Exploration Of The Linkage Between Entrepreneurial Marketing Capacities And Mobile Technology As A Tool For Supply Chain Efficiency

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Abstract

This study explores the relationship between entrepreneurial marketing capacities (EMC) and mobile technology (MT) as tools for enhancing supply chain efficiency (SCE), using the beef supply chain in Karmo Market, Abuja, Nigeria as a case study. It examines how mobile-enabled communication, innovation, and resource leveraging contribute to reducing waste and improving the operational, financial, and managerial performance of supply chain actors. Drawing on the resource-based view (RBV), the research integrates concepts from entrepreneurship, mobile supply chain management, and performance measurement to develop a holistic framework for sustainable supply chain development. Findings reveal that the strategic application of EM and MT fosters agility, transparency, and customer responsiveness. These insights offer actionable recommendations for stakeholders such as farmers, abattoirs, processors, and retailers. The study provides both theoretical and practical value, with implications for broader food supply chains across sub-Saharan Africa where similar market structures and technological conditions exist.

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I. Introduction

In recent years, the interplay of entrepreneurial marketing (EM), information and communication technologies (ICT), and the resource-based view (RBV) of firms has emerged as a critical area of inquiry in business performance and supply chain research. However, these domains have often been studied in silos, limiting our understanding of their collective impact on supply chain efficiency (SCE), particularly in the context of small and medium-sized enterprises (SMEs) operating in developing economies (Qureshi, Aziz, & Mian, 2017). This study aims to bridge these gaps by integrating mobile technology (MT), entrepreneurial marketing capacities (EMC), and RBV within a unified framework that explains how firms can enhance supply chain efficiency through innovation, agility, and resource optimisation.

While mobile technology has transformed operational processes and communication channels globally, its full potential in enabling supply chain coordination and strategic marketing remains underexplored in Africa's informal and semi-formal markets (Eng, 2006; Marinagi, Trivellas, & Reklitis, 2014). Against this backdrop, this study focuses on the beef supply chain in Karmo Market, Abuja, Nigeria, a typical representation of food supply networks in the Global South that suffer from inefficiencies, wastage, and coordination failures. The significance of this research lies in its novel contribution—no known empirical studies have holistically examined the interrelationship between mobile-enabled entrepreneurial marketing capacities and supply chain performance for waste minimisation and sustainable competitiveness.

Firm performance (FP) in supply chain contexts is typically evaluated through improvements in operational, financial, and managerial metrics. According to Das (2018), performance encompasses enhancements in efficiency, reduction in costs, and overall process optimisation across supply chain tiers. Other scholars extend this definition to include the cost of purchased materials (Chen & Paulraj, 2004; Green Jr., Whitten, & Inman, 2012), energy consumption reduction (Zhu, Sarkis, & Lai, 2007, 2008; Zailani et al., 2012), and logistics performance (Zhu et al., 2008; Park & Lee, 2015). These indicators reflect the value that supply chains derive from strategic and operational alignment with emerging technologies and market-oriented behaviours.

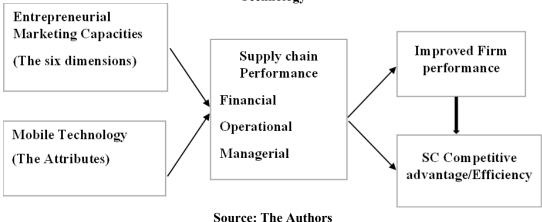
The resource-based view (RBV) posits that firm performance depends on internal resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). As such, the capabilities of firms—including financial capital, technical infrastructure such as mobile platforms, and intangible assets like entrepreneurial orientation—are central to creating and sustaining competitive advantage (Kostopoulos, Spanos, & Prastacos, 2002). Yet, empirical studies suggest that despite growing awareness, many SMEs have not fully exploited these capabilities, particularly mobile-based ICT systems, to improve performance outcomes (Qureshi et al., 2017).

