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Integrated marketing strategies between container seaports and their complementary dry ports: A contingency framework for selected ports in South Africa and Germany

Authors:
Chuma Myoli[1]
Kai U. Wellner[1,2]
Nomtha Hadi[1]

Affiliations:
[1]Faculty of Business and Economic Sciences, Nelson Mandela University, Gqeberha, South Africa

[2]Faculty of Business Administration, Technische Hochschule Nurenberg Georg Simon Ohm, Nurenberg, Germany

Corresponding author:
Chuma Myoli,
chuma.myoli@yahoo.com

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Background: The integration of container seaports and dry ports is critical for global logistics efficiency. However, standard marketing models often fail to account for the profound structural differences between monopolistic state-owned enterprises (SOEs), such as those in South Africa (SA), and liberalised, competitive markets like Germany.

Objectives: This study aims to extend the general framework of integrative marketing theory by applying contingency theory. The primary objective is to develop a contingency-driven integrated marketing strategy (IMS) framework that provides context-specific strategic roadmaps for ports operating under these divergent market structures.

Method: Adopting an interpretivist–constructivist paradigm, the study employed a qualitative research design. Purposive sampling was used to interview industry experts across the container logistics value chain in SA and Germany. Data were processed using thematic analysis supported by ATLAS.ti software.

Results: The findings reveal a critical dichotomy: In the monopolistic SA context, marketing efficacy is hindered by internal structural inadequacies and an information behaviour and values crisis, necessitating a focus on service recovery and human capital development. Conversely, the liberalised German market faces external competitive constraints and data privacy barriers, requiring neutral governance models to facilitate collaboration.

Conclusion: A 'one-size-fits-all' marketing approach is invalid. The study concludes that the adoption of advanced Marketing 6.0 strategies is contingent upon first securing foundational operational reliability in SOEs, whereas competitive markets require neutral intermediaries to manage data integration.

Contribution: The research contributes a novel IMS framework that prescribes distinct implementation paths for monopolistic and liberalised economies, formally establishing environmental sustainability as a mandatory core pillar of modern port marketing.

Keywords: integrated marketing strategies; contingency theory; port logistics; monopolistic economies; liberalised economies; environmental sustainability; Marketing 6.0; information behaviour and values.

Introduction

The growing complexity of container logistics requires enhanced marketing strategies that extend beyond transactional exchanges to embrace holistic, integrated approaches (Dussan 2012; Jeevan et al. 2022; Karaś 2022; Notteboom, Pallis & Rodrigue 2022). While modern theoretical models, such as the general framework of integrative marketing (GFIM), advocate for the synthesis of traditional marketing elements (like the 7Ps) with modern concepts (like Marketing 6.0 and customer relationship management or CRM Hunt, Madhavaram & Hatfield 2022; Parvatiyar & Sheth 2021), these frameworks often fail when applied across structurally divergent markets. Container corridors in economies such as South Africa (the Port of Durban [PoD]) and its complementary dry port, City Deep Inland Container Terminal), which are dominated by state-owned enterprises (SOEs), face entrenched internal structural inadequacies. In contrast, liberalised markets such as Germany (the Port of Hamburg [PoH] and Container Terminal Osnabrück [CTOS]) face strict external competitive constraints that prevent deep collaboration. This study addresses the profound knowledge gap by developing an IMS framework that is

conditional upon resolving these specific structural constraints, ensuring the final strategy is robust and practically viable across contexts. The structure of this article follows the expected academic flow, moving from the Introduction to Methodology, Theory, Application Results, Discussion and Conclusions.

Contextual background

The South African container logistics corridor, comprising the PoD and the City Deep Inland Terminal (CDIT), operates under the vertically integrated SOE structure of Transnet Group (Transnet 2025). While this structure theoretically allows for seamless collaboration, the reality is operational instability and a lack of market share growth, driving containerised cargo to competing road transport. However, this context is actively undergoing structural change, as the South African government has commenced with liberalisation in the container port and the rail sector. This reform is evidenced by the privatisation of the Durban Container Terminal (DCT) and the mandated establishment of the Transnet Rail Infrastructure Manager (TRIM) to enable private sector investment and competition in the rail network (Freight News 2024; South African Government 2022). The necessity for structural change within South African maritime and logistics governance structures is widely recognised as crucial for economic development (Hadi 2022). Conversely, the PoH cluster, including Container Terminal Osnabrück GmbH (CTOS) as one of its complementary dry ports, operates within a liberalised market where efficiency and technology are high (Tiemann, 18 June 2025), and the challenge lies in coordinating marketing efforts across numerous competing private entities while respecting competitive constraints. The comparative analysis requires acknowledging that both contexts operate within complex macro-environmental factors. Comparing distinct economic contexts enables the identification of specific success factors and contextual drivers of performance (Wellner & Strydom 2024). The organisational structure of the markets profoundly affects IMS viability, forcing the GFIM to this study's contingency framework for success in South Africa (PoD and CDIT) and Germany (PoH and CTOS).

Research problem and contribution

The subject of this research (container port competitiveness) is intricate and vital, particularly as the industry has transformed from simple commodity exchange points to dynamic global business networks (Jeevan & Roso 2019). The central research problem lies in the pervasive lack of holistic, integrated marketing strategies (IMSs) linking container seaports with their complementary dry ports as a unified service offering. This fragmentation severely compromises operational efficiency and competitive viability. In South Africa, the problem requires urgent intervention as the PoD, despite its significance, has experienced an 8% growth decline in 2023 and sustained negative growth over the past 5 years (Transnet 2025). The strategic importance of South Africa's maritime sector is underscored by its role in regional economic scenarios, requiring contextually sensitive management frameworks (Hadi 2022). In Germany, the PoH, which ranks third in Europe, also reported a 7% decline in container throughput to 7.7 million twenty-foot equivalent units (TEUs) in 2023, continuing a trend of negative growth primarily because of pervasive external global macroeconomic challenges, such as rising inflation and trade fluctuations (Hafen Hamburg Marketing: Annual Report 2022; Supply: Transportation and Logistics Analysis 2023). The institutional disparities across the study sites exacerbate the challenge. In South Africa's monopolistic SOE structure, the problem is organisational, as failure is rooted in internal flaws and the difficulty of integrating the various operating divisions (ODs) that are meant to be under one Transnet. Conversely, in the liberalised German context, the challenge is structural, stemming from the need to manage external competitive constraints and adhere to stringent data protection mandates, which structurally inhibit the deep commercial collaboration envisioned by modern marketing theories. This lack of comparative research addressing IMS specifically across an SOE and a liberalised market creates a critical knowledge gap. The study aims to address the declining market share of the PoD and the PoH by providing actionable insights to benefit both the South African and German economies.

To address this complex problem, the main research aim is to identify the key components of an IMS framework for the container seaports of Durban and Hamburg and their complementary dry ports, with the specific objective of enhancing competitiveness in the container transportation market. This primary goal is achieved through five specific secondary research objectives (ROs) and their corresponding research questions (RQs):

- **RO1 (Collaborative customer segmentation):** To identify the appropriate customer segmentation methods that can be collaboratively deployed by PoD and its complementary container dry port of CDIT, as well as PoH and CTOS, to identify common port users effectively.
- **RO2 (Value propositions):** To determine the critical value propositions (CVPs) for the container commodity customers of PoD and its complementary container dry port of CDIT, as well as PoH and CTOS, ensuring these propositions meet the specific needs of these customers.
- **RO3 (GFIM application):** To analyse the application of the GFIM for marketing strategies of PoD and its complementary dry port of CDIT, as well as PoH and one of its complementary dry ports of CTOS for the container commodity and to identify the implications of this theory for enhancing marketing practices and strategic partnerships within port logistics.
- **RO4 (Unique challenges):** To identify the unique challenges faced by marketing managers at PoD and its complementary container dry port of CDIT, as well as PoH and CTOS, specifically those arising from their employment within an SOE.
- **RO5 (Recommendations):** To make key recommendations for the development and implementation of IMSs between container sea and dry ports.

