly, horizontal logistics collaboration (HLC) is typically associated with strategic alliances between firms at the same supply chain level, whereas shared outsourced transportation is more operationally focused, emphasising resource pooling and route consolidation rather than formalised long-term partnerships.

Additionally, it is distinct from platform-based logistics models, which involve digital intermediaries that dynamically align demand and supply. This is because shared outsourced transportation frequently involves pre-arranged coordination mechanisms that are facilitated by logistics providers. The efficiency gains associated with shared outsourced transportation are primarily derived from economies of scale, load consolidation and improved asset utilisation from a cost perspective. Transport providers can optimise routing, reduce empty miles and redistribute fixed transportation costs across a broader base of users by aggregating delivery volumes across numerous SMEs. This simultaneously improves operational efficiency and decreases the per-unit cost of delivery for participating firms. These mechanisms are particularly significant for grocery SMEs that operate within constrained financial and infrastructural environments, as they provide access to logistics capabilities that would be economically unattainable if pursued independently.

Grocery small- and medium-sized enterprises and transportation cost challenges

Grocery SMEs frequently function within a fragile financial structure that constrains their capacity to efficiently control logistics expenses. Limited resources and inadequate market coverage impede their competitive ability (Kgwadi et al. 2025; Oyeyemi et al. 2023). Third-party logistics integration has become a practical way to overcome these constraints. Through the utilisation of cost-effective outsourcing strategies, SMEs can augment inventory management and operational effectiveness, consequently optimising service provision and decreasing lead times (Kgwadi et al. 2025; Oyeyemi et al. 2023).

Furthermore, the significance of collaboration within supply chains is vital for SMEs' grocery enterprises. These collaborative frameworks enable SMEs to strategically engage with suppliers and logistics providers. Empirical evidence suggests that collaboration within the supply chain improves the competitive advantage of Fast Moving Consumable Goods (FMCG) SMEs by facilitating resource sharing and reducing logistics expenses (Oyeyemi et al. 2023). The implementation of efficient supply chain strategies can significantly reduce logistics expenditures for SMEs, thereby improving their competitive positioning within the market.

One of the primary vulnerabilities confronting small and medium-sized grocery enterprises is their limited scale, which constrains their bargaining strength with transportation providers and suppliers (Alkaabi 2023). Large corporations leverage economies of scale that enable lower transportation costs per unit, whereas SMEs frequently face less advantageous terms, resulting in higher logistics expenses that may diminish profit margins (Rijal, Bijvank & Koster 2023).

Furthermore, inefficiencies in the integration of warehousing and transportation processes intensify these vulnerabilities. Inadequate coordination between warehouse activities and vehicle routing may result in avoidable delays and heightened costs within logistics operations (Rijal et al. 2023). This situation emphasises the importance of efficient incorporation of logistics processes, which can be accomplished through strategic collaborations with 3PL providers capable of delivering essential infrastructure and technological support (Monnagaaratwe & Mathu 2022).

Outsourcing transport logistics offers a viable approach to address these challenges effectively. Through collaborations with LSPs, SMEs can leverage resources and expertise that would be prohibitively expensive to sustain internally (Alkaabi 2023; Kiggell, Kilbourn & Heyns 2021). Research indicates that outsourcing logistics functions, when implemented effectively, can result in significant long-term cost reductions, thereby reinforcing the potential for sustainable operational improvements (Kiggell et al. 2021).

Strategic alliances with logistics partners can empower SMEs to augment their service portfolios, thereby facilitating expedited delivery schedules and elevating customer contentment. This methodology not only contributes to the reduction of immediate delivery expenses but also enables SMEs to exhibit greater adaptability in response to evolving market dynamics (Souza, William & Lee 2019). Furthermore, the deployment of shared transportation networks facilitates the optimisation of order fulfilment and distribution processes, potentially resulting in substantial cost efficiencies (Monnagaaratwe & Mathu 2022).

Outsourced transportation in small- and medium-sized enterprise supply chains

The outsourcing of conveyance functions enables SMEs to capitalise on external expertise and resources, thereby

potentially improving service quality and operational efficiency. As asserted by Sadeghi et al. (2023), the efficacy of logistics management is paramount to the operational success of mobile grocery services, exerting a considerable influence on both delivery schedules and inventory control. When SMEs collaborate with 3PL providers, they gain access to established networks and technological infrastructures that would otherwise be expensive to develop independently (Monnagaaratwe & Mathu 2022). This partnership may also improve supply chain resilience, a vital factor for organisations addressing post-pandemic challenges (Burgos & Ivanov 2021). Furthermore, utilising shared transportation services can streamline operations, especially within fragmented supply chains where SMEs encounter difficulties in scaling. Improving logistics via outsourcing facilitates strategic alignment of resources and capabilities, enabling small enterprises to contend with larger retailers in aspects of pricing and product availability (Monnagaaratwe & Mathu 2022).

For SMEs in the grocery industry, outsourced transport has many benefits, chief among them being lower costs, better service and a stronger emphasis on core skills. The cost savings achieved through outsourcing are derived from a shared economy framework in which SMEs collaboratively utilise transportation resources, thereby decreasing their individual expenses related to logistics and distribution (Teixeira et al. 2023). This approach has the potential to substantially reduce delivery expenses, as shared transport systems are demonstrated to lower operational overhead through the utilisation of aggregated resources (Teixeira et al. 2023). Furthermore, outsourcing enables SMEs to concentrate on their core business activities while entrusting logistics partners with the management of transportation issues. This can promote increased customer satisfaction, as logistics providers are frequently endowed with advanced technologies and expertise in route optimisation, tracking and warehousing, as Alghofeli (2023) elaborates on the improvement of supply chain performance through information technology (Alghofeli 2023).

