Logistics and Asset Management

The Path Forward for Saudi Arabia's Logistics and Asset Management

Jul 2025

argaam³ Intelligence

combining expert human analysis with advanced data tools

MACRO

Content

Between the Lines
By Islam Zween

In an era where supply chain intelligence has become the ultimate competitive differentiator, Saudi Arabia's ambitious transformation of its logistics sector represents more than infrastructure development—it exemplifies the emergence of the **Intelligent Logistics System (ILS**), a paradigm-shifting approach that integrates AI-powered platforms, IoT-enabled infrastructure, and unified digital governance to position the Kingdom as a global logistics powerhouse.

The ILS framework represents a fundamental shift from asset-heavy to intelligence-heavy logistics, where predictive capabilities and system integration determine competitive advantage more than physical infrastructure alone.

Yet beneath this technological vision lies a critical execution paradox that decision makers must address to ensure the strategy's success.

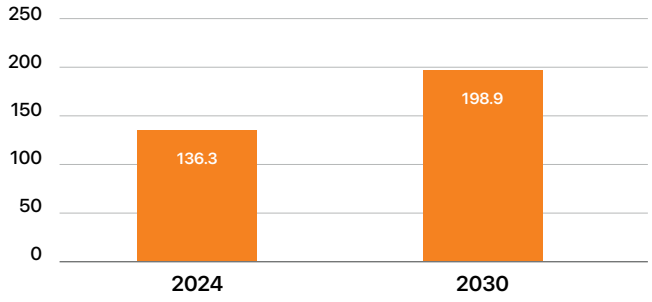
The Intelligent Logistics System concept fundamentally redefines how supply chains operate by combining artificial intelligence, machine learning, and IoT devices to create predictive, self-optimizing networks.

At its core, ILS functions as an omniscient supply chain assistant that predicts demand patterns, automatically manages inventory levels, and dynamically optimizes routes across the Kingdom's expanding logistics network.

This technological integration is anchored by the Fasah platform, Saudi Arabia's unified electronic customs gateway, which has transformed clearance processes from 12 days to 2 hours while connecting government agencies through a unified system that serves importers, exporters, and logistics companies.

The macroeconomic implications are substantial: the Saudi logistics market reached $136.3 billion in 2024 and is projected to grow at a 6.5% CAGR to $198.9 billion by 2030, with the sector's GDP contribution targeted to increase from 6% to 10%.

Saudi Logistics Market - US$ (Billion)



Source: Argaam

The Execution Paradox: Digital Divide in Implementation

Despite technological sophistication at the macro level, recent analysis reveals a concerning implementation gap that threatens the ILS vision.

While digital transformation is accelerating among Saudi SMEs—with 99% now accepting digital payments (up from 88% in 2023) according to Mastercard's 2025 SME Confidence Index and 93% expressing confidence about digital transformation for 2025—significant gaps remain in advanced technology adoption across logistics operations.

Research demonstrates that digital technology adoption significantly enhances SME performance, with the Saudi logistics technology market projected to grow at 7.87% CAGR through 2033. However, this growth potential remains concentrated among larger enterprises, creating a two-speed logistics sector where megaprojects advance rapidly while foundational operators lag behind, undermining the integrated intelligence that defines ILS.

Essentially, this digital acceleration reveals critical implementation gaps that require inclusive adoption strategies encompassing SMEs alongside megaprojects.

The Physical-Digital Integration Challenge

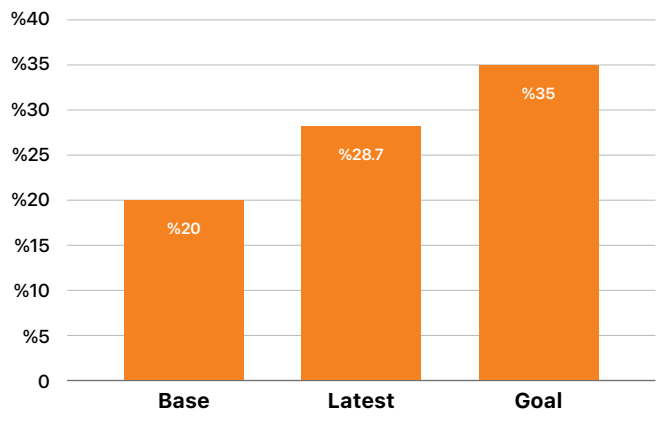
The infrastructure challenges compound this technology gap. While Saudi Arabia boasts impressive connectivity with approximately 200,000 kilometers of paved roads, 9 major ports, and 29 commercial airports, infrastructure development generally lags behind cargo movement, creating critical bottlenecks.