Entrepreneurial marketing orientation encapsulates firms' proactive and innovative engagement with market opportunities. It involves recognizing and exploiting market gaps, leveraging limited resources, taking

calculated risks, and building customer-centric strategies to deliver sustained value (Morris et al., 2002; Gilmore, 2011). For firms in volatile environments such as informal supply chains in Nigeria, these capacities are crucial for navigating challenges like price volatility, inconsistent supply, and demand fluctuations. Collinson and Shaw (2001) argue that opportunity recognition, innovation, and customer responsiveness are necessary traits for firms aiming to achieve strategic flexibility and long-term success.

Gilmore (2011) articulates six core dimensions of entrepreneurial marketing: value creation, opportunity recognition, innovation, leveraging resources, customer intensity, and risk management. These dimensions guide firms in turbulent markets to create adaptive strategies and technologies that improve supply chain flow, enhance visibility, and reduce losses. Through their strategic application, SME owners can not only respond to market uncertainty but also reconfigure supply chain activities to improve lead time, stock accuracy, and product quality.

Figure: 1 Supply Chain Firm Performance Linkage to Entrepreneurial Marketing Capacities and Mobile Technology



Although prior studies have examined the roles of EM or mobile technology independently in firm performance (e.g., Wu et al., 2006; Tseng et al., 2011), very few have explored the synergistic effect of these constructs on supply chain efficiency. This paper contributes to filling this void by theorizing how the integration of EM and MT capabilities can be harnessed to optimize resource use, reduce waste, and improve supply chain responsiveness, particularly within the context of developing economies. It also offers a conceptual framework—grounded in the RBV—that captures the dynamics between entrepreneurial behaviour, technological tools, and operational effectiveness.

The next section develops this framework in greater detail, supported by an extensive literature review and thematic synthesis. By mapping the linkage between mobile-enabled EM practices and supply chain performance, this study sets the foundation for practical strategies that SME actors across agriculture and food sectors can adopt to drive sustainable growth.

II. Theoretical Background

Mobile Technology in Supply Chain Management

Mobile technology (MT) has transformed business operations by enhancing communication, connectivity, and real-time access to information across geographically dispersed networks. In supply chain management (SCM), mobile technology plays a pivotal role in reshaping processes related to procurement, logistics, coordination, and customer engagement. Enterprise mobility—the application of mobile and wireless technologies to business functions—enables greater flexibility, responsiveness, and operational efficiency (Dahl, Kongsted, & Sørensen, 2011).

Mobile Supply Chain Management (MTSCM) is defined as the application of mobile devices and wireless networks to support SCM processes such as inventory control, order tracking, logistics, supplier communication, and real-time data analytics (Eng, 2006). It promotes decentralisation and real-time decision-making by connecting stakeholders across the supply chain. According to Wu et al. (2010), SCM in the mobile era involves the seamless coordination of material, information, and financial flows between trading partners to achieve responsiveness and minimise waste.

Kalakota and Robinson (2001) identified four core areas of MT application in SCM: (1) electronic procurement, including digital purchasing approvals and payments; (2) logistics operations and inventory management; (3) supply chain transparency through real-time tracking technologies; and (4) field service automation and reverse logistics. These areas are enhanced through enabling technologies such as barcodes,

RFID, mobile apps, and data warehouses that allow for predictive analytics, demand forecasting, and customer behaviour tracking (Fawcett et al., 2011).

A key benefit of MT in SCM is its ability to enhance visibility and interconnectivity. By linking employees, customers, and suppliers, mobile platforms improve responsiveness and alignment with customer needs (Shaik & Abdul-Kader, 2013). Real-time communication reduces demand distortions—commonly referred to as the "bullwhip effect"—and builds trust across the supply chain (Mitra & Singhal, 2008). Furthermore, enhanced transparency reduces transaction costs and facilitates better collaboration (Dyer & Chu, 2003), particularly in volatile markets where uncertainty is high.