This study yields significant scientific value by advancing the theoretical foundation of marketing in the specialised business-to-business (B2B) maritime and logistics environment. Recent research confirms that while there is growth in marketing theories for seaport authorities, less attention is paid to hinterland container flows (Jeevan et al. 2022). Existing literature often features studies with limited scope (focusing on marketing strategies for container seaports, excluding container dry ports) or relies on general surveys (Amara & Negm 2022; Deerod 2018; My Ahmed & Badreeddine 2021; Parola et al. 2016). This research distinguishes itself by focusing on the container segment, directly testing the contemporary GFIM. The originality lies in the contingency theory extension, which establishes that IMS effectiveness is not uniform but conditional upon the unique structural situation of the port (a critical boundary condition previously underexplored in logistics literature). The study provides valuable literature on port competitiveness and contributes to the body of CRM knowledge in the port industry, drawing on a B2B context and expanding on studies from other business sectors.

The mandated expansion of the IMS framework itself further realises the theoretical contribution. Empirical findings dictate the formal integration of environmental sustainability as a core pillar to address rising environmental, social and governance (ESG) demands (MacNeil, Adams & Walker 2021). Furthermore, the study mandates the strategic integration of Marketing 6.0 (the utilisation of technologies such as artificial intelligence [AI] and Big Data for personalised marketing) with the relevant traditional marketing mix elements of the 7Ps (Price, Product, Process, Place and People). This fusion is essential because the advanced Marketing 6.0 strategy is futile if basic operational reliability (Process, Product) is lacking, underscoring the need for the theoretical model to align with fundamental customer value creation.

The practical and managerial contributions are substantial, directly providing actionable guidance to policymakers and management to reverse declining market share. By isolating the Information Behaviour and Values capability as the single most significant factor determining SOE success or failure, the research provides a clear focus for structural reform in monopolistic contexts. The outcome is a set of managerial roadmaps detailing the necessary service recovery steps for the South African SOE and the functional service assurance model required for the German liberalised market. This provides management with expert knowledge to inform decision-making, leading potentially to increased revenue and minimising risk. This study thus delivers a transparent, theory-informed account with practical and scholarly relevance.

Literature review

To establish a rigorous theoretical basis for the proposed framework, this literature review evaluates the transition of maritime marketing from isolated, transactional exchanges towards the holistic, integrated approaches required by modern logistics complexities. By synthesising extant scholarship across structurally divergent market environments, this section identifies the theoretical necessity for strategies that unify seaports with their hinterland counterparts to overcome pervasive operational and strategic fragmentation.

The scholarly gap: Beyond seaport isolation

A critical deficiency in current maritime literature (Amara & Negm 2022; Kounoupas & Pardali 2015; Kuakoski et al. 2023; Parola et al. 2016) is the tendency to treat seaports as separate entities, often neglecting the essential role of hinterland container flows and the marketing strategies of the dry ports that serve them. While extensive research exists regarding port choice and seaport competitiveness (Kuakoski et al. 2023; Lagoudis, Theotokas & Broumas 2017; Shi & Li 2017), dry port marketing remains an underexplored research area with limited academic coverage. This scholarly isolation results in fragmented strategies that fail to provide a holistic one-stop-shop logistics solution, which is increasingly demanded by global shippers (Harrison, Van Hoek & Skipworth 2014; Notteboom el al. 2022). This study addresses this gap by investigating the seaport–dry port dyad as a singular, integrated service offering within the container transportation market.

Theoretical foundation: The general framework of integrative marketing

To address this fragmentation, this research adopts the GFIM as its primary theoretical lens. The GFIM theory represents a paradigm shift from transactional, one-way communication to a collaborative relational model based on the integration of various marketing sub-disciplines into a consistent whole (Parvatiyar & Sheth 2021). Central to this theory is value co-creation and in container logistics, this posits that superior value arises from active interactions between the port, the dry port and the customer rather than just the end product. In the B2B logistics context, this requires a 360-degree view of the customer journey, aligning internal operations with external stakeholder needs to achieve sustainable profitability.

The strategic fusion: Traditional 7Ps as prerequisites for Marketing 6.0

A significant theoretical contribution of this study is the argument for a mandatory strategic fusion between the relevant traditional 7Ps marketing mix and modern Marketing 6.0 practices. While Marketing 6.0 leverages AI and Big Data Analytics (BDA) for predictive intelligence and personalised experiences (Nozari 2024), these advanced digital tools are futile if foundational operational reliability is absent. In B2B logistics, elements such as Price, Product (service portfolio), Process (efficient workflows) and People (competence and trust) are non-negotiable foundational prerequisites (Ciechomski 2024). For instance, high-level AI forecasting cannot compensate for equipment downtime or systemic unreliability; thus, the 7Ps serve as the vehicle that must be secured before the digital vision of modern

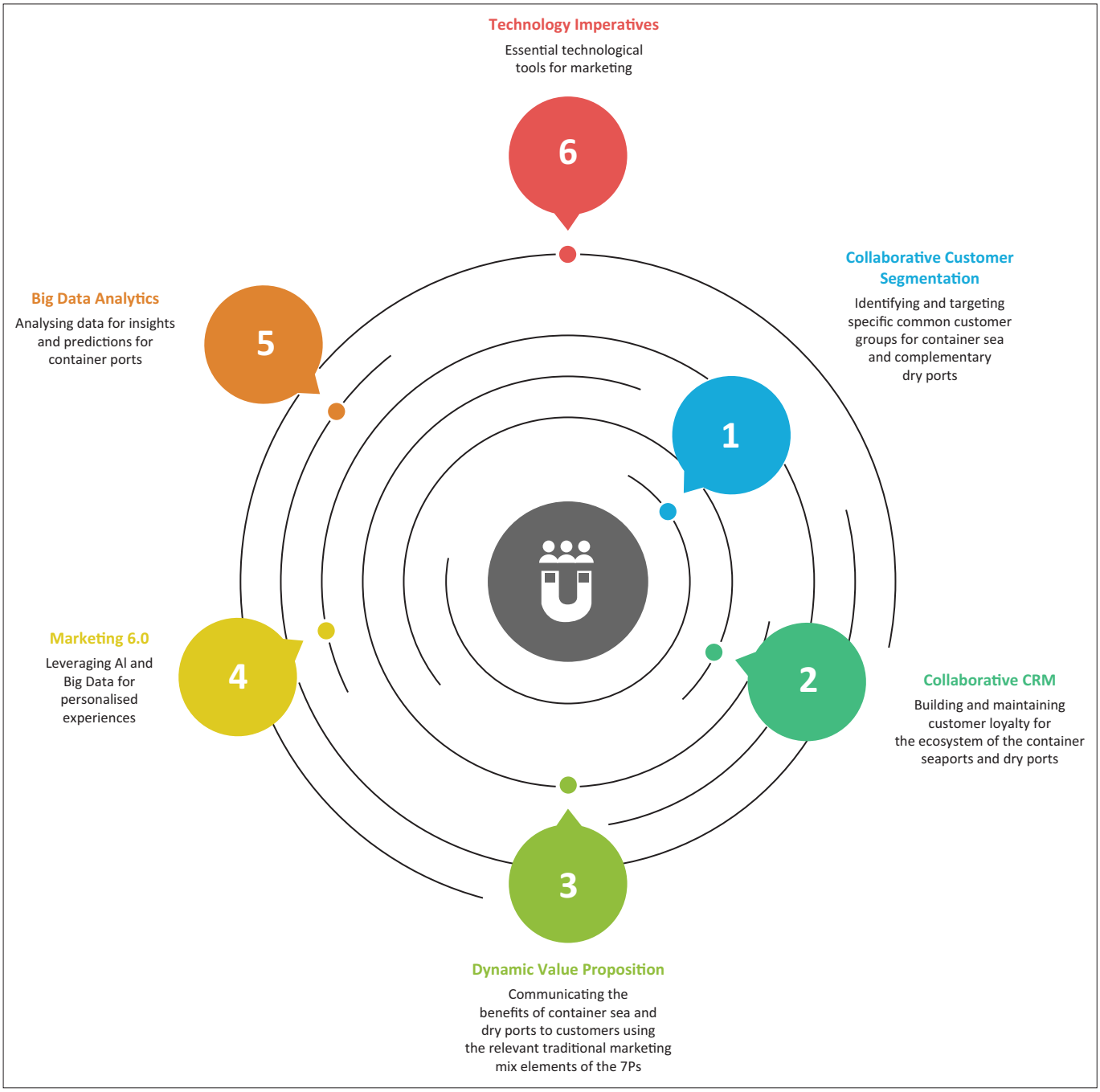
marketing tools such as Marketing 6.0 can be effectively implemented.

