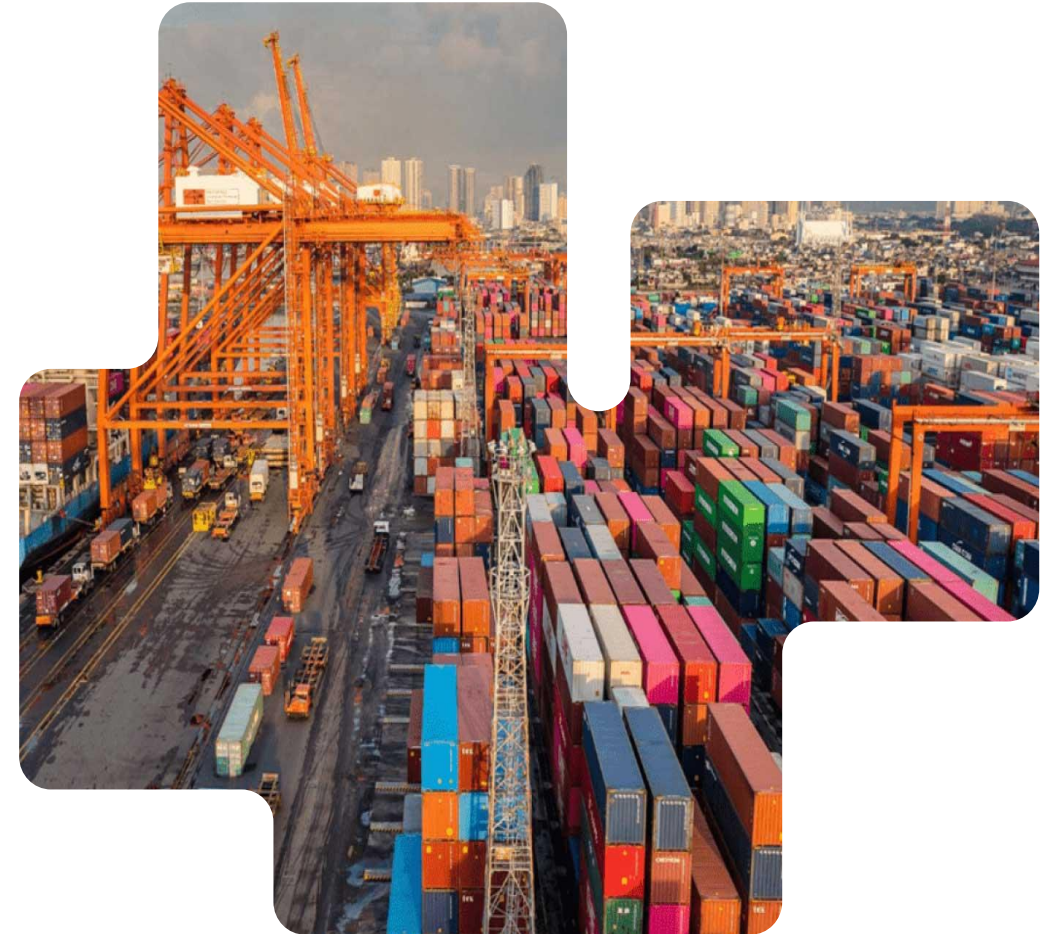


**Solvo.TOS & Digital
Transformation :**
**Enhancing port & railway
operations through innovative
technology solutions**

Giovanni Migliaccio,
Vice President Sales & Marketing



About Solvo

30+

**years
experience**



24/7/365 support



5 offices worldwide



400+ projects



SOLVO is successfully certified on ISO 9001:2000 certification, compliant with ISO 27001, SOLVO.TOS and SOLVO.WMS systems are included in the widely acclaimed international Fraunhofer IML and CML directories, undergoing regular re-validation process.

Business core areas



Solutions for ports and terminals

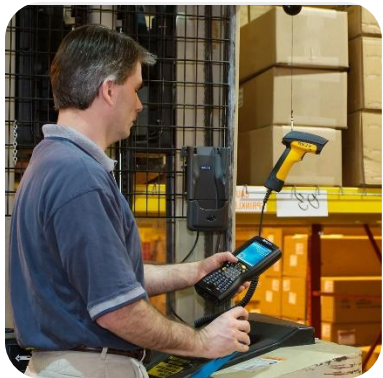
A leading Terminal Operating System for ports and terminals. An ultimate set of solutions for managing just any type of cargo: container, break bulk, Ro-Ro, general cargo, etc., including extra solutions as the VBS, AGMS, VGM.