Mobile Technology's Impact on Supply Chain Efficiency

The integration of MT into supply chains has led to demonstrable gains in operational efficiency, productivity, and financial performance. Early skepticism regarding the productivity paradox of IT investments has largely been overturned by empirical evidence indicating strong correlations between IT adoption and business value creation (Barua & Lee, 1997; Mukhopadhyay et al., 1997). Nguyen et al. (2011) assert that although understanding the mechanisms behind IT success remains complex, its benefits to supply chain visibility, agility, and collaboration are now well acknowledged.

Mobile technologies enhance supply chain integration by enabling internal coordination (between departments) and external integration (with suppliers and customers) in real time (Marinagi, Trivellas, & Reklitis, 2014). This real-time interactivity allows firms to track inventory, adjust orders, reroute shipments, and respond instantly to market shifts. The power of MT lies in its ability to combine autonomy (Jennings & Wooldridge, 1995), social capability (Moyaux, Chaib-draa, & Sphie, 2006), and reactivity (Parunak, 1999) to facilitate intelligent decision-making under uncertainty (Brooks & Davenport, 2004).

Furthermore, MT contributes to value creation through multiple channels—cost reduction, increased delivery speed, improved customer service, and reduced information asymmetry (Brandyberry et al., 1999). These outcomes align closely with the principles of lean and agile supply chains, both of which prioritise waste reduction and customer responsiveness.

Tseng et al. (2011) argue that MT adoption cannot be viewed in isolation from other organisational components such as strategy, customer engagement, and knowledge management. Indeed, mobile systems are most effective when deployed as part of an integrated strategy that aligns with broader business goals (Andersen et al., 2001). As such, MT should be viewed not only as a technological tool but also as a strategic resource that supports organisational agility, learning, and innovation.

Mobile Technology as a Driver of Competitive Advantage

Mobile technology creates competitive advantages in supply chains by enhancing efficiency, responsiveness, and connectivity. According to Rogers et al. (1993), firms can use MT to improve responsiveness to customer demands and service innovation. For example, mobile-based platforms enable firms to access new customer segments and markets that were previously unreachable due to physical or infrastructural constraints (Wu, Mahajan, & Balasubramanian, 2003).

Information flow plays a critical role in gaining competitive advantage. Byrd et al. (2003) highlight that IT systems facilitate enhanced communication and coordination both within the firm and with external stakeholders, thereby boosting supply chain performance. In turn, this leads to higher customer satisfaction, faster time-to-market, improved order accuracy, and reduced operating costs (Kim, 2009; Wu et al., 2006).

Tseng et al. (2011) suggest that MT contributes to performance by enabling dynamic resource reallocation, real-time analytics, and better forecasting. These benefits lead to improved return on investment (ROI), enhanced profitability, and more accurate demand fulfilment. Additionally, mobile systems support end-to-end visibility, allowing firms to optimise inventory levels, reduce lead times, and align operations with consumer demand patterns.

Managing Supply Chain Relationships Through Mobile Technology

SCM is inherently relational, requiring the coordination of multiple stakeholders with varying objectives. Mobile SCM provides a platform for transparent and adaptive relationship management across the supply chain. Eng (2004) argues that mobile technology enables firms to shift from linear supply models to network-based configurations, where relationships are dynamic and decentralised.

MT facilitates the sharing of real-time data—such as sales forecasts, customer feedback, and shipment tracking—across functional and organisational boundaries. This high degree of visibility reduces information lags and allows firms to respond swiftly to market changes. For example, real-time inventory data can be used to prevent overstocking or stockouts, improving service levels and reducing wastage.

Trust and transparency, fostered by MT-enabled communication, enhance interfirm collaboration and reduce opportunistic behaviours. As noted by Dyer and Chu (2003), information sharing is a foundation for

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relationship trust, which in turn lowers transaction costs and enhances performance. Moreover, MT allows firms to differentiate between transactional and strategic relationships, thereby enabling more effective resource allocation (Eng, 2004).