Having evaluated the GFIM as the primary orientation for modern container logistics marketing and established the strategic fusion of the relevant traditional 7Ps of the marketing mix as mandatory prerequisites for Marketing 6.0, the following model illustrated in Figure 1 provides a visual synthesis of these interdependent constructs to establish a unified theoretical framework for container port logistics.

While the provided model in Figure 1 establishes the theoretical synthesis of these interdependent constructs, their practical efficacy, priority and configuration are not uniform, but are instead profoundly moderated by contingency theory, which addresses the environmental conditions and resulting theoretical controversies that dictate strategic success across divergent market structures.

The moderator: Contingency theory and theoretical controversies

Reflecting on the limitations of universal marketing models, this study confirms that the efficacy of an IMS is critically moderated by contingency theory. This theory challenges standard, global prescriptions by asserting that organisational effectiveness is only achieved by fitting the strategy to the



CRM, customer relationship management; AI, artificial intelligence.

FIGURE 1: Synthesis of the general framework of integrative marketing theory components.

unique structural situation of the market, rejecting the notion of a single best way (Burns & Stalker 1961; Liu 2020; Nassou & Bennani 2024). This research highlights two major theoretical controversies that emerge when applying modern frameworks to divergent port clusters, which are discussed in the following section.

The controversy regarding universal digital maturity (Marketing 6.0)

While theoretical models for Marketing 6.0 advocate for the immediate, widespread adoption of AI and Big Data to deliver immersive, data-driven customer interactions, the empirical evidence from the South African SOE context necessitates a more cautious, contingent approach. The findings reveal that an internal information, behaviour and values (IBV) crisis, characterised by information politics and a hoarding culture, acts as an insurmountable block to digital transformation. This suggests that the theory cannot be successfully applied until internal structural integrity is restored through a mandate of service recovery, as advanced technology cannot compensate for a systemic void in cross-functional visibility.

The paradox of deep collaboration in liberalised markets

While the GFIM mandates deep commercial collaboration and data sharing to achieve ecosystem alignment (Hunt et al. 2022; Parvatiyar & Sheth 2021), the findings from the German liberalised market disagree with the feasibility of this ideal. The study identifies that the necessity to protect competitive advantage and adhere to strict data privacy mandates structurally prohibits deep commercial integration, such as shared customer contracts or integrated CRM systems. Consequently, the theory must be adapted to a model of functional service assurance achieved through neutral external intermediaries, such as the Hafen Hamburg Marketing (HHM). This adaptation ensures that integrated promotional efforts and functional data sharing occur without breaching competitive confidentiality or requiring the sharing of sensitive commercial data.

Mandatory extension: Environmental sustainability as a core pillar

Finally, the literature review mandates the formal inclusion of environmental sustainability as a core, non-negotiable pillar of the GFIM. As container ports face intense global pressure to align with environmental, social and governance (ESG) parameters, sustainability has evolved from a secondary concern to a CVP. In liberalised markets, this serves as a competitive differentiator through verifiable carbon dioxide (CO_2) reporting, while in SOE contexts, it functions as a mechanism for brand defence and legitimacy.

Research methodology

Having established the theoretical synthesis of the GFIM and identified the essential moderating role of contingency theory, the following section outlines the scientific methodology employed to investigate these constructs within the complex operational environments of the South African and German logistics corridors.

Research design and paradigm

This study adopted an interpretivist–constructivist paradigm, which assumes that reality is socially constructed through the subjective experiences and interactions of stakeholders (Fick 2020). A qualitative, multiple-case study research design was employed to provide the in-depth, contextually grounded inquiry necessary to investigate complex organisational phenomena within their natural settings (Yin 2018).

Research setting and sampling strategy

The research compared two fundamentally divergent logistics configurations, which are the vertically integrated South African SOE (Transnet) and the liberalised German cluster. The target population comprised 286 managers and stakeholders involved in container logistics. A purposive sampling technique was used to select a total of 29 participants. In South Africa ($n = 17$), participants included senior managers from Transnet National Ports Authority (TNPA), Transnet Port Terminals (TPT), Transnet Freight Rail Operating Company (TFROC) and major shipping line, cargo owners and merchant customers. In Germany ($n = 12$), participants included senior managers from HHM, terminal operators, as well as shipping line, cargo owners and merchant customers (similar to the South African sample composition).

Data collection

Primary data were gathered through semi-structured interviews lasting from 60 min to 90 min. These were supplemented by archival documentary research, including annual reports and regulatory studies, to ensure a rich, triangulated understanding of the phenomenon (Yin 2018). In South Africa, some interviews were recorded and transcribed verbatim, while in Germany, detailed notes were taken at the request of respondents.

Data analysis

Data were analysed using thematic analysis, following a rigorous six-step coding process (Braun & Clarke 2019). A hybrid coding strategy combined deductive codes from the GFIM (e.g. Value Proposition, CRM) with inductive codes emerging from the data (e.g. IBV crisis, Competitive Necessity). All analyses were conducted using Scientific Software Development ATLAS.ti to ensure an auditable coding trail and methodological transparency.

Methodological rigour and ethics

To enhance trustworthiness, the study employed triangulation across diverse stakeholder groups and member checking, where participants verified the accuracy of the researcher's

interpretations. Ethical clearance was obtained from the Nelson Mandela University Research Ethics Committee.

Case-specific findings and presentation of results

Building on the theoretical and methodological foundations previously established, this section presents the qualitative empirical data derived from key stakeholders, commencing with a detailed analysis of the monopolistic South African logistics cluster and the unique internal structural inadequacies that define its current operational environment.

South Africa: The monopolistic container port cluster

The first phase of the empirical analysis investigates how this environment influences the identification and classification of its customer base; thus, the following subsection evaluates the specific customer segmentation methods (RQ1 & RO1) employed to establish the foundational orientation required by the GFIM.

Customer segmentation methods (Linked to RQ1 & RO1)

Findings revealed that while Transnet ODs, as such, TNPA and TPT (responsible for the PoD) and TFROC (responsible for CDIT), attempt to segment by customer type within the container commodity customers (e.g. shipping lines, cargo owners and merchants), separate and contradictory customer definitions exist within ODs. In some cases, certain customers (shipping lines) are all considered common first-party customers by both TNPA and TPT (PoD) and TFROC (CDIT), while some customers (cargo owners) are considered first-party customers to TFROC but third-party customers to TPT and TNPA. This strategic fragmentation, therefore, blocks the collaborative segmentation prescribed in the theory of GFIM.

