



Building Resilient and Scalable Logistics Transport Operations in Fragmented Markets

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Abstract

This report provides a summary of the TRATSEDI webinar focused on "Building Resilient and Scalable Logistics Transport Operations in Fragmented Markets." The webinar addressed the crucial need for efficient logistics in emerging economies, particularly the complexities of fragmented markets with limited infrastructure. Emeka Mba-Kalu, CEO of Sendstack, presented insights on these challenges, based on Sendstack's experiences in Nigeria. The discussion explored the difficulties businesses face, including diverse customer expectations, managing multiple delivery partners, and achieving scalability. The transformative power of technology in digitizing operations, enhancing visibility, and improving partner management was highlighted as essential for building robust and scalable logistics solutions. Sendstack's evolution from a Lagos-based delivery service to a SaaS platform provider illustrated the practical application of technology to overcome these obstacles and promote sustainable growth within fragmented logistics environments.

Keywords: Fragmented Markets; Logistics; Scalable; Resilient; Emerging Markets.

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Introduction

This report delves into the critical insights derived from a recent webinar centered on "Building Resilient and Scalable Logistics Transport Operations in Fragmented Markets." This webinar addressed a significant challenge prevalent in emerging economies: establishing effective logistics in markets characterized by a lack of consolidated infrastructure and dominant industry players. Organized by TRATSEDI (Transformative Transport Service Design Initiative), an organization dedicated to advancing sustainable transport solutions, the webinar underscored the urgent need for innovative approaches to logistics in these dynamic environments.

Hosted by Emmanuel Mogaji, Associate Professor of Marketing at Keele Business School, the session provided a platform for Emeka Mba-Kalu, Co-founder and CEO of Sendstack, to share his expertise. The core discussion revolved around dissecting the unique obstacles faced by businesses in fragmented logistics markets, particularly within Nigeria, and exploring the transformative power of technology in overcoming these hurdles. Mba-Kalu presented strategies for designing, implementing, and optimizing logistics systems, drawing from Sendstack's direct experience in running a logistics operation and developing a logistics management platform tailored for these challenging contexts.

The webinar's relevance is underscored by the fundamental role of robust logistics in driving economic development and enabling business expansion, especially within emerging economies. Efficient and scalable logistics are not merely operational necessities but are crucial enablers of trade, commerce, and overall economic progress. This report captures the essence of the webinar discussion, highlighting the importance of leveraging technology to build resilient, sustainable, and scalable logistics solutions that can thrive within the complexities of fragmented markets and contribute to economic advancement.

Challenges of Transport and Logistics in Emerging Markets

Emeka Mba-Kalu highlighted the significant differences between developed logistics markets (like the US and UK) and fragmented markets (using Nigeria as a primary example, but also applicable to other African, Southeast Asian, and Latin American markets). In fragmented markets, key challenges include:

- **Lack of Dominant Players and Infrastructure:** Unlike developed markets with established large logistics players and government-set infrastructure (e.g., USPS, Royal Mail), fragmented markets are characterized by numerous small-scale players, leading

to heavy competition and low barriers to entry. This absence of established infrastructure forces businesses to independently develop their logistics processes.

- **Evolving and Varied Customer Expectations:** Customer expectations are not clearly defined and are rapidly changing. Trends like same-day delivery, often unnecessary for many goods, become customer expectations due to the lack of established service standards. This creates inefficiencies and pressures businesses to adapt constantly.
- **Complex Logistics Management for Businesses:** Businesses in fragmented markets must dedicate significant resources (around 30% of their "mental power") to logistics. They need to define delivery processes, timelines, and coverage independently. This involves managing multiple delivery partners (SMEs often use around 10), each with varying specialties, communication preferences (e.g., Google Sheets, WhatsApp), and reliability levels.
- **Scaling Challenges and Diseconomies of Scale:** As businesses grow, logistics complexities escalate. Coordinating with numerous delivery partners with different processes increases overhead costs, often requiring large logistics teams. Economies of scale are not realized; instead, diseconomies can occur as growth increases stress and reduces efficiency in logistics operations.
- **Inconsistent Customer Experience:** Maintaining consistent service quality becomes difficult when relying on numerous delivery partners with varying standards. Finding a few reliable partners is easier at a small scale, but maintaining quality across a larger network of partners becomes increasingly challenging, negatively impacting customer experience.
- **Operational Costs:** Fragmented markets lead to ballooning overhead costs due to the need for large coordination teams and inefficiencies in managing diverse delivery partners.

Leveraging Technology to Transform Traditional Logistics Models

Mba-Kalu emphasized that while market fragmentation is inherent in many emerging economies, technology offers a crucial bridge to overcome logistical challenges. He proposed a shift towards a technology-driven approach to create a single, unified layer connecting businesses and diverse delivery partners.