However, firms must invest in the physical and digital architecture necessary to support these interactions. Effective use of MTSCM involves not only technology deployment but also the cultivation of interfirm commitment, shared goals, and continuous learning. Firms must select their partners carefully and align technological capabilities with strategic goals to maximise the benefits of MT-enabled collaboration.

The Role of Entrepreneurial Marketing Capabilities in Coordination and Integration

Entrepreneurial marketing (EM) capabilities are critical for the effective coordination and integration of mobile-enabled supply chains. EM involves the ability to recognise market opportunities, innovate rapidly, and leverage limited resources for maximum impact (Morris et al., 2002). In the context of SMEs, particularly in developing economies, these capabilities determine the success of MT adoption and integration into supply chain processes.

The real-time and decentralised nature of MT requires a high level of cross-functional coordination. As noted by Morash and Clinton (1998), Johnson (1999), and Stank et al. (2001), coordination and integration across supply chain functions—procurement, logistics, sales, and customer service—are essential for performance enhancement. MT amplifies these capabilities by allowing simultaneous task execution, live feedback, and coordinated responses across supply chain tiers.

Entrepreneurial SME owners are uniquely positioned to exploit these opportunities. Their agility, innovative mindset, and resourcefulness allow them to implement MT solutions more flexibly than larger, bureaucratic firms (Hines, 2013). However, the success of MT in SCM also depends on system-wide knowledge and collaboration. Chopra (2019) cautions that lack of coordination can trigger the bullwhip effect, where minor fluctuations in demand cause large variances upstream in the supply chain.

To avoid such inefficiencies, SME owners must leverage EM capacities to foster internal integration (between departments) and external integration (with suppliers and customers). This includes training staff to use mobile tools, creating feedback loops for continuous improvement, and embedding MT into strategic planning. Ultimately, the goal is to build supply chain networks that are not only digitally connected but also strategically aligned and customer-focused.

III. Methodology

Research Design

This study adopts a qualitative, exploratory case study approach to investigate the interrelationship between entrepreneurial marketing (EM) capacities and mobile technology (MT) in enhancing supply chain efficiency (SCE). Given the limited prior research in this specific context, a qualitative design is well-suited for capturing the depth, complexity, and contextual nuances of the phenomena under investigation. The case study is focused on the beef supply chain in Karmo Market, located in Abuja, Nigeria—an environment characterized by informal business practices, limited technological infrastructure, and dynamic market interactions.

Sampling and Data Collection

Purposive sampling was employed to ensure the inclusion of diverse stakeholders across the beef supply chain. Eighteen participants were selected based on their roles and relevance to the study, including livestock farmers, abattoir workers, transporters, meat processors, and retailers. Semi-structured interviews were conducted using a guided protocol that explored participants' experiences with mobile technology adoption, marketing decision-making, and operational coordination. The flexibility of the semi-structured format allowed for probing emerging themes while maintaining consistency across interviews. Additionally, relevant documents such as market reports and policy briefs were reviewed to contextualize primary data. A literature triangulation strategy was also employed to strengthen the study's validity and theoretical grounding.

Data Analysis

Data were analysed using thematic analysis as outlined by Braun and Clarke (2006). This method involved six steps: familiarization, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Both inductive and deductive coding approaches were used to ensure a balanced integration of participant-driven insights and theory-informed concepts. NVivo software was used to organize and manage the data, enabling systematic identification of recurring patterns and relationships across the dataset.

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IV. Discussion And Contribution

Entrepreneurial Marketing Capacities and Supply Chain Efficiency

Entrepreneurial marketing (EM) has emerged as a key strategic orientation for firms operating in dynamic and resource-constrained environments. Defined by Morris et al. (2002) as the proactive identification and exploitation of market opportunities through innovation, risk-taking, and resource leveraging, EM offers firms the flexibility and responsiveness necessary to navigate volatile supply chain conditions. Within the context of the beef supply chain in Karmo Market, Nigeria, this study found that firms exhibiting high levels of EM were better positioned to align supply with fluctuating consumer demand, thus reducing inefficiencies and improving service delivery.