Critical value propositions (Linked to RQ2 & RO2)

For South African customers, the primary need is not advanced differentiation but service recovery, focusing on equipment uptime and cargo security. Consequently, the CVP shifts from an aspirational competitive offering to the mandatory task of securing basic operational reliability, which effectively becomes the primary 'Product' being marketed to ensure organisational survival.

Application of general framework of integrative marketing and Marketing 6.0 (Linked to RQ3 & RO3)

A significant digital lag was identified at the PoD and CDIT, where the limited usage of integrated CRM systems blocks the implementation of Marketing 6.0 strategies. This strategic deficiency forces a reliance on fragmented, manual communication methods (such as personal cell phone calls and instant messaging groups), which fundamentally lack the data integrity required to scale integrated operations or provide the real-time visibility demanded by corridor customers. Because communication relies heavily on manual input and overly dependent on individual personnel, stakeholders report significant issues with data inconsistency, perceived favouritism and delayed updates, all of which hamper efficient corridor management.

Furthermore, the practical implementation of BDA and AI is exceedingly difficult to achieve, as the organisation currently remains behind the Fourth Industrial Revolution and lacks the foundational technological backbone required for such advancements. This severe digital lag and the limitation of integrated systems make it functionally impossible to execute the data-driven strategies inherent in Marketing 6.0, such as utilising AI for predictive risk mitigation during cable theft seasons and other causes of operational deviation. Consequently, customer satisfaction is profoundly compromised; the inability to provide a reliable, automated platform for live tracking and tracing erodes customer confidence and forces clients to assume the burden of coordinating activities across fragmented silos. This systemic failure to ensure real-time transparency not only leads to persistent dissatisfaction but also increases the likelihood of customers diverting cargo to regional competitors that offer better digital visibility.

Unique challenges in a state-owned enterprise context (Linked to RQ4 and RO4)

The digital lag and operational deficiencies identified in the previous subsection are not merely technical failures but are symptoms of deeper institutional barriers inherent to the South African SOE structure. The empirical data confirm that the most binding constraint to implementing an IMS is the Information Behaviour and Values crisis. This challenge is characterised by a pervasive hoarding culture and a high degree of information politics, where data are transformed into a personal currency and a powerful device for loyalty fiefdoms rather than being utilised as a shared organisational asset.

This restrictive internal environment profoundly impacts the workforce, adding to the demotivation of marketing employees at PoD and its complementary dry port of CDIT. The findings highlight a fragmented strategic understanding, where marketing employees feel they must focus exclusively on the complex challenges of their specific OD before any meaningful corridor-wide integration can occur. Ultimately, the South African case study extends the GFIM by demonstrating that in a struggling SOE, internal structural integrity and ethical governance act as insurmountable blocks. The findings confirm that the restoration of internal capability and the resolution of the IBV deficit are mandatory prerequisites that must be solved before the advanced digital and collaborative elements of Marketing 6.0 can be successfully applied to the logistics corridor.

Germany: The liberalised container cluster

Building on the initial overview of the German case study, the following section investigates the foundational strategic process of identifying and grouping common port users within this highly liberalised and competitive logistics cluster.

Customer segmentation methods (Linked to RQ1 and RO1)

Findings from the German cluster (PoH and CTOS) reveal that customer segmentation is profoundly defined by a

highly liberalised and competitive market structure, which creates a sharp contrast to the vertically integrated model found in South Africa. In this environment, the Hamburg Port Authority (HPA), terminal operators and the complementary dry ports maintain distinctly separate customer bases dictated by direct commercial contracts. The HPA primarily identifies terminal operators as its direct customers via lease agreements, while terminal operators hold contracts with shipping lines, and CTOS identifies train operating companies (TOCs) as its core direct customer segment. Similar to the South African context, cargo owners and merchants are frequently relegated to third-party status by the PoH terminal operators; however, in Germany, this is a structural result of market-driven contractual chains rather than internal organisational silos.

Consequently, deep commercial data sharing is structurally prohibited by the paramount need to protect competitive advantage and strict adherence to institutional data privacy mandates. This competitive necessity functionally blocks the formal execution of collaborative segmentation as prescribed in the theory of GFIM, as companies avoid sharing sensitive customer insights that could undermine their market position. Functional integration is pragmatically channelled through the HHM, which uses a neutral membership model to align promotional efforts without requiring the exchange of commercially sensitive data.

Critical value propositions (Linked to RQ2 and RO2)

The German context focuses on functional service assurance, where high service quality and digital transparency are the primary drivers of port choice. This strategic focus is currently anchored by the DAKOSY Port Community System, which provides significant value by integrating container and cargo data across terminal operators and hinterland ports.

However, while stakeholders express satisfaction with this digital backbone, they identify a critical gap in real-time visibility regarding operational disruptions for all customers including third-party port customers. The existing system lacks advanced features, such as AI-integrated predictive alerts for the entire logistics chain, which are increasingly necessary to maintain predictability during unforeseen events that directly affect customers.

Consequently, while the current digital infrastructure is a comparative strength, the inability of the promotional and operational functions to fully converge creates a friction point in the customer experience. This suggests a strategic necessity for the HHM to evolve its role beyond traditional promotion to address these unmet functional demands.

Application of general framework of integrative marketing and Marketing 6.0 (Linked to RQ3 and RO3)

For the German cluster, this study suggests that Marketing 6.0 is adapted via a neutral intermediary, HHM, which provides non-commercial live updates to the cluster. This strategic evolution effectively transforms the HHM from a traditional promotional body into a centralised digital middleware, leveraging AI-driven analytics to bridge the gap between marketing communication and operational reality without compromising the competitive confidentiality of individual port operators.

By channelling functional data (such as real-time vessel tracking and disruption alerts) through a neutral third party, the German cluster overcomes the competitive blockade that prevents private firms from sharing sensitive commercial insights directly. This ensures that the GFIM is fulfilled through a functional service assurance model, where the marketing focus moves beyond brand awareness to provide the verifiable transparency and predictability demanded by modern B2B customers.

Port of Durban and Port of Hamburg comparison: Synthesis of findings (Linked to RQ5 and RO5)

Table 1 provides a high-level synthesis of primary empirical findings derived from in-depth stakeholder and customer feedback, moving beyond secondary data to capture the distinct operational realities of each cluster. By contrasting the functional service assurance model and high digital transparency of the PoH with the urgent service recovery mandate and security concerns of the PoD, the research establishes the contingent baseline for the IMS framework discussed in the subsequent sections.

While Table 1 provides a high-level summary of the comparative baseline between the two clusters, Section Discussion of integrated marketing strategy framework components and contingent extensions proceeds to a

TABLE 1: Port of Durban and Port of Hamburg comparison (a summary of findings).

Key theme	Port of Hamburg (German participants gp18–gp29)	Port of Durban (South African participants p1–p17)
Core service need	Functional service assurance: Focus on maintaining predictable high-performance stats and digital transparency for cargo planning	Service recovery: Critical need for basic operational reliability, equipment uptime and addressing systemic failures
Operational visibility	Digital integration: Reliance on the DAKOSY port community system for tracking container movements and custom declarations	Manual reliance: Frequent resort to manual communication (cell calls and WhatsApp) because digital platforms like NAVIS are viewed as outdated or unreliable
Infrastructure and security	Capacity and technical constraints: Primary concern is sufficient draft depth for megamax vessels and the need for continuous dredging	Security and integrity crisis: Severe concerns regarding cargo safety, tampering and theft, leading customers to explore regional competitors
Pricing sentiment	Value over price: Price is secondary to reliable service, although terminal rates are perceived as very expensive compared to other global regions	Price sensitivity: High sensitivity driven by the need to compete with cheaper road transport; customers demand transparent negotiation and flexibility
Marketing posture	Proactive branding: Collective promotion through HHM that translates directly into sales leads and global brand positioning	Reactive brand defence: Marketing employees are often demotivated and constantly justifying systemic failures and fraud perceptions
Hinterland connectivity	Multimodal aspiration: High value placed on the rail network, with requests for three-modal (rail, road, barge) integration	Corridor fragility: Dependency on the JHB-Durban rail link, which is hampered by excessive deviation because of cable theft and rolling stock shortages

HHM, Hafen Hamburg Marketing; JHB, Johannesburg.

granular presentation of the qualitative empirical data and case-specific results derived from the in-depth stakeholder interviews conducted in both the monopolistic South African corridor and the liberalised German logistics cluster. This forthcoming section details the specific nuances of each operational environment, exploring themes of customer segmentation, CVPs and the application of Marketing 6.0 and GFIM elements within their respective structural contexts.