The warehousing capacity shortage exemplifies this coordination failure: despite 820,000 square meters of industrial space under construction in Riyadh, the city faces severe warehouse shortages with occupancy rates reaching 98%, driving lease rates up 10.4% y/y to SAR 210 per square meter.

Incorporating data on digital transformation gaps would reveal that successful ILS implementation requires synchronized advancement across all operational levels, not just flagship projects.

The ILS success depends on bridging the gap between technological capability and grassroots adoption, requiring inclusive digitalization strategies that encompass SMEs alongside megaprojects.

Small and medium size enterprises (SME) share of GDP in Saudi Arabia as of 2023



Source: PwC/Argaam

The Saudi Landbridge project exemplifies both the promise and peril of ILS implementation. Designed to connect Jeddah and Riyadh via 950 kilometers of new railway, the project aims to reduce freight transit times dramatically. However, successful integration requires more than connectivity—it demands synchronized development of complementary infrastructure including smart warehousing, automated terminals, and integrated customs facilities, rather than sequential deployment.

The 59 planned logistics centers covering over 100 million square meters represent massive potential, but only 21 are currently under construction. Incorporating infrastructure synchronization metrics would demonstrate that ILS effectiveness depends on coordinated rather than sequential development of supporting facilities.

The ILS success requires orchestrated infrastructure development where physical assets are deployed as integrated networks rather than standalone facilities, enabling system-wide optimization.

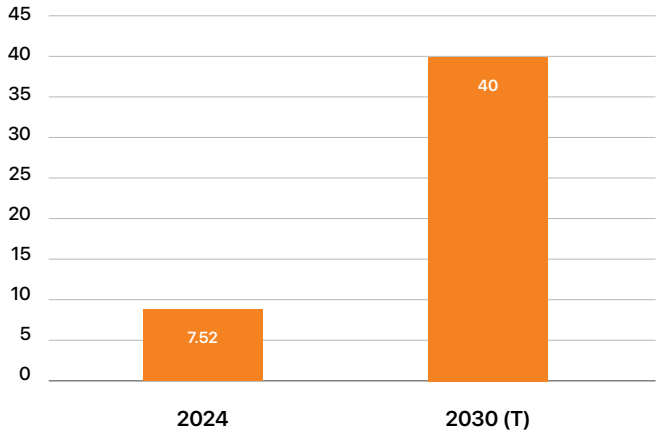
Category	2023	2024	2030 Target	Growth from 2023-2030
Logistics Centers	22	22	59	%168
Total Area (Million sqm)	34	34	+100	%194
Under Construction	21	21	-	-
Investment (USD Billion)	53.2	53.2	267	%402
Warehouse Stock Riyadh (Million sqm)	28	-	-	-
Occupancy Rate (%)	97	98	-	-

Saudi Arabia's container handling demonstrates both operational success and strategic challenges. Container throughput reached 7.52 million TEU in 2024, with exports rising 8.86% to 2.8 million TEU and imports growing 13.79% y/y to 2.98 million TEU. The Kingdom climbed to 15th globally in container handling rankings, with three Saudi ports securing positions in the global top 100.

However, achieving the ambitious target of 40 million TEU by 2030 requires unprecedented coordination between digital systems and physical infrastructure—precisely the integration challenge that defines ILS implementation success.

Container throughput growth demonstrates operational capability, but achieving 2030 targets requires seamless integration of digital and physical systems across the entire logistics network.

Container Throughput - Million TEU



argaam

Total container throughput:

7.52 million TEU in 2024

down **10.93%** from 2023

expected to surge to **40** million TEU by 2030

This represents growth trajectory **5.3x**

requiring unprecedented coordination and seamless integration between digital systems and physical infrastructure across the entire logistics network.