Participants identified six dimensions of EM as being critical to their operations: opportunity recognition, innovation, customer intensity, value creation, resource leveraging, and risk management. Firms that employed these capacities reported practical applications such as using WhatsApp for real-time updates, mobile money for seamless transactions, and customer feedback loops to inform purchasing decisions. This supports Collinson and Shaw's (2001) argument that customer-oriented innovation is central to improving firm adaptability and supply chain performance.

The data further revealed that firms practising EM were not only more responsive to market changes but also demonstrated better waste minimization, especially in perishable goods like meat. By innovating around storage, delivery, and customer engagement, these firms mitigated spoilage and optimized product flows. These findings suggest that EM acts as a catalyst for supply chain efficiency by promoting proactive, value-creating behaviour at every stage of the chain.

Mobile Technology as an Enabler of Real-Time Coordination

Mobile technology in supply chain management (MTSCM) serves as a transformative tool for achieving real-time coordination, operational transparency, and data-driven decision-making. Participants in this study widely acknowledged the use of mobile applications and platforms to monitor inventory, coordinate logistics, and manage customer interactions. These technologies enabled firms to respond more quickly to disruptions and maintain service continuity.

Eng (2006) and Wu et al. (2010) argue that mobile tools allow firms to overcome geographic and infrastructural limitations, thereby enhancing responsiveness and communication throughout the supply chain. In line with this, study participants reported improved stock turnover and customer satisfaction, which they attributed to the timely exchange of information facilitated by mobile platforms. According to Barua and Lee (1997), information flow is a major determinant of productivity—a finding substantiated by this study's estimate of a 30% improvement in stock movement among firms using mobile-enabled coordination systems.

Furthermore, mobile technology was instrumental in bridging the gap between formal and informal market actors, supporting better alignment between supply and demand. Firms were able to adjust their procurement and delivery strategies based on real-time updates from customers and suppliers. This not only reduced uncertainty but also minimized costs related to overstocking or under-delivery, which are prevalent in traditional supply chain models.

Competitive Advantage Through Integration of EM and MT

The combined deployment of entrepreneurial marketing and mobile technology yielded significant strategic benefits for participating firms. This integration empowered firms to enhance their responsiveness, reduce costs, and generate higher returns on investment—critical indicators of competitive advantage. As noted by Kim (2009) and Tseng et al. (2011), firms that leverage mobile tools in tandem with marketing agility are better positioned to meet customer expectations, adjust to market changes, and maintain operational efficiency.

This convergence of EM and MT aligns with the resource-based view (RBV) of the firm, which emphasizes the strategic importance of valuable, rare, inimitable, and non-substitutable (VRIN) resources in achieving competitive advantage (Barney, 1991). In this study, the ability to merge marketing innovation with technological capability was seen as a key differentiator among high-performing firms. These firms exhibited stronger customer relationships, quicker response times, and better financial performance compared to those operating without such integration.

The research also found that EM-MT integration enabled firms to identify new market segments, enhance service quality, and create adaptive business models tailored to their specific environments. This not only improved their internal performance metrics but also helped in developing more resilient supply chains capable of withstanding shocks such as price fluctuations, transport disruptions, or public health emergencies.

Interfirm Collaboration and Knowledge Sharing

Mobile technology also played a central role in strengthening interfirm collaboration, facilitating trust, and promoting continuous learning across the supply chain. Real-time communication enabled by mobile devices

reduced information asymmetry and fostered transparency, particularly in price negotiations, inventory status, and delivery timelines. This openness supported collaborative planning and forecasting, leading to improved accuracy and reliability in supply operations.

According to Dyer and Chu (2003), trust in supply chain relationships lowers transaction costs and enhances joint performance. In this study, participants noted that mobile communication platforms contributed to trust-building by allowing for consistent, traceable, and efficient exchanges with suppliers and buyers. Furthermore, mobile systems were used to disseminate knowledge, provide market intelligence, and coordinate capacity-building activities, especially among small-scale farmers and informal retailers.