Discussion

Integrated marketing strategy framework components and contingent extensions

The empirical evidence mandated significant extensions to the GFIM to make it viable in both economies.

Strategic alignment: Linking Theoretical analysis to practical improvements

To clearly establish the link between the study's theoretical foundations and the prescriptive roadmaps provided in this section, Table 2 maps the primary contingent barriers identified during the analysis to the corresponding strategic interventions within the IMS framework.

The matrix provided in Table 2 demonstrates that strategic success in port logistics is not a universal prescription but is critically moderated by the political and economic structure of the transport corridor. By mapping the theoretical pillars of the GFIM to case-specific findings, the study establishes that the implementation of modern marketing is contingent upon resolving unique structural barriers. In the South African context, the priority must be a top-down mandate to address internal structural inadequacies and the IBV crisis, whereas the German context requires functional adaptation to manage external competitive constraints via neutral governance. This alignment ensures that suggested improvements are not merely tactical interventions but are scientifically grounded responses to the identified theoretical blockages.

TABLE 2: Matrix of theoretical analysis and practical improvements.

Theoretical analysis (Contingency and GFIM theory)	Analytical finding (Contextual constraint)	Suggested practical improvement (Actionable roadmap)
Internal Inadequacy Contingency: Theory is blocked until structural integrity is restored	IBV crisis (S.A.): Information hoarding and 'politics' prevent collaborative segmentation and unified CRM	Mandate a centralised coordinating vehicle (CCV): Establish a top-down mandate to re-align customer definitions and enforce joint corridor strategy
GFIM Digital Transformation: Advanced digital tools are futile without operational reliability	Digital lag (S.A.): A lack of integrated systems (CRM and Big Data) blocks predictive intelligence and visibility.	Foundational investment (TCDLIS): Procure a centralised digital logistics integration system to achieve real-time visibility and risk mitigation
External Competitive Constraint: Competition prohibits deep commercial data sharing	Competitive autonomy (Germany): Private entities reject joint contracts to protect competitive advantage and data privacy	Elevate neutral intermediation: Evolve the hafen hamburg marketing into a digital platform integrator to provide non-commercial live updates
GFIM Extension (ESG): Modern CVPs must include societal and environmental value	High esg demand (Global): Customers require verifiable CO_2 reporting as a competitive differentiator or brand defence	Integrated sustainability pillar: Formalise sustainability kpis and promote smartPORT technologies as part of the primary value proposition

GFIM, general framework of integrative marketing; IBV, information, behaviour and values; CRM, customer relationship management; KPIs, key performance indicators.

This strategic mapping underscores that before a CVP can be effectively delivered, the foundational step of identifying and grouping common port users must occur. Therefore, the following section examines how collaborative customer segmentation serves as the initial engine for value, while remaining uniquely enabled or constrained by the prevailing market structure of the corridor.

Collaborative customer segmentation and market structure (Linked to RQ1 and RO1)

Customer segmentation is recognised as the initial and foundational step for modern marketing strategy and a strategic necessity for sustained success in competitive transport logistics. While Parvatiyar and Sheth (2021) suggest that collaborative customer segmentation is a strategic necessity for modern marketing, this study found that in logistics marketing and in the South African context, internal structural failure and conflicting customer definitions actively block this integration, thereby extending the theory by identifying internal structural inadequacy as a primary boundary condition for GFIM success. The findings regarding Transnet reveal a profound functional fragmentation where separate Transnet ODs define the same corridor customers in contradictory ways. Transnet Port Terminals views cargo owners as third-party stakeholders, while TFROC treats them as primary direct account holders. This misalignment prevents the creation of a unified CRM database, which is a prerequisite for the one-stop-shop logistics experience demanded by modern customers.

In contrast, while Möller and Halinen (2022) and Jeevan et al. (2022) posit that segmentation is a fundamental driver of competitive advantage, the German context demonstrates that external competitive constraint acts as a structural blockade in liberalised markets. Private firms in the Hamburg cluster intentionally reject deep commercial data sharing to protect their market intelligence and adhere to strict data protection mandates. Therefore, the GFIM must be extended to recognise that in liberalised systems, collaboration is achieved functionally and promotionally through neutral external bodies (like the HHM) rather than through unified commercial contracts. This analysis confirms that effective segmentation is the engine that drives value; however, as discussed in the following section, the nature of that value depends entirely on the stability of the underlying infrastructure.

The critical value proposition and the 7Ps

The research confirmed that modern GFIM must integrate traditional marketing, especially when the underlying product is flawed. While literature suggests that competitive advantage is driven by differentiated service portfolios (Ciechomski 2024), this study found that in the South African context, customers prioritise fundamental operational reliability and service recovery over advanced differentiation,

thereby extending the theory by redefining the CVP as service recovery in unstable monopolistic environments.

Service recovery versus functional service assurance

In the monopolistic economy (S.A.), the CVP is primarily service recovery. Customers demand that Transnet resolve fundamental issues (reliability, security and equipment uptime) before focusing on socio-economic benefits or advanced offerings; therefore, the primary measure of satisfaction is reliability. In the liberalised economy (Germany), the CVP is functional service assurance (a focus on efficiency, minimal ship dwell times and consistent, predictable service).

Integrating the relevant traditional marketing mix (7Ps)

While marketing theory has evolved (GFIM and Marketing 6.0), empirical results confirm that operational reliability remains the CVP in the B2B logistics industry (RQ2). This necessity mandates the fusion of traditional concepts into the modern GFIM structure. The core goal of modern marketing is value co-creation (Hunt et al. 2022), and the 7Ps elements serve as foundational prerequisites or critical determinants of this value in the logistics sector. Specifically, the cross-case analysis consistently confirms the criticality of the following elements of the traditional marketing mix, the 7Ps depicted in Table 3, which formally validates this theoretical bridge. As demonstrated in this table, the physical elements of the 7Ps, specifically, Product (Service Portfolio), Process, Place and People, are not merely secondary considerations but function as foundational prerequisites upon which the success of advanced strategies such as CRM and Marketing 6.0 (RQ3) depends.

Table 3 systematically highlights how four empirically validated traditional 7Ps elements remain CVPs in logistics, demonstrating their necessity as foundational prerequisites for the modern GFIM elements (CRM, value co-creation, etc.). The context shows how market structure forces a fundamental strategic shift, redefining the marketing task from achieving service recovery (S.A.) to managing functional service assurance (Germany).

Marketing 6.0 and technology adoption

The application of advanced GFIM constructs, which rely on AI, Big Data and digital platforms, is contingent on the host economy's political and economic capacity. While Nozari (2024) suggests that Marketing 6.0 enables immersive data-driven personalisation, this study found that in the logistics marketing and in the South African context, a profound digital lag starves digital efforts, thereby extending the theory by establishing that foundational 7Ps reliability is a mandatory precursor to Marketing 6.0 adoption.

The digital lag in monopolistic economies

In South Africa, Marketing 6.0 is blocked by a systemic digital lag and resource constraints. While the potential for Big Data to automate reports (e.g. revenue deviation, incident impact analysis) and enhance forecasting is recognised, the lack of core systems and the ongoing IT company conflict make foundational investment necessary before Marketing 6.0 implementation. Without fixing the internal system void, technology cannot provide cross-functional visibility.