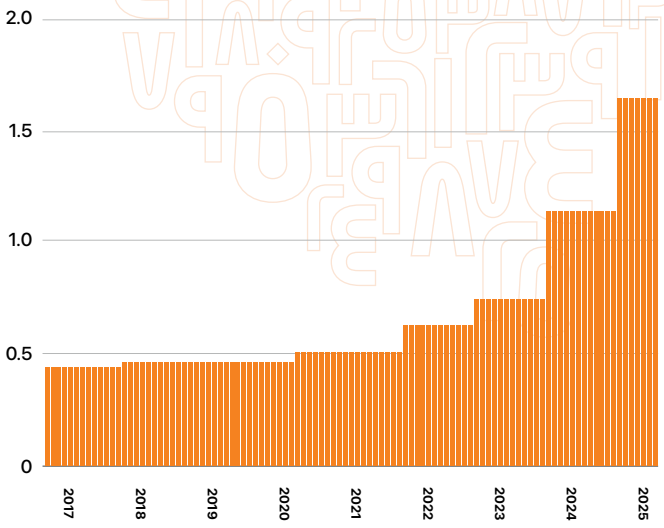
The Hidden Friction in Smart Systems

The customs complexity paradox illustrates the gap between technological potential and operational reality. While the Fasah example represents a digital breakthrough enabling electronic submissions and real-time tracking, foreign businesses still navigate complicated regulatory requirements that can cause clearance delays despite the platform's capabilities.

Recent regulatory changes have inadvertently intensified operational pressures: the 2023 mandate prohibiting trucks over 20 years old has created acute vehicle shortages, doubling container rates from SAR 4,000-6,000 to SAR 8,000-9,000.

The January 2025 diesel price increase of 44% to SAR 1.66 per liter further escalates transportation costs, forcing freight companies to pass increased expenses to clients and disrupting the cost optimization that ILS systems are designed to achieve. These regulatory-induced frictions demonstrate how policy implementation can undermine technological sophistication.

Saudi Diesel Price (SAR / Liter)



Source: saudi Aramco

argaam MACRO

A comparative analysis of regulatory efficiency would show that successful ILS deployment requires harmonized policy frameworks that complement rather than complicate digital platforms. The Kingdom's target of ranking among the top 10 countries in the Logistics Performance Index by 2030 necessitates addressing these regulatory bottlenecks.

From Vision to Integrated Execution

The fundamental challenge facing Saudi Arabia's logistics transformation is coordination—between technological advancement and workforce development, between megaproject execution and SME integration, between regulatory modernization and operational efficiency.

The Kingdom has allocated over $267 billion for logistics sector development, with $53.2 billion already deployed across multiple projects (The expansion from 22 to 59 logistics zones by 2030, including 18 zones near ports representing over $2.66 billion in investment, demonstrates the scale of commitment to infrastructure development), but success ultimately depends on synchronized execution across all system components.

The e-commerce logistics market segment demonstrates market demand for integrated intelligent systems, growing from $2.02 billion in 2024 to a projected $3.32 billion in 2025, exhibiting a robust 10.94% CAGR. This growth trajectory, supported by 99% internet penetration and government digital transformation initiatives, creates immediate demand for ILS capabilities

However, realizing this potential requires addressing the execution gaps that currently limit ILS effectiveness: inclusive digitalization, regulatory harmonization, and infrastructure synchronization across the expanding logistics network.

Realizing the ILS Vision

To fully implement the Intelligent Logistics System and achieve the ambitious 2030 targets, Saudi Arabia must address three critical execution priorities:

Accelerate Inclusive Digitalization:
Deploy comprehensive technology adoption programs targeting SMEs, with subsidized access to ILS platforms and mandatory integration requirements for major supply chain participants.

Harmonize Regulatory Frameworks:
Streamline customs procedures, vehicle regulations, and fuel pricing policies to complement rather than complicate digital optimization systems.

Orchestrate Infrastructure Development:
Ensure coordinated deployment of the 59 logistics centers as integrated network nodes rather than standalone facilities, enabling system-wide intelligence and optimization.

The Intelligent Logistics System represents more than technological innovation—it embodies a fundamental reimagining of how supply chains create value through integrated intelligence rather than physical assets alone.

The Kingdom stands at a critical juncture where technological capability meets execution reality. The ILS framework provides the conceptual foundation for transformation, but realizing its potential requires addressing the coordination challenges that currently limit system-wide intelligence. Success demands treating intelligence as infrastructure—as fundamental to logistics competitiveness as roads, ports, and warehouses.

In an increasingly complex global trade environment, the countries that succeed will be those that can seamlessly integrate physical assets with digital intelligence, creating adaptive, predictive supply chains that respond to disruption with automated precision. Saudi Arabia's Intelligent Logistics System represents this future—if executed with the same ambition that conceived it, leveraging the Kingdom's strategic positioning at the crossroads of three continents.

argaam MACRO

This report is produced by argaam³ Intelligence ,
combining expert human analysis with advanced data tools. All insights reflect the editorial judgment of the team, supported — but not replaced — by AI technologies.