The creation of these digitally-enabled knowledge networks reinforces the importance of integrating physical infrastructure with digital tools, as highlighted by Marinagi, Trivellas, and Reklitis (2014). This dual integration ensures that the benefits of MTSCM—such as flexibility, speed, and data accuracy—are maximized, while also encouraging innovation and mutual support among supply chain actors.

Contribution to Theory and Practice

This study offers several key contributions to both the theoretical and practical understanding of supply chain efficiency in emerging markets. Theoretically, it advances the literature on EM and SCM by demonstrating how entrepreneurial capacities and mobile technologies intersect to influence supply chain outcomes. It validates the RBV perspective by showing that EM-MT integration serves as a valuable internal capability contributing to sustained performance.

Practically, the research provides a roadmap for SMEs in resource-constrained settings to adopt low-cost, high-impact solutions for improving their supply chain operations. It highlights the importance of equipping entrepreneurs with both the mindset and tools necessary to innovate and coordinate effectively in dynamic environments. The findings are particularly relevant for policymakers, development practitioners, and supply chain managers seeking to enhance food security, reduce post-harvest loss, and promote inclusive economic growth in the Global South.

V. Conclusion And Future Prospects

Conclusion

This study set out to explore the intersection of entrepreneurial marketing (EM) capacities and mobile technology (MT) in enhancing supply chain efficiency (SCE), with a particular focus on Nigeria's informal beef supply chain in Karmo Market, Abuja. Using a qualitative, exploratory case study approach, it examined how resource-constrained small and medium-sized enterprises (SMEs) leverage internal capabilities and mobile-enabled tools to improve responsiveness, reduce waste, and gain competitive advantages in highly volatile and infrastructure-challenged contexts.

The findings demonstrate that when EM and MT are strategically integrated, they create a powerful synergy that enables firms to navigate supply chain complexities and operate with greater agility. Specifically, six EM dimensions—opportunity recognition, innovation, customer focus, value creation, resource leveraging, and risk management—were found to play a central role in how firms respond to market dynamics and coordinate supply chain activities. This entrepreneurial orientation enabled participants to develop adaptive practices, such as using mobile platforms for direct-to-consumer communication, real-time payment processing, and inventory tracking, thereby reducing inefficiencies and perishability.

Mobile technology, on its own, emerged as a critical enabler of real-time coordination, transparency, and data-driven decision-making. It allowed supply chain actors to synchronize operations, adjust delivery schedules, and share market intelligence in real time. These capabilities enhanced supply chain visibility and responsiveness, mitigating common inefficiencies like the bullwhip effect and demand misalignment. By facilitating constant communication between supply chain actors, MT also strengthened interfirm trust and collaboration, aligning with the findings of Dyer and Chu (2003) that information sharing fosters relational capital and reduces transaction costs.

The research further illustrated that the integration of EM and MT aligns with the Resource-Based View (RBV) of the firm, which emphasizes the strategic role of internal capabilities in achieving sustained competitive advantage (Barney, 1991). When firms treat entrepreneurial behaviour and digital tools as valuable, rare, inimitable, and non-substitutable resources (VRIN), they position themselves not only to compete effectively but also to innovate continuously. This was evident in the way SMEs in the study deployed mobile applications creatively to overcome infrastructural deficits, such as unreliable power supply or fragmented transportation systems.

Importantly, the study offers both theoretical and practical contributions. Theoretically, it extends the literature on supply chain performance by demonstrating how entrepreneurial orientation and mobile-enabled communication systems jointly contribute to firm efficiency in emerging markets. While previous studies often addressed these elements separately, this research highlights their interconnected nature and proposes a cohesive

framework linking EM, MT, and SCE. Practically, it provides actionable insights for SME owners, supply chain managers, policymakers, and development practitioners on how to build resilient and inclusive supply chains using context-appropriate, scalable technologies.