Marketing 6.0 adaptation in liberalised economies

In Germany, Marketing 6.0 is adapted to the competitive environment. Highly personalised marketing experiences driven by data are the aspiration. The key is to leverage platforms such as LinkedIn for B2B marketing, focusing on sharing actionable knowledge and providing insights that resonate strongly with sophisticated B2B customers. While Jeevan et al. (2022) suggest that IMS requires deep dyadic integration, this study found that in the German context, competitive necessity and data privacy laws prohibit formal commercial collaboration, thereby extending the theory by validating Neutral External Governance as the only viable mechanism for IMS in liberalised markets. The need for

TABLE 3: The contingent relevance of traditional marketing mix (7Ps) elements.

Relevant 7Ps element	Core customer relevance (Logistics)	South Africa (Internal inadequacy contingency)	Germany (Competitive constraint contingency)
Product and process (Service portfolio and efficiency)	Foundational requirement for customer satisfaction and service quality.	Service recovery mandate: The CVP is redefined by necessity; focus must be on achieving basic operational reliability (e.g. Improving productivity, equipment uptime and efficient workflows) to recover market share lost to road transport.	Functional service assurance: Customers demand and expect extremely high-performance statistics, emphasising sustaining excellence (e.g. Predictable transit time, minimal ship dwell times and high-efficiency levels).
Price (Cost and flexibility)	The only element that generates revenue influences value perception.	Contingent value co-creation: Price is highly sensitive, requiring competitive rail rates to drive the modal shift away from road transport. Price negotiation capability must become a transparent value co-creation lever.	Competitive value feature: Price consistency is high because of regulations for inland terminals, making dynamic pricing and flexibility (e.g. Volume-based pricing and tiered discounts) key CVP features to minimise the perception of high cost.
Place (Location and connectivity)	The most critical factor influencing port selection. Vital for distribution and reducing double-handling costs.	Gateway reliance: The CVP relies heavily on Durban's strategic location as a gateway to Southern Africa and on cdit's proximity to reduce handling costs.	Branded network: PoH maintains an advantage through effective brand positioning as the gateway to central and Eastern Europe. Strategic focus is on enhancing dense multimodal connections (e.g. Rail).
People (Competence and professionalism)	Indispensable for establishing trust and providing essential service quality in the B2B niche.	Foundational breakdown: Employees are perceived as lacking competence and overburdened (IBV crisis). Requires human capital development to mitigate the demotivating SOE environment as a prerequisite for successful CRM.	High-performing element: Generally, employees are perceived as highly competent; marketing prioritises face-to-face meetings as the non-negotiable primary CRM method, supplemented by reliable CRM technology.

CVP, critical value proposition; PoH, Port of Hamburg; CRM, customer relationship management; CDIT, City Deep Inland Terminal; IBV, information, behaviour and values; HHM, Hafen Hamburg Marketing; SOE, state-owned enterprise.

functional service assurance means that the HHM needs to employ Marketing 6.0 tools to maximise data transparency without sharing sensitive commercial data, but this will require the HHM to evolve and include data transparency in its service packages for member companies.

Port environmental sustainability as a mandatory core pillar

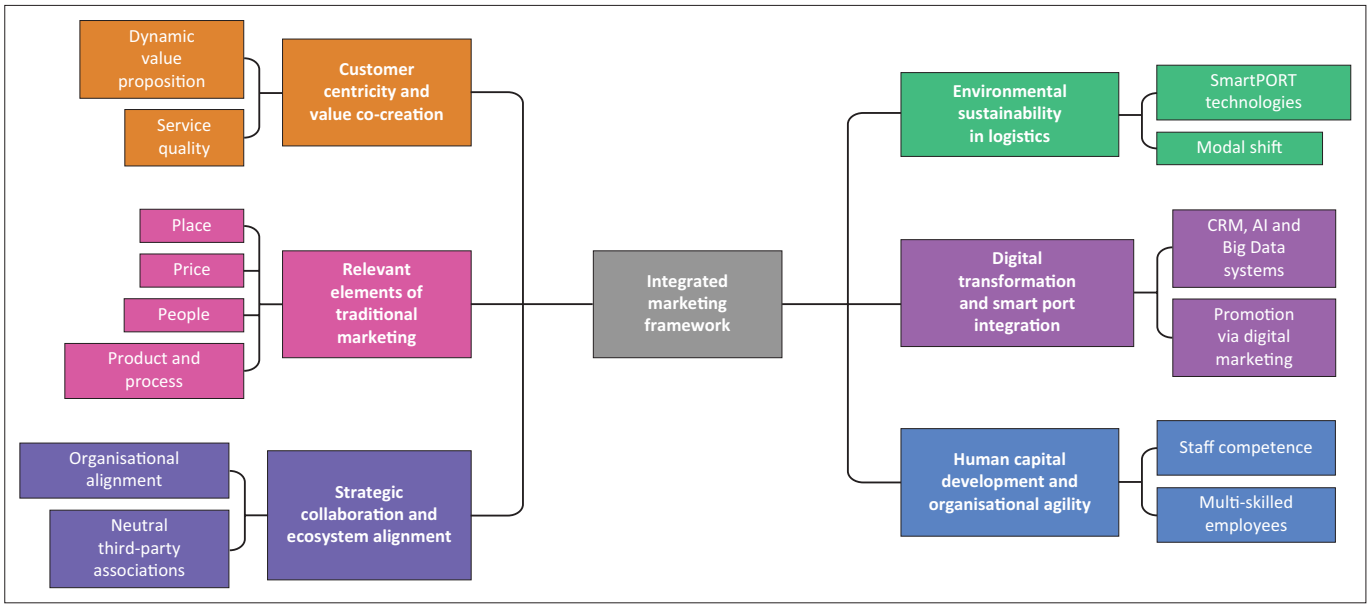
The cross-case analysis required the formal addition of environmental sustainability as a mandatory core pillar in the IMS framework. This inclusion was necessary to align the framework with contemporary global demands for sustainable development and ESG parameters (MacNeil et al. 2021; Notteboom et al. 2022). In the liberalised German economy (PoH and CTOS), environmental sustainability is a key value proposition and a necessary competitive differentiator. Customers not only expect demonstrable environmental initiatives but also actively track CO_2 emissions and require verifiable performance reports, reinforcing the need to integrate green initiatives into the customer value proposition.

Conversely, in the monopolistic S.A. (PoD and CDIT), while environmental sustainability is recognised as a global trend and is necessary for long-term viability and global compliance, it is often viewed as a low-priority competitive factor when compared to the urgency of achieving basic operational viability. Customer focus is frequently on fundamental challenges such as securing cargo and ensuring reliability. The framework dictates that Transnet must therefore leverage existing investments in hybrid equipment and rail's inherent environmental advantage (by reducing road traffic and carbon emissions) as part of a promotional strategy to defend the brand and prioritise sustainable operations as a feature of service recovery. This approach strategically communicates the environmental potential of a reliable rail corridor to attract freight volumes and align with ESG standards.

The proposed integrated marketing strategies framework

The study culminates in the development of a prescriptive IMSs framework illustrated in Figure 2. This serves as the definitive answer to the main RQ regarding the key components of an IMS between container seaports and their complementary dry ports. This framework provides the essential prescriptive guidance needed to fulfil the mandate of RO5 (key recommendations). The entire structure is theoretically grounded in the finding that the GFIM must be extended by incorporating contingency theory as a critical moderator, confirming that the success of the IMS is conditional upon resolving market-specific structural challenges.

Figure 2's six core pillars synthesise the specific empirical findings derived from all analytical RQs. It systematically overcomes the structural barriers identified in RQ4 (unique challenges in South Africa and Germany) and mandates the pillar of Strategic Collaboration and Ecosystem Alignment, which incorporates the Collaborative Customer Segmentation Model required by RQ1. Furthermore, the framework directly integrates the synthesis of RQ2 (CVPs) by formally including the relevant 7Ps marketing mix elements (which act as operational prerequisites for service quality) and mandating the environmental sustainability extension as a crucial component of the modern value proposition. Finally, the framework operationalises the requirements of RQ3 (Application of GFIM Elements) through the pillar of Digital Transformation and Smart Port Integration, detailing how advanced technologies such as Marketing 6.0 (AI and Big Data) must be configured and applied effectively to execute modern marketing constructs within the defined contingent market realities. This resultant framework is a new structure,



CRM, customer relationship management; AI, artificial intelligence.

FIGURE 2: Integrated marketing strategies for container sea and dry ports.

created from research outcomes, designed to provide structured guidance for effective decision-making and is visually conceptualised in Figure 2.

Prescriptive recommendations

Contingency-driven action roadmaps (Addressing RQ5 and RO5)

This section consolidates the theoretical and empirical insights gathered throughout the study to deliver the definitive answer to the primary RO, which was to identify the key components of an IMS for container port logistics.

The findings established in the preceding chapters confirm that successful integrated marketing is not a universal prescription but is critically moderated by the contextual environment, necessitating a significant extension of the GFIM through the lens of contingency theory. This research posits that for an IMS to be effective, managerial interventions must be tailored to overcome the dominant structural barrier in each economy.

The following sections present a newly structured, contingency-driven IMS framework organised around six core pillars. Before outlining these prescriptive roadmaps, it is essential to demonstrate the scientific rigour and traceability that underpins these conclusions, ensuring that every recommendation is directly grounded in the study's empirical evidence.

Research integrity and traceability: The chain of evidence

To satisfy the requirements of academic validation, this section provides the audit trail connecting the study's initial aims to its final prescriptive solutions. The following matrices demonstrate that the final framework is not merely a tactical intervention but a scientifically grounded response to the identified theoretical and operational blockages. Before concluding the study, it is essential to demonstrate the logical thread that connects the initial ROs to the empirical data and the subsequent theoretical interpretations. The following matrices (Table 4 and Table 5) provide the chain of evidence required to confirm the study's execution and scientific rigour.

Table 4 confirms that every interview prompt was intentionally designed to address a specific RO, while the Traceability Rationale Matrix (Table 5) identifies the exact empirical and theoretical origins of the final framework pillars.

This matrix demonstrates how the final IMS framework pillars were derived. Drawing on these divergent analytical findings, the research provides specific, actionable guidance to overcome the identified blockages. This is further detailed in the prescriptive strategies found in the following section of the Road Map for Monopolistic SOE Economies (South Africa).

TABLE 4: Consistency matrix (Linked to research question and/or research objective).

Research objective	Research question	Key interview prompt	Grounded findings
RO1: Segmentation	RQ1: Collaborative Methods	What role can collaborative segmentation play in your IMS?	• Conflicting customer definitions in SA • Privacy constraints in Germany
RO2: Value Propositions	RQ2: Critical Needs	What are your primary needs from a container seaport/dry port?	• Service recovery (SA) • Functional Service Assurance (Germany)
RO3: GFIM Application	RQ3: Marketing 6.0 Readiness	How is Big Data/AI utilised in your current marketing strategy?	• System void/digital lag (SA) • PCS (DAKOSY) integration (Germany)
RO4: Unique Challenges	RQ4: SOE Institutional Impact	Which unique challenges do you face as a marketing employee because of working for an SOE?	• Internal structural failure (IBV Crisis) in SA • External competitive constraint (Liberalisation) in Germany

RQ, research question; RO, research objective; AI, artificial intelligence; GFIM, general framework of integrative marketing; IMS, Integrated marketing strategies; PCS, Port community system; SOE, state-owned enterprises; SA, South Africa; IBV, information, behaviour and values.

Road map for monopolistic state-owned enterprise economies (South Africa)

The primary finding for South Africa (PoD and CDIT) is that marketing cannot succeed until basic operational reliability is secured. The IMS mandate is service recovery, focusing on correcting the pervasive IBV challenge and systemic organisational failures. Table 6 depicts the South African road map for mitigating internal structural inadequacies.

Table 6 shows that the South African roadmap for mitigating internal structural inadequacies dictates that the service recovery mandate is achieved by addressing foundational internal failures in human capital, systems and processes. Specifically, solutions include mandating foundational digital investment in integrated Big Data and CRM systems to overcome the digital lag and implementing accountability measures, such as formal inter-departmental SLAs, to correct the IBV challenge and systemic organisational failures.

Road map for liberalised economies (Germany)

The primary finding for the German cluster (PoH and CTOS) is that collaboration must be achieved functionally, while respecting the need for competitive autonomy. The IMS

TABLE 5: Traceability rationale matrix.

Framework pillar	Empirical evidence (Section 4)	Theoretical interpretation (Section 5)
Pillar 1: Customer Centricity	High dissatisfaction with fragmentation	Internal silos block value delivery in SOEs
Pillar 2: Sustainability Pillar	Demand for verifiable CO_2 reporting	ESG as a mandatory competitive differentiator
Pillar 3: Digital Transformation	Digital lag preventing real-time tracking	Basic 7Ps as gating conditions for Marketing 6.0
Pillar 4: Relevant 7Ps Integration	Findings identified critical gaps in Process, People, Place and Price that directly compromised customer satisfaction	The traditional 7Ps are not obsolete but act as mandatory gating conditions that must be fulfilled before modern strategies can succeed
Pillar 5: Strategic Collaboration and Ecosystem Alignment	Stakeholders showed a willingness to collaborate, but efforts were blocked by data silos in SA and competitive privacy in Germany	The collaboration model is context-specific, requiring top-down alignment in SOEs and neutral association orchestration in liberalised markets
Pillar 6: Human Capital Development and Organisational Agility	High reliance on personal KAM relationships and the presence of a destructive IBV crisis	Employee competence and internal information culture (IBV) are the primary binding constraints that determine the feasibility of any strategy

SOE, state-owned enterprises; ESG, environmental, social and governance; KAM, key account management; IBV, information, behaviour and values.

mandate is functional service assurance, focusing on leveraging technology through neutral external bodies to maximise customer value. Table 7 depicts the German Roadmap for adapting to the external competitive constraint.

The proposed road map details the contingent, strategic solutions necessary for the liberalised German cluster (PoH and CTOS) to provide solutions for commercial data sharing modern technology, Marketing 6.0 capabilities, CVPs and promotion and brand consistency to deliver by leveraging neutral external bodies (like the HHM), the effectiveness of which is monitored using defined key performance indicators (KPIs), which are discussed in the following section.

Key performance indicators

The KPIs established in Table 8 are mandated as the operational tools necessary to measure the success of the GFIM extension and ensure that all strategic programmes and investments achieve their desired results (Ciechomski 2024; Majika 2021). The use of both financial and non-financial KPIs is essential for gauging the relative success and long-term performance of strategic programmes and organisations (Büttner & Wellner 2023; Wellner & Musante 2024).

Table 8 systematically categorised KPIs by time horizon (short to long term) across three mandatory measurement areas (Customer and Operations, Digital and Financial, as well as Sustainability and Governance), which are mandated as operational tools necessary to measure the success of the GFIM extension and ensure accountability across all strategic programmes.

TABLE 6: South African road map: Mitigating internal structural inadequacies.

GFIM element and challenge (Contingency: Internal challenges)	Strategic implication for IMS	Solution (Actionable road map)
Digital Lag (Marketing 6.0 and CRM)	Systemic absence of data-driven systems blocks smart marketing and holistic account management	• Mandate foundational digital investment: Secure immediate procurement and implementation of integrated big data and crm systems • Overhaul digital platforms: Websites must function as accurate digital identities and communication hubs
IBV Crisis and Functional Silos (People and Collaboration)	Neglect of IBV leads to information politics and prevents cross-functional collaboration	• Mandate human capital development: Prioritise training to overcome the ibv crisis • Implement accountability: Formalise short, inter-departmental service-level agreements (SLAs) to agree on response times and manage customer expectations for cross-departmental issues
Operational Reliability (CVP and Product)	Systemic failures (cable theft, breakdowns) reduce the marketing task to service recovery and brand defence	• Leverage marketing 6.0 For security: Implement ai for predictive data, alerting management to 'seasons for disruption' (e.g. Cable theft forecasting). Implement predictive maintenance using sensors on equipment
Fragmentation (Collaboration and Strategy)	Collaboration is paralysed despite the structural advantage of one Transnet	• Establish a centralised coordinating vehicle: Transnet group must act as the convener and consolidator. The CCV must formally mandate and monitor the joint marketing strategy

GFIM, general framework of integrative marketing; CVP, critical value proposition; CCV, centralised coordinating vehicle; CRM, customer relationship management; IBV, information behaviour and values.

Limitations and future research

This study utilised a qualitative approach focused on two logistics clusters in two countries, limiting the broad generalisability of quantitative findings. Furthermore, the primary data collected in Germany were limited by competitive constraints and data privacy concerns. Added to this, the research findings and proposed solutions are contingent upon the market structure existing at the time of the study, specifically the prevailing monopolistic structure of the South African SOE. This structural constraint is significant because the South African context is currently undergoing structural change towards a liberalised model, evidenced by the mandated establishment of the TRIM and the privatisation of the DCT. The framework's predictive power is therefore constrained, as its ultimate stress test must occur once private-sector competitors are fully operational in the future liberalised environment.

Future research should focus on:

- Pilot Studies: Conducting a quasi-experimental longitudinal study to test the efficacy of low-risk pilot programmes for digital data sharing and collaborative promotion managed by neutral third parties (e.g. the HHM).
- IBV Quantification: Developing a quantitative instrument to measure the maturity of the IBV capability within SOEs to establish a benchmark for necessary structural reform before implementing advanced Marketing 6.0 systems.
- Post S.A. Rail and Port Liberalisation Research: A crucial area for subsequent investigation is the conduct of post-liberalisation studies to empirically test the framework's effectiveness once the South African container port and rail sectors are fully competitive with private operators.

TABLE 7: German road map: Adapting to external competitive constraint.

GFIM element and challenge (Contingency: Competitive constraint)	Strategic implication for IMS	Solution (Actionable road map)
Commercial Sharing (Collaboration and CRM)	The necessity for data privacy blocks deep commercial segmentation and joint sales strategies.	Elevate neutral intermediation: Guide the strategic use of the hafen hamburg marketing association to coordinate integrated promotion and networking events.
Marketing 6.0 and Service Assurance	High technological capability exists, but commercial AI and Big Data integration is constrained, limiting personalisation.	Evolve HHM's business model: Mandate the evolution of the HHM into a centralised ai digital logistics integration system. This system provides functional service assurance (e.g. Real-time operational data and live updates) as an added, non-commercial service offering to members.
Critical Value Proposition and Sustainability	High customer expectations require continuous enhancement to track and report verifiable environmental performance.	Integrate sustainability into marketing 6.0: Leverage marketing 6.0 Capabilities to promote hamburg's smartport strategy as a model for intelligent traffic management and verifiable co_2 reduction.
Promotion and Brand Consistency	Marketing must maintain a competitive advantage by effectively sharing knowledge and insights.	Leverage digital content: Strategically utilise platforms such as linkedin and industry publications for targeted B2B communications and sharing positive performance metrics. The HHM must integrate operational data into promotional materials.

IMS, Integrated marketing strategies; CRM, customer relationship management; GFIM, general framework of integrative marketing; HHM, Hafen Hamburg Marketing; B2B, Business-to-Business.

TABLE 8: Categorisation of key performance indicators by time horizon.

KPI category	Short-term indicators (Tactical: An operational focus)	Medium-term indicators (Integration: A maturity focus)	Long-term indicators (Strategic: A sustainability focus)
Customer and Operations	• Operational KPIs (e.g. Dwell Times; On-Time Performance), Customer Complaints.	• Annual Customer Satisfaction Scores (CSat); • Net Promoter Score (NPS); • SLA compliance.	• Customer loyalty and retention rate; • Customer Lifetime Value (CLV); • Service Quality Index (e.g. SERVQUAL).
Digital and Financial	• Sales volumes and revenue (vs. budgeted); campaign conversion rates (marketing performance tracking).	• Data-sharing adoption rate (% participation); workforce training completion rates; • Marketing ROI (MROI) analysis (payback period).	• Sustained segment profitability trajectories; brand equity and value.
Sustainability and Governance	• Compliance with mandatory reporting deadlines; utility consumption reduction targets.	• Percentage reduction in GHG and CO_2 emissions (verified performance); • Investment in green infrastructure as % of capital expenditure	• Alignment with global ESG parameters; • Sustainable growth and development.

KPI, key performance indicators; ESG, environmental, social and governance; ROI, return on investment; SLA, service-level agreement; GHG, greenhouse gas.

Conclusion

This research successfully achieved its primary objective by investigating IMSs across two highly differentiated logistics environments, which are the monopolistic SOE context of South Africa and the liberalised and the competitive market in Germany. The study addressed all five RQs, culminating in the development of a contingency-driven IMS framework that provides a definitive roadmap for enhancing port competitiveness. The central theoretical conclusion of this study is that the efficacy and configuration of the GFIM constructs are critically moderated by contingency theory. The research establishes that marketing success in port logistics is conditional upon fitting the strategy to the specific organisational and market structure.

In the South African SOE context, implementation is contingent upon overcoming internal structural inadequacies. Systemic failures, specifically the IBV challenge and the resulting digital lag, actively paralyse collaboration and the execution of advanced Marketing 6.0 elements. Consequently, the study prescribes a service recovery mandate, focusing on achieving and communicating basic operational reliability and service assurance as the primary marketing task.

Conversely, in the liberalised German market, implementation is contingent upon managing external competitive constraints. Because of strict data protection mandates and the need to protect competitive advantage, deep commercial integration is structurally prohibited. The GFIM is successfully adapted here by routing collaboration through neutral external governance (such as the HHM Association) focusing on functional service assurance while maintaining competitive autonomy.

Finally, the study provides two crucial theoretical extensions:

- The formal inclusion of environmental sustainability as a mandatory core pillar to meet global ESG demands.
- The recognition that certain traditional marketing mix (7Ps) elements (specifically Product and/or Service, Place, People and Process) remain foundational CVPs that must be seamlessly fused with modern constructs to achieve true customer-centricity.

The resulting framework and context-specific roadmaps provide actionable guidance for decision-makers, ensuring that integrated marketing is not merely a theoretical ideal but a practical tool for survival in the evolving global logistics economy.

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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

Chuma Myoli: Conceptualisation, Data curation, Formal analysis, Investigation, Methodology, Project administration, Software, Validation, Writing – original draft, Writing – review & editing. Kai U. Wellner: Conceptualisation, Funding Acquisition, Project administration, Supervision, Writing – review & editing. Nomtha Hadi: Conceptualisation, Funding Acquisition, Project administration, Supervision, 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.

Ethical considerations

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Data availability

The primary qualitative data are stored on a password-protected computer and securely archived at the university for 10 years, as per ethical requirements. However, the data may be made available upon reasonable request from the corresponding author, subject to strict confidentiality protocols and approval from the relevant institutional ethics committees.

Disclaimer

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