Although outsourcing transportation offers advantages, it also involves inherent risks. Control over logistics operations may decrease, potentially resulting in service interruptions that adversely impact customer relationships (Monnagaaratwe & Mathu 2022). Furthermore, small and medium-sized enterprises may face difficulties concerning information exchange and quality control when partnering with 3PL providers (Namagembe & Mbago 2023). Small- and medium-sized enterprises must prioritise effective communication and establish well-defined performance metrics to mitigate these risks. The utilisation of outsourced providers may also introduce difficulties concerning the adaptability and promptness necessitated by fluctuating market dynamics. The swift changes in consumer behaviour observed during the pandemic highlight the importance of flexible supply chains that can respond effectively to disruptions (Burgos & Ivanov 2021). Failure to sustain agility within transportation logistics can impede a small-to-medium enterprise's competitive advantage.

Shared transportation models

Shared logistics and collaborative transportation represent an innovative paradigm within the logistics industry, wherein multiple stakeholders combine their resources to optimise operational efficiency and decrease expenses is defined by the cooperation among multiple logistics providers, enabling the sharing of assets such as warehouses, vehicles and information technology systems. Collaborative logistics is predicated on its ability to improve supply chain efficiency via operational streamlining, thereby enabling firms to realise economies of scale and maximise resource utilisation (Ghomi et al. 2023).

For example, Ghomi et al. (2023) have developed a model illustrating how collaboration among carriers can result in substantial cost savings and improved service quality. Wang et al. (2020) further emphasise the significance of collaboration and resource sharing in tackling complex vehicle routing problems, demonstrating that the incorporation of such collaborative mechanisms can improve resource utilisation. The integration of communication and information technologies is essential in this context, as it enables the efficient coordination of resources between parties, thereby improving the overall effectiveness of the logistics network (Wang et al. 2022). Horizontal logistics collaboration represents a specific form of CL, distinguished by alliances among companies operating at a comparable stage within the supply chain. Hammoud et al. (2024) elaborate on the efficacy of HLC in reducing overall transportation emissions, as it facilitates synchronised deliveries, resulting in optimised equipment utilisation and minimised carbon footprints.

The adoption of shared transport models offers significant benefits in cost efficiency and operational flexibility for SMEs. Oyeyemi et al. (2023) observed that resource optimisation via collaborative approaches enables SMEs to reduce logistics expenditures, thereby improving their competitive position. This is further supported by Monnagaaratwe and Mathu (2022), who highlight that shared transport results in substantial cost reductions and increased operational efficiency for SMEs, thereby strengthening their capacity to compete in the marketplace.

Cooperative transportation methods not only decrease immediate transport expenditures but also augment supply chain adaptability. Through the implementation of a shared logistics model, SMEs can dynamically adapt their operational strategies to accommodate shifting market requirements while concurrently mitigating the inefficiencies often linked to underused resources (Oyeyemi et al. 2023; Wang et al. 2022). The evolving nature of customer demands requires a more adaptable logistical framework, wherein collaborative models are employed to meet customer requirements effectively and efficiently.

Furthermore, the significance of environmental sustainability in shared logistics should not be underestimated.

The deliberate minimisation of vacant miles and the improvement of delivery routes lead to decreased environmental effects and lower operational expenses, resulting in a dual advantage (Do et al. 2019). As outlined in the study by Do et al. (2019), logistical collaboration has the potential to decrease delivery times and travel distances, thereby advancing sustainability within urban logistics.

Competitiveness in grocery small- and medium-sized enterprises

Small- and medium-sized enterprises generally face challenges related to elevated operational expenses owing to their limited economies of scale relative to larger competitors. Efficient SCM can alleviate these expenses, enabling SMEs to sustain their competitive cost advantage. For example, the research conducted by Kgwadi et al. (2025) highlights the integration of 3PL as a vital strategy for improving stock availability and decreasing operational costs. Similarly, Oyeyemi et al. (2023) highlight that supply chain collaboration can optimise resource utilisation by facilitating SMEs in sharing logistics and distribution networks, thus reducing operational costs and improving service reliability.

Maintaining service reliability is of paramount importance within the grocery sector, given elevated consumer expectations. Operational frameworks such as Lean Management and Total Quality Management, as proposed by Nyangoma et al. (2024), delineate strategies for minimising waste and improving service delivery, thereby resulting in increased customer satisfaction. A critical differentiator is also the capacity for improved responsiveness; the ability to rapidly adapt to evolving consumer needs is paramount for smaller entities operating within this competitive environment. According to the research conducted by Monnagaaratwe and Mathu (2022), collaborative SCM strategies improve product flow and foster a more responsive supply chain, thereby ensuring the efficient fulfilment of customer requirements.

Logistics significantly contributes to the competitive advantage of SMEs within the grocery sector. The capacity to effectively oversee logistics operations not only diminishes expenses but also improves customer satisfaction. Ding et al. (2019) posit that SMEs that utilise third-party warehousing and transportation services can realise substantial reductions in warehousing expenditures while retaining adaptability to fluctuations in order volume. For SMEs hoping to compete against bigger companies with stronger logistics infrastructures, this flexibility is essential.

Furthermore, the implementation of advanced technologies, as outlined by Awonuga et al. (2024), facilitates digital transformation in logistics operations. Leveraging technologies such as artificial intelligence and the Internet of Things enables SMEs to optimise logistics, inventory management and responsiveness to evolving market dynamics. This digital transformation advances operational efficiency, resulting in cost reductions, elevated service quality and ultimately, a more robust competitive position.

However, establishing supply chain resilience is essential for SMEs to mitigate disruptions and preserve their competitive advantage. Nugroho, Santosa and Khoa (2025) emphasise that resilient firms are better equipped to adapt to market fluctuations, maintain operational efficiency and consequently attain a competitive advantage. According to Babu et al. (2022), SMEs can leverage the benefits offered by specialised logistics services while concentrating on their main business operations by carefully choosing their logistics partners.

Theoretical lens

The Resource-Based View (RBV) offers a suitable theoretical framework for analysing grocery SME owners' perceptions of shared outsourced transportation as a strategy to lower delivery costs and improve competitiveness. Resource-Based View asserts that organisations attain sustained competitive advantage through the effective acquisition, deployment and utilisation of valuable, rare, inimitable and non-substitutable resources.

For small and medium-sized grocery enterprises, transportation capacity frequently constitutes a vital yet limited resource owing to constraints in financial resources, infrastructure and negotiating leverage.

Consequently, numerous SMEs encounter difficulties in cultivating internal logistical competencies that satisfy stipulations regarding cost, reliability and responsiveness.

Collaborative outsourced transportation provides grocery SMEs access to logistical resources and capabilities that would be otherwise inaccessible to them individually. Through collaboration with LSPs and engagement in shared distribution networks, SMEs can harness collective scale, specialised expertise and sophisticated transportation infrastructure. From an RBV perspective, although the tangible transportation assets themselves may not be scarce, the capacity of SME owners to effectively integrate, coordinate and oversee shared logistics relationships represents a strategic competency. This relational and managerial competence can serve as a source of competitive advantage by improving cost efficiency, service dependability and market agility. Furthermore, the RBV emphasises the significance of managerial perceptions and decision-making in identifying and leveraging strategic resources.

An examination of SME owners' perceptions is consequently essential, given that their interpretations of value, risk and control affect the utilisation of shared outsourced transportation and its potential to generate a competitive advantage. In this context, shared outsourced transportation

serves as a facilitating resource that assists grocery SMEs in improving their competitive positioning within highly cost-sensitive retail markets.

Research gap

While transportation cost management is increasingly recognised as critical for improving the competitiveness of SMEs in the grocery sector, the current body of academic research is primarily characterised by quantitative, cost-centric and firm-specific investigations. There is a significant lack of qualitative, perception-oriented research examining how SMEs business proprietors perceive and interpret the implementation of shared outsourced transportation within their routine operational environments. Existing research offers insufficient understanding of the lived experiences, decision-making processes and perceived benefits or drawbacks related to shared transport arrangements, specifically from the perspective of SME proprietors. Furthermore, numerous studies employ a broad or large-firm perspective, providing inadequate context-specific insights into the constraints, capabilities and strategic factors distinctive to grocery SMEs. This deficiency of decision-maker-focused insight hampers the formulation of practical, contextually appropriate logistics strategies and policy measures. Employing qualitative research to address this deficiency facilitates a more comprehensive comprehension of the perceptions, adoption and utilisation of shared outsourced transportation in encouraging competitiveness within grocery SMEs. The inclusion of peer-reviewed and high-impact scholarly sources within the logistics and SCM domain was a focus to improve the academic strength of the study, thereby ensuring that the conceptual foundation of the study is based on established and authoritative research. Although existing research has made significant contributions to the comprehension of transportation cost structures and logistics optimisation within SMEs, a significant portion of this work is based on quantitative modelling, cost analysis and performance measurement methodologies. These studies offer a limited comprehension of how SME decision-makers in practice perceive, interpret and operationalise logistics strategies, despite the fact that they provide valuable insights into efficiency outcomes. Therefore, qualitative research is indispensable for the purpose of identifying the contextual, behavioural and experiential factors that impact the effectiveness and adoption of shared outsourced transportation. This study addresses the necessity for more interpretive and context-sensitive research in the logistics and SCM literature by emphasising the perspectives of SME proprietors. All technical terms and abbreviations are defined at first occurrence and applied consistently throughout the manuscript to ensure clarity and readability.

Research methodology

Research philosophy and approach

This study is based on an interpretivist research philosophy, which is particularly appropriate for examining the subjective meanings, perceptions and experiences of grocery SME proprietors concerning shared outsourced transportation. Interpretivism posits that reality is socially constructed and that knowledge is obtained through individuals' interpretations of their actual experiences, rather than solely through objective measurement. The interpretivist paradigm in this study allows for a detailed understanding of how SME owners evaluate the benefits of shared transportation arrangements, perceive delivery cost pressures and make strategic decisions within their operational circumstances.

Consistent with this philosophical perspective, the study employs a qualitative, exploratory research methodology. A qualitative approach is suitable as it facilitates a comprehensive examination of intricate logistics practices and strategic factors that cannot be sufficiently represented through quantitative data. The exploratory approach to this design is warranted by the paucity of extant qualitative research concerning shared outsourced transportation within the context of grocery SMEs. This method enables the recognition of emerging themes, contextual obstacles and perceived advantages straight from the viewpoints of decision-makers. By employing an interpretivist paradigm and a qualitative exploratory design, this study offers comprehensive, contextually detailed insights into the comprehension and application of shared outsourced transportation as a strategy to improve competitiveness within grocery SMEs.

Research design

This study employs a qualitative, case study research design, with the possibility of a multicase approach to encompass varied perspectives among distinct grocery SMEs. A case-based or multicase qualitative methodology is suitable as it facilitates a comprehensive analysis of real-world logistics practices and decision-making processes within their authentic business environments. Through the examination of individual cases, this study investigates the experiences, interpretations and implementation of shared outsourced transportation among grocery SME owners. Furthermore, a multicase design facilitates cross-case comparisons, enabling the identification of prevalent patterns and context-dependent variations.

The rationale for employing qualitative inquiry stems from the exploratory character of the research problem and the necessity to comprehend subjective perceptions rather than to establish causal relationships.

Quantitative methodologies alone are inadequate for fully representing the intricacies, interpretations and strategic factors inherent in the transportation decisions of SME proprietors. A qualitative design enables participants to express their experiences, challenges and perceived benefits of shared outsourced transportation in their own words, thereby producing detailed, contextualised insights. This approach improves the study's capacity to elucidate how and why shared outsourced transport is regarded as an effective strategy for lowering delivery costs and improving competitiveness among grocery SMEs.

Study context

The study is conducted within the SMEs sector of grocery retail in Mahikeng in the North West Province, which functions in a highly competitive and cost-conscious market environment. Grocery SMEs are essential to local economies by offering accessible food products, encouraging employment opportunities and contributing to community development. However, these enterprises encounter substantial logistical difficulties, especially in overseeing transportation and delivery expenses related to frequent replenishments and perishable commodities. The research is carried out within a defined geographical setting, where infrastructural limitations, market forces and regulatory frameworks further impact logistics decision-making. Analysing grocery SMEs within this context facilitates a more comprehensive understanding of how shared outsourced transport is perceived and employed by owners as a strategic measure to address cost pressures and competitiveness challenges inherent to their specific operating environment.

Sampling strategy

The target population for this study includes owners and senior administrators of SMEs who are directly engaged in logistics and transportation decision-making within their organisations. These participants were optimally positioned to offer informed insights into the adoption and perceived value of shared outsourced transportation. A purposive sampling method was utilised to deliberately select participants with pertinent experience in transportation outsourcing or shared logistics arrangements. This method guaranteed that the data gathered is comprehensive and corresponds with the aims of the study. Snowball sampling was also employed to identify additional appropriate participants through referrals, especially in instances where access to SME proprietors is restricted. Inclusion criteria stipulate that participants had to be owners or administrators of SMEs with a minimum of 1 year of operational experience and active involvement in delivery or transportation decision-making. The exclusion criteria encompass large retail chains, franchise-operated grocery stores and individuals lacking direct responsibility for logistics-related decisions, thereby ensuring the study's focus on independent grocery SMEs.

Data collection

Semi-structured interviews were conducted with 12 grocery SME owners and managers. Data saturation was achieved at the 12th interview, as no new themes or insights emerged from subsequent data analysis.

This data collection method was suitable as it enabled participants to openly articulate their experiences, perceptions and decision-making processes concerning shared outsourced transport, while assuring comprehensive coverage of all essential research topics. A structured interview protocol was formulated in accordance with the study's research aims and guided by pertinent scholarly sources. The interview protocol consisted of open-ended enquiries concerning challenges related to delivery costs, rationales for outsourcing transportation functions, experiences with CL initiatives and the effects on competitive positioning. Before the primary data collection, the interview guide was examined and refined through expert consultation and a pilot interview to ensure clarity and pertinence. Data collection was carried out iteratively and persisted until data saturation was reached. Data saturation was obtained at the 12th interview, as no new themes, categories or conceptual insights were discovered during the subsequent data analysis. Saturation is defined in this study as the moment at which further data gathering no longer advances the growth, improvement or expansion of the developing theme structure. In the latter phases of data collection, no meaningful variation was observed, and recurring patterns became increasingly stable. The assessment of saturation was conducted through the continuous comparison of codes and themes across interviews.

Most importantly, the data acquisition and analysis were conducted in a concurrent, iterative manner. After each interview, preliminary classification and thematic reflection were implemented to evaluate the impact of new data on the evolving analytical framework. This process allowed the researcher to track the progression towards saturation and to determine the point at which additional interviews ceased to offer new insights.

Evidence of saturation began to emerge before the final interviews, with subsequent responses primarily reinforcing existing themes rather than introducing new conceptual dimensions. The decision to conclude data collection at the 12th participant was therefore based on the data's adequacy and completeness, rather than on procedural or resource considerations.

The sample size was determined in accordance with the principle of theoretical saturation, rather than adhering to a predetermined numerical range. The saturation point in qualitative inquiry is attained when the data fails to produce new themes, dimensions or meaningful variation because of additional data collection. The point of saturation was achieved in this study during the latter phases of data collection, when recurring patterns were consistently identified across participants, and no further conceptual refinement emerged from additional interviews. The continuous assessment of thematic development was facilitated by the iterative nature of data collection and analysis, which ensured that the decision to conclude data collection was based on the adequacy and richness of the data rather than procedural convenience.

Data analysis

Data analysis was performed by employing a thematic analysis methodology, which was suitable for detecting, examining and interpreting patterns of meaning within the qualitative data. Initially, the interview transcripts were

subjected to repetitive readings to facilitate familiarisation with the data. An initial open coding procedure was subsequently implemented, during which significant segments of text were methodically annotated to identify key ideas and concepts arising from participants' narratives. These preliminary codes were subsequently refined and organised through axial coding to discern relationships, identify patterns and establish broader categories within the dataset. Selective coding was subsequently utilised to synthesise and consolidate the central themes that aligned with the research objectives of the study. Where applicable, qualitative data analysis software was employed to facilitate data administration, ensure coding consistency and improve the transparency of the analytical process. Software utilisation streamlined transcript organisation, facilitated efficient data retrieval and augmented the thoroughness of theme development. This structured analytical procedure made sure that the grocery SME owners' views on shared outsourced transport were interpreted in a way that was both credible and clear.

The progression towards data saturation across the 12 interviews is illustrated in Table 1. During the initial phases of data collection, the analysis suggests that novel codes were primarily identified, while interviews that were conducted later provided minimal or no additional conceptual insights. Thematic repetition became increasingly apparent from the eighth interview onwards, with subsequent interviews verifying rather than extending the existing thematic structure. The claim that data saturation was reached is empirically supported by this pattern, which demonstrates that the sample size was adequate to capture the key dimensions of the phenomenon under investigation.

Several measures were implemented during the coding process to improve the analytical rigour and credibility of the thematic analysis. To ensure consistency in interpretation and refine codes, the coding procedure was conducted iteratively, requiring recurrent engagement with the data. To improve the internal coherence of the emerging themes, the initial codes were systematically reviewed and contrasted across transcripts to identify convergence and divergence in participant responses. The researcher took deliberate measures to reduce subjective bias, even though the primary categorisation was conducted by them. These included keeping thorough coding memos, recording analytical choices and regularly reviewing the data to make sure the themes found were based on participants' narratives rather than researcher conjecture. Themes were revised and refined as needed to ensure that they faithfully reflect the underlying data patterns. Additionally, to improve analytical consistency and mitigate interpretive bias, the coding framework and emergent themes were subjected to critical reflection and peer debriefing. Although formal inter-coder reliability testing was not conducted, this is recognised as a study's limitation. However, the trustworthiness and dependability of the findings are improved by the systematic and transparent classification process, which is complemented by reflexive practices and iterative analysis.

TABLE 1: Evidence of data saturation across interviews.

Interview	New codes identified	Theme development status
P1	Multiple new codes	Initial theme development
P2	Several new codes	Expanding themes
P3	New codes identified	Refinement of themes
P4	Fewer new codes	Theme consolidation begins
P5	Minimal new codes	Themes becoming stable
P6	Minimal new codes	Confirmation of emerging themes
P7	Very limited new codes	Strong repetition observed
P8	No significant new codes	Themes stabilised
P9	No new codes	Repetition confirmed
P10	No new codes	Saturation evident
P11	No new codes	No variation observed
P12	No new codes	Saturation confirmed

Trustworthiness of the study

The reliability of the study was established by applying the four criteria outlined for qualitative research: credibility, dependability, transferability and confirmability. Credibility was strengthened through the utilisation of semi-structured interviews, which facilitated comprehensive engagement with participants, extended interaction during data collection and iterative inquiry to elucidate meanings. Where appropriate, member checking was utilised to confirm the veracity of interpretations and to ensure that the findings faithfully represented participants' perspectives.

Reliability was ensured through the establishment of a transparent and methodical audit trail of the research process, encompassing documentation of the research design, data collection methods and analytical choices.

Transferability was facilitated by providing detailed, comprehensive descriptions of the study context, participants and findings, allowing readers to evaluate the relevance of the results to comparable grocery SME environments. Confirmability was maintained through the practice of reflexivity, the documentation of analytical memos and the anchoring of interpretations in empirical data, thereby reducing researcher bias and promoting objectivity.

Ethical considerations

Ethical clearance to conduct this study was obtained from the Economic and Management Sciences Research Ethics Committee of the North-West University (No. 225384/11/2024).

Ethical considerations were thoroughly examined throughout the study to safeguard the rights and well-being of all participants. Informed consent was secured before data collection, with participants receiving a comprehensive information document detailing the study's objectives, research procedures and their rights as participants. Consent was provided voluntarily and in writing before the commencement of interviews.

Confidentiality and anonymity were rigorously preserved by eliminating all identifiable information from interview

transcripts and employing pseudonyms or coded identifiers in the presentation of the findings. No personal or organisational information that could potentially disclose participants' identities was revealed.

Participation in the study was completely voluntary, and participants were duly informed of their right to withdraw at any point without facing any adverse consequences. These ethical protocols guaranteed adherence to established research ethics standards and fostered trust and transparency throughout the research process.

Results

Table 2 provides a summary of the 12 participants involved in this study. Table 2 provides an overview of participants' roles, business contexts and levels of responsibility in logistics and transportation decision-making. All information is provided in anonymised format to maintain confidentiality and to offer contextual clarity for the interpretation of the subsequent findings.

Emergent themes

Diverse participants' prior experiences with shared outsourced conveyance were considered during the interpretation of the results. Although several participants had direct operational experience with shared transport arrangements, others expressed perceptions based on indirect exposure or anticipated adoption. This distinction is crucial, as participants who had direct experience tended to offer more operationally grounded insights, particularly in relation to coordination challenges and service reliability, whereas those who did not have direct experience emphasised perceived benefits, such as cost savings and flexibility. A more complex comprehension of the interpretation of shared outsourced transportation across various experiential contexts is facilitated by the recognition of this variation. The findings presented in this section reflect participants' subjective perceptions and experiential interpretations of shared outsourced transportation, rather than objective measurements of cost reduction or competitiveness.

Analysis of the interview data identified four interrelated themes that illustrate grocery SME proprietors' perceptions of shared outsourced transportation. These themes encompass participants' perspectives on the perceived cost-saving advantages, operational flexibility, risk-sharing, the challenges, and concerns related to shared transport arrangements, and the impact of shared transport on competitiveness and market positioning. Together, the themes offer a thorough comprehension of how shared outsourced transportation is perceived and assessed by grocery SME owners within their operational environments.

The perceived cost-saving benefits of shared outsourced transportation were:

- 'Sharing transport has reduced what we spend on deliveries because the cost is split.' (P1)
- 'We no longer feel the full impact of fuel increases since transport costs are shared.' (P2)
- 'Using shared delivery is cheaper than hiring transport on our own each time.' (P3)
- 'Our monthly delivery expenses became more predictable with shared transport.' (P4)
- 'It helped us save on vehicle-related costs like maintenance and emergency deliveries.' (P6)
- 'Shared transport made deliveries more affordable for a small business like ours.' (P7)
- 'The biggest benefit is paying less per delivery compared to operating alone.' (P9)

Participants consistently regarded shared outsourced transportation as an effective strategy for minimising delivery-associated expenses. A few participants said that consolidating deliveries with other grocery SMEs facilitated the sharing of transportation costs, thereby reducing individual delivery fees. Participants emphasised the cost

TABLE 2: Participants' profiles.

Participant	Role	Grocery SME context	Logistics responsibility	Experience with shared transportation
P1	Owner-Manager	Independent grocery SME with over 5 years of operation	Oversees delivery scheduling and coordination with external transport providers	Direct experience
P2	Senior Manager	Medium-sized grocery SME	Manages procurement-related distribution and outsourced transportation arrangements	Direct experience
P3	Owner	Neighbourhood grocery store operating for more than 3 years	Directly manages delivery costs and transport service negotiations	Direct experience
P4	Co-Owner	Grocery SME with multiple suppliers and frequent delivery requirements	Responsible for logistics planning and cost evaluation	Limited experience
P5	Operations Manager	Grocery SME utilising outsourced delivery services	Coordinates day-to-day transportation and supplier deliveries	Direct experience
P6	Owner	High-volume independent grocery SME	Manages logistics provider relationships and delivery efficiency	Direct experience
P7	Senior Manager	Growing grocery SME	Oversees distribution efficiency and transportation cost control	Limited experience
P8	Owner-Manager	Long-established grocery SME	Responsible for delivery frequency and transportation outsourcing decisions	Direct experience
P9	Owner	Grocery SME operating in a competitive retail environment	Explores collaborative and shared logistics arrangements	Limited experience
P10	Senior Manager	Grocery SME with multiple supplier relationships	Monitors transportation performance and delivery reliability	Direct experience
P11	Owner	Small grocery SME with limited internal logistics capacity	Relies primarily on outsourced transportation solutions	No direct experience (Perceptual)
P12	Owner	Independent grocery SME with extensive delivery experience	Negotiates and manages shared transportation arrangements	Direct experience

SME, small- and medium-sized enterprise.

reductions related to fuel expenses, vehicle maintenance and decreased dependence on irregular delivery arrangements. Several participants observed that shared conveyance provided improved cost predictability, facilitating better budgeting and financial planning. These perceived cost efficiencies were regarded as especially advantageous in an environment characterised by slim profit margins and frequent supplier deliveries.

The operational flexibility and risk-sharing were:

- 'Shared transport allows us to adjust delivery volumes when demand changes.' (P5)
- 'If there is a delay, the risk is not carried by one business only.' (P8)
- 'It gives us flexibility because transport is arranged collectively.' (P10)
- 'We don't panic as much when something goes wrong because it's a shared system.' (P12)
- 'Shared delivery helps when demand suddenly increases.' (P3)
- 'We feel less exposed to delivery problems when transport is shared.' (P6)
- 'It reduces the pressure of managing transport risks alone.' (P11)

Operational flexibility has become a recognised primary advantage of outsourced shared transport.

Participants indicated that collaborative arrangements facilitated more flexible adjustments to delivery volumes and schedules in response to varying demand. Emphasis was also placed on risk-sharing, specifically concerning vehicle malfunctions, delivery setbacks and fluctuations in fuel prices. Through engagement with shared transport networks, participants reported diminished vulnerability to operational interruptions and logistical ambiguities that would typically be experienced independently. These concerns suggest that the perceived advantages of shared outsourced transportation are not unconditional, but are dependent on effective coordination mechanisms, clearly defined responsibilities and sustained trust among participating stakeholders.

The challenges and concerns associated with shared transportation were:

- 'Sometimes the delivery times do not match what our store needs.' (P4)
- 'We depend on others, which can cause delays.' (P2)
- 'There is less control over delivery schedules with shared transport.' (P7)
- 'Coordination becomes difficult when many businesses are involved.' (P9)
- 'If something goes wrong, it's not always clear who is responsible.' (P5)
- 'Service quality can drop if transport providers are not well organised.' (P10)
- 'Trust is important, and sometimes it is hard to trust shared arrangements.' (P1)

Although acknowledging the purported advantages, participants articulated several concerns pertaining to shared outsourced transportation. These factors encompassed diminished control over delivery schedules, reliance on external coordination efforts and the potential for conflicts stemming from schedule discrepancies among participating SMEs. Several participants expressed concerns regarding service reliability, accountability and the potential for delays to impact customer satisfaction. Trust between participating businesses and logistics providers was recognised as a vital yet occasionally delicate component of collaborative arrangements.

The perceived influence on competitiveness and market positioning were:

- 'Lower delivery costs help us keep prices competitive.' (P6)
- 'Shared transport allows us to compete with larger grocery stores.' (P8)
- 'We can focus more on sales because delivery costs are under control.' (P3)
- 'It improves our efficiency without needing big investments.' (P11)
- 'Shared delivery supports better stock availability for customers.' (P2)
- 'It helps us survive in a competitive market.' (P7)
- 'Shared transport improves our position, but reliability is very important.' (P12)

Participants generally perceived shared outsourced conveyance as having a positive influence on their competitiveness. Cost reductions were regarded as facilitating more competitive pricing, while improved delivery reliability contributed to improved service levels. Several participants found that shared transport improved their capacity to compete with larger retailers by increasing operational efficiency without requiring substantial capital investment. Nonetheless, participants observed that the competitive advantages depended on efficient coordination and uniform service delivery.

A summary of key insights

The results of this study suggest that grocery SME proprietors typically regard shared outsourced transportation as an effective approach for addressing delivery cost pressures. Participants indicated that the sharing of transportation resources facilitated cost savings through decreased fuel expenditures, reduced per-delivery charges and improved cost predictability. Operational flexibility and risk-sharing were also identified as significant advantages, as collaborative arrangements enabled SMEs to adjust delivery timelines in response to fluctuating demand while mitigating individual vulnerability to logistical interruptions. However, the findings also identified significant challenges, such as diminished control over delivery schedules, coordination obstacles and concerns related to service dependability and accountability. Trust and efficient communication between participating SMEs and LSPs were identified as

essential factors impacting the success of shared transport arrangements. Overall, participants regarded shared outsourced transportation as augmenting their competitiveness through the facilitation of cost-efficient operations and improved service quality, although the magnitude of these advantages was contingent upon sustained coordination and dependable transportation performance.

Discussion

Interpretation of findings

The interpretation of the findings demonstrates a significant correlation between the emergent themes and the study's research objective, which aimed to examine grocery SME owners' perceptions of shared outsourced transportation as a strategy for lowering delivery costs and improving competitiveness. The theme concerning perceived cost-saving advantages directly aligns with the primary objective by illustrating that participants consistently regarded shared outsourced transportation as an efficient method for controlling delivery-related costs. Participants' perceptions of decreased petroleum expenses, collective delivery fees and improved cost predictability demonstrate how shared transport was regarded as a pragmatic solution to the ongoing cost challenges encountered by grocery SMEs. These interpretations should also be considered considering participants' varying levels of prior experience with shared transportation, which influenced the depth and nature of their perceptions. These insights should therefore be interpreted as perception-based evaluations, which may not necessarily correspond to quantifiable performance outcomes but remain critical in shaping strategic decision-making among SME owners.

The theme of operational flexibility and risk-sharing further advances the research objective by emphasising the perceived value-added benefits of collaborative outsourced transportation. Participants correlated collaborative frameworks with improved flexibility in scheduling deliveries and diminished personal vulnerability to logistical challenges, including vehicle malfunctions, fuel cost volatility and delivery postponements. These perceptions indicate that shared transport was regarded not merely as a means of cost reduction but also as a strategic method that improved the resilience and responsiveness of operations.

The theme concerning challenges and concerns offers significant contextual insight into the research objective by highlighting factors that limited the perceived effectiveness of shared transport. Concerns pertaining to coordination, diminished oversight and the consistency of service reliability demonstrate that the advantages associated with distributed outsourced transportation were regarded as contingent rather than assured. These issues highlight the critical significance of governance, trust and effective communication in influencing the perceptions and experiences of SME proprietors.

The theme centred on competitiveness and market positioning connects perceived costs and operational advantages to overarching strategic results. Participants reported that utilising shared outsourced transportation correlated with increased pricing flexibility, elevated service standards and a greater capacity to compete effectively with larger retailers. The collective findings offer an in-depth knowledge of how grocery SMEs proprietors view shared outsourced transportation as a strategy that can both facilitate and be contingent upon specific contexts to improve cost efficiency and competitiveness.

Comparison with existing literature

The results of this investigation are largely consistent with extant research, which identifies transportation expenses as a significant impediment to the competitiveness of SMEs, especially within the grocery retail industry. Previous research has consistently demonstrated that shared and outsourced transport models can facilitate cost reductions for SMEs by leveraging economies of scale, decreasing fuel costs and minimising capital investment in logistics infrastructure. The participants' perceptions of cost savings and improved cost predictability corroborate these established findings, reinforcing the perspective that CL arrangements can alleviate the structural disadvantages encountered by smaller firms.

The study further corroborates previous research highlighting the significance of logistics outsourcing in improving operational flexibility and facilitating risk-sharing. Previous research indicates that shared transport arrangements enable SMEs to respond more efficiently to fluctuations in demand and to mitigate risks associated with operational disruptions. Participants' reports of improved flexibility and diminished personal risk align with these findings, demonstrating consistency between empirical observations and theoretical projections.

Nevertheless, the findings also contrast with certain optimistic representations in the literature that depict shared transport as an invariably advantageous solution. Although previous research frequently emphasises efficiency improvements, this study emphasises enduring apprehensions concerning coordination complexities, diminished oversight of delivery timelines and service dependability. These challenges indicate that the results of shared transport are extremely context-specific and significantly affected by relational and governance factors. This study, by emphasising the lived experiences of SME owners, expands upon the current literature by elucidating the complex circumstances under which shared outsourced transportation is viewed favourably or unfavourably, thus providing a more comprehensive and context-dependent understanding of CL within grocery SMEs.

The results of this study suggest a more complex and context-dependent reality, even though prior studies have frequently presented shared transport as an inherently beneficial

strategy. Despite the recognition of cost efficiencies and operational flexibility, these advantages were consistently counterbalanced by the necessity for trust among participating entities, reduced control over delivery processes and the complexity of coordination. This suggests that shared outsourced conveyance is not a universally optimal solution, but rather a contingent strategy whose efficacy is influenced by operational alignment and relational dynamics. The study transcends the mere confirmation of established benefits by emphasising the circumstances under which shared transport may succeed or fail in practice.

Theoretical implications

This study expands upon the current body of knowledge on SME logistics by transcending cost-centric explanations of transportation outsourcing and revealing the underlying relational and operational mechanisms that influence the practical efficacy of shared outsourced transportation. Although prior research has primarily focused on efficiency gains, such as cost reduction and increased flexibility, the results of this study indicate that these outcomes are not inherent but are dependent on critical enabling conditions, such as trust among participating SMEs, coordination capability and clarity of accountability within shared transport arrangements. The study offers a qualitative, perception-driven perspective on the way grocery SME proprietors interpret, negotiate and operationalise shared transport in resource-constrained and constrained environments. The results indicate that shared outsourced transport is not merely a logistical solution, but rather a relationally embedded practice. The capacity to manage interdependencies and uncertainty is essential for achieving operational and competitive benefits. The analytical emphasis is shifted from transport as a purely cost-reduction mechanism to a coordination-intensive capability that necessitates active managerial engagement.

Based on the RBV, the results indicate that shared outsourced transport serves as an enabling resource. This enables SMEs to access logistical capabilities that exceed their internal capacity. However, the study further demonstrates that competitive advantage is not solely derived from access to shared transport, but from the capacity of SME owners to coordinate, administer and seamlessly integrate these shared resources. This focus on relational and managerial capabilities improves a more sophisticated comprehension of how logistics resources are converted into competitive advantages within small- and medium-sized enterprise environments. These findings suggest that the competitive value of shared outsourced transportation does not reside solely in access to external logistics resources, but in the capability of SME owners to effectively coordinate, govern and sustain collaborative transport relationships under conditions of operational constraint.

Furthermore, the study advances SME logistics theory by elucidating the contingent nature of shared transportation advantages. Theoretical models frequently posit efficiency improvements stemming from collaboration; however, empirical results suggest that governance structures, trust levels and coordination efforts substantially affect observed outcomes. Consequently, this research improves transportation theory by integrating behavioural and contextual factors, thus providing a more comprehensive framework for analysing CL strategies among grocery SMEs.

Practical implications

The findings of this study offer significant practical implications for proprietors of grocery SMEs, LSPs and policymakers. For SME business proprietors, shared outsourced transportation is regarded as an effective approach to reduce delivery cost pressures and improve operational efficiency.

However, the findings suggest that the effectiveness of such arrangements relies on efficient coordination, mutual trust among participating SMEs and transparent communication with logistics partners. Small- and medium-sized enterprises proprietors are advised to actively participate in the governance of shared transport systems to guarantee their alignment with operational requirements and service standards.

For LSPs, the study emphasises the importance of developing customised shared transportation solutions that acknowledge the limitations and variability encountered by grocery SMEs.

Providers should prioritise providing adaptable scheduling options, transparent pricing models and explicitly defined accountability measures. Improving reliability and communication can encourage greater trust and promote enduring collaboration with SME clients.

Based on the study's findings, policymakers and agencies providing support to SMEs should consider facilitating CL initiatives as part of their policy and programme agendas. Support programmes can advance shared transport by utilising coordination platforms, providing financial incentives and implementing training initiatives designed to improve the logistics management capabilities of SMEs. Such interventions can improve the sustainability and competitiveness of grocery SMEs in challenging market conditions.

Conclusion

This study examined the perceptions of SME business proprietors regarding shared outsourced transportation as a strategy to lower delivery expenses and improve competitiveness. The study's results indicated that participants generally viewed shared transportation as an effective method for controlling delivery-related expenditures through cost-sharing, improved cost predictability, and

diminished exposure to fuel and maintenance expenses. Operational flexibility and risk-sharing were further recognised as significant perceived advantages, allowing SMEs to adapt to demand variability and reduce uncertainties associated with logistics. Conversely, the research also revealed difficulties pertaining to coordination, diminished oversight of delivery timelines and apprehensions concerning service dependability. Despite these limitations, participants predominantly regarded shared outsourced transport as a positive factor improving competitiveness through the facilitation of cost-effective operations and elevated service quality. This study improves the existing body of information by providing qualitative, perception-based insights into shared transportation practices within SME logistics and transportation literature, emphasising the significance of managerial interpretation and relational dynamics. The results collectively emphasise the significance of collaborative outsourced transportation as a strategically pertinent, context-specific strategy for grocery SMEs. While the findings of this study suggest that shared outsourced transportation is perceived to contribute positively to cost management and competitiveness, these conclusions are grounded in subjective evaluations rather than direct empirical measurement of performance outcomes.

This study is subject to multiple limitations; the qualitative design and small sample size methodologically constrain the generalisability of the findings outside the analysed setting. The scope of this study was limited to grocery SMEs operating within a specific context; thus, the generalisability of the results to other sectors or geographic regions may be restricted. Also, dependence on self-reported perceptions may induce subjective bias. Furthermore, the study's scope was restricted to SME owners and managers who are actively involved in transportation decision-making, which allowed for a comprehensive understanding of experiential perspectives. However, this focus excludes potentially valuable viewpoints from SME operators who have not adopted shared transportation, those who may hold negative or sceptical attitudes towards such arrangements, and LSPs responsible for facilitating shared transport systems. The inclusion of these perspectives could offer a more comprehensive understanding of adoption barriers, resistance factors and operational dynamics. Future research is therefore encouraged to incorporate a broader range of stakeholders to enrich the analysis of shared transportation practices within SME contexts. In addition, the study was conducted within a particular geographical context, specifically grocery SMEs that are located in Mahikeng, which is located in the North West Province of South Africa. The transferability of the findings may be influenced by the contextual characteristics of this location, such as local market dynamics, infrastructure constraints and operational conditions. Therefore, it is important to exercise caution when extrapolating the findings to other urban centres, regions within South Africa, or broader developing country contexts. Future research is encouraged to conduct comparative studies across various geographical locations to evaluate the extent to which these findings are applicable in a variety of operational environments.

Based on participants' insights, grocery SMEs are advised to implement shared conveyance arrangements facilitated by well-defined coordination mechanisms and trust-based partnerships. Logistics service providers should improve transparency and dependability within shared models. Future research may utilise mixed methods approaches to quantify cost implications or conduct comparative analyses across sectors and regions to improve understanding of shared outsourced transportation strategies.

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This article is based on data from a larger study. Another article was published from the same thesis. The article focusing on assessing the impact of supplier and customer relationships and third-party logistics on stock availability in Mahikeng grocery small- and medium-sized enterprises has been published in the *Journal of Transport and Supply Chain Management*, Volume 19, in 2025.

Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

CRediT authorship contribution

Boipelo Kgwadi: Conceptualisation, Data curation, Formal analysis, Methodology. Alexander B. Samuels: Conceptualisation, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualisation, Writing – original draft, Writing – review & editing. All authors reviewed the article, contributed to the discussion of results, approved the final version for submission and publication, and take responsibility for the integrity of its findings.

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Data availability

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Disclaimer

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