Solutions for managing yard

YMS helps to manage all the operations at the yards, including allocation and storage of different types of cargo, housekeeping, reefer and empty containers management, CFS management etc. Providing procurement of gate-entry/cargo pick-up permits for truck-drivers, trucks and cargo forwarders/transport companies.

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Solutions for warehouse logistics

One of the leading software providers of SCE software. Solutions range from WMS to WCS, Yard, Billing, KPI and more for all verticals: production, retail and distribution, 3PL and pharmaceuticals.



Consultancy in logistics and system integration

Logistics and Management consultants, including specializations for Project Management, Optimization, Engineering, Design and Procurement.

As well as training, seminars, webinars and other educational events.

Solvo.TOS overview

Solvo.TOS



Gate management



Yard management



Truck operations management



Screening zone management



CFS (stuffing/restuffing)



Vessel planning



Repair zone management



OCR-systems (Gate, crane, rail)



Empty container depot management



Berth planning



Rail operations management



Remote control of automatic equipment



Customs systems



Data capture terminals



CHE management



EDI



KPI



Web



Automatic reefer monitoring



Global positioning systems (DGPS, RTK, GNSS, RTLS)



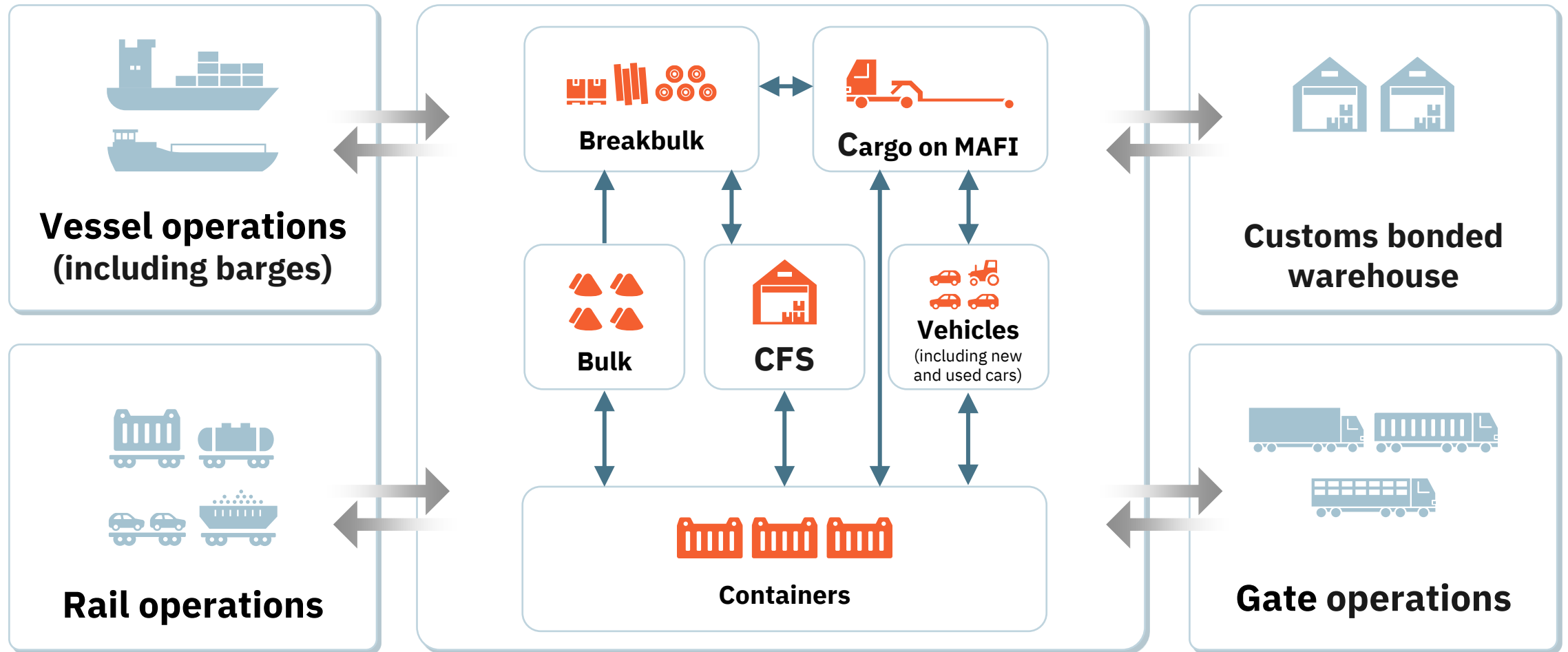
External ERP systems



Crane systems STS, RTG/RMG, RTLS/DGPS

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