Key technological interventions include:

- **Digitization and Automation:** Automating processes like order scheduling, partner assignment, tracking, and dispatch is crucial. This reduces manual work, improves efficiency, and alleviates the burden on logistics teams. Sendstack's journey began by

automating its own delivery service in Lagos, demonstrating significant efficiency gains with a small team.

- **Real-time Visibility:** Implementing trackers and sensors to monitor assets and integrating data from various partners into a single platform provides real-time visibility. This enhances communication and collaboration among businesses, delivery partners, and customers, creating a "360 communication" system.
- **Partner Management:** Utilizing data to analyse delivery partner performance is essential for quality control. Technology can facilitate data-driven decisions on partner selection, performance management, and optimization, ensuring consistent service standards.

Strategies to Scale Transport Operations Sustainably

The webinar highlighted that sustainable scaling in fragmented logistics markets hinges on adopting technology to streamline operations and manage complexity. The core strategy revolves around creating a technological "single layer" that businesses and diverse delivery partners can plug into. This approach aims to:

- **Standardize Processes:** Technology can impose standardized processes for order management, communication, and tracking, despite the diverse operational styles of individual delivery partners.
- **Improve Communication:** A unified technology platform can centralize communication, ensuring seamless information flow between businesses, partners, and customers, replacing fragmented communication methods like phone calls and disparate messaging apps.
- **Enhance Efficiency:** Automation and real-time visibility tools minimize manual tasks, reduce coordination overhead, and optimize resource allocation, leading to significant efficiency improvements as operations scale.

Insight into Sendstack's Journey in Logistics

Sendstack's journey provides a practical example of these principles. Starting with a direct-to-consumer last-mile delivery service in Lagos in 2022, Sendstack initially faced the typical challenges of manual logistics management. By prioritizing automation and digitization from the outset, they achieved significant efficiency, processing 200 daily deliveries with a lean team.

This operational experience led Sendstack to pivot and develop "Control," a SaaS product suite designed to empower other businesses and delivery companies with similar technological capabilities.

Sendstack's product suite now includes:

- **Control Business:** An operations management platform for businesses to control logistics tasks.
- **Control Partner:** A mobile app for delivery partners to receive orders and communicate seamlessly.
- **Customer App/Booking Page:** Customer-facing tools for order placement and tracking.
- **Control Tracker:** Portable GPS trackers for enhanced asset visibility.

By offering this comprehensive suite, Sendstack aims to drive broader adoption of technology in fragmented logistics markets, moving beyond direct service provision to enabling ecosystem-wide improvements.

Discussion on AI in Logistics

Mba-Kalu discussed the potential and limitations of Artificial Intelligence (AI) in logistics within fragmented markets. While acknowledging the hype around AI, he offered a balanced perspective:

- **Strong Use Case: Data Digitization:** AI can play a significant role in initial data digitization, particularly in unstructured environments. AI can help parse delivery details from various sources like WhatsApp messages, Instagram, and purchase orders, automating data entry into digital systems.
- **Limited Impact on Complex Optimization (Currently):** Mba-Kalu expressed scepticism about AI's immediate impact on complex tasks like route optimization in markets with poor physical infrastructure and unreliable data. He cited examples of road quality data gaps in mapping services and unpredictable factors like local unrest that currently necessitate human intervention (e.g., community-based route verification).
- **Future Potential:** He remains hopeful about AI's future role but believes foundational improvements in physical infrastructure and data quality are prerequisites for advanced AI applications in logistics (like route optimization and demand forecasting) to be truly effective in these markets. He emphasized that the immediate priority for most businesses is basic digitization and automation to replace manual processes.

Questions and Answers - Key Takeaways

The Q&A session addressed critical questions about the future of logistics in fragmented markets:

- **Need for a "National Post" Style Player:** While technically possible for a large private player to emerge and consolidate the market, Mba-Kalu believes it would require significant government will and support. He also highlighted the challenge of

maintaining consistently high service quality due to the training levels of supply chain professionals in these markets, leading to customer churn.

- **Training and Law Enforcement Challenges:** The discussion touched upon the practical challenges of operating in Nigeria, including law enforcement interference (e.g., police stopping delivery personnel). Mba-Kalu acknowledged that these issues impact customer experience and are part of the broader operational realities in such markets. He also noted the need for improved training for logistics professionals to enhance service quality and reliability.
- **Robotics and Automation in the Future:** In response to a question about robots in delivery, Mba-Kalu humorously pointed out potential challenges like theft or vandalism, highlighting the current infrastructural and societal context that may limit advanced automation in the immediate future.

Conclusion

The webinar provided valuable insights into the complexities of building logistics operations in fragmented markets. Emeka Mba-Kalu effectively articulated the unique challenges and emphasized the transformative potential of technology in streamlining operations, enhancing efficiency, and enabling sustainable scaling. While acknowledging the limitations of current infrastructure for advanced AI applications, the webinar underscored the immediate need for businesses to prioritize digitization, automation, and data-driven partner management to overcome fragmentation and build resilient logistics operations in emerging economies.