The findings are particularly relevant for African economies and other developing regions where supply chains are often informal, resource-limited, and highly fragmented. In such contexts, traditional SCM models—typically designed for structured, digitally integrated environments—fall short. This research proposes a more inclusive model grounded in local capabilities and accessible technologies, offering a pathway for sustainable growth, food security, and poverty reduction.

Future Prospects

Despite its significant contributions, this study also highlights several avenues for future research that could deepen understanding and broaden the applicability of its findings.

1. Quantitative Validation and Model Testing

While the qualitative approach provided rich insights into the lived experiences of supply chain actors, future studies could adopt a quantitative or mixed-methods approach to test the conceptual relationships among EM, MT, and SCE on a larger scale. For instance, structural equation modelling (SEM) could be used to quantify the strength of relationships and test for mediating effects of MT between EM and firm performance. Such validation would not only strengthen the theoretical framework but also increase its generalisability across different sectors and regions.

2. Sectoral and Geographical Expansion

This study was grounded in the beef supply chain in a specific urban market context. Future research could replicate or adapt the study in other sectors such as grains, dairy, or fisheries—industries similarly affected by perishable goods and supply chain inefficiencies. Additionally, comparisons between rural and urban markets, or between formal and informal supply chains, would yield deeper insights into how contextual factors influence the adoption and effectiveness of EM-MT integration.

Furthermore, extending the study beyond Nigeria to other countries in sub-Saharan Africa or Southeast Asia would allow for cross-cultural comparisons and reveal patterns of convergence or divergence in mobile-enabled entrepreneurial practices. Regional differences in digital literacy, infrastructure, and institutional support could significantly mediate how mobile technology and entrepreneurial marketing interact.

3. Longitudinal Research

Understanding the long-term impact of mobile-enabled entrepreneurial marketing requires longitudinal data. Future studies should explore how firms sustain or evolve their EM and MT practices over time—especially in response to external shocks such as pandemics, economic recessions, or climate-related disruptions. Such research would illuminate the dynamics of capability development and reveal whether short-term gains in efficiency lead to sustained competitiveness and resilience.

4. Technology Readiness and Digital Inclusion

Future work should examine the barriers to MT adoption, particularly among the most marginalised actors in the supply chain, such as smallholder farmers or women entrepreneurs. Issues such as digital literacy, affordability, and access to mobile infrastructure can significantly hinder the equitable diffusion of mobile technology. Investigating these digital divides would help tailor interventions that ensure inclusive supply chain development.

Additionally, research could explore the role of intermediary organisations—such as cooperatives, NGOs, or agri-tech startups—in bridging these gaps by providing training, infrastructure, or financial support to technologically lagging supply chain participants.

5. Policy and Institutional Environment

Another promising area of research is the influence of regulatory and institutional frameworks on EM-MT adoption. Future studies could assess how government policies on digital finance, mobile data pricing, or entrepreneurship training affect the diffusion of mobile-enabled supply chain practices. Understanding these institutional enablers and constraints would inform more targeted policy recommendations and private sector partnerships.

For instance, national broadband policies, incentives for agri-tech innovation, or investments in rural telecommunications could all enhance the effectiveness and reach of mobile-enabled supply chains. As such, researchers could collaborate with policymakers to develop models of public-private engagement that accelerate digital transformation in traditional supply systems.

Final Reflections

This research underscores the importance of contextually grounded innovation in addressing long-standing challenges in supply chain management. In an era marked by global uncertainty and rapid technological change, SMEs in emerging economies must find locally adapted strategies to remain competitive and sustainable. Entrepreneurial marketing, when coupled with accessible mobile technologies, offers one such pathway—blending creativity with practicality to improve outcomes across financial, operational, and relational dimensions.

As markets become more digitised and interconnected, the strategic integration of EM and MT will become increasingly vital—not only as a tool for efficiency but also as a platform for transformation. This study lays the foundation for a deeper exploration of this integration and calls on researchers, practitioners, and policymakers to engage collaboratively in building inclusive, resilient, and technologically enabled supply chains for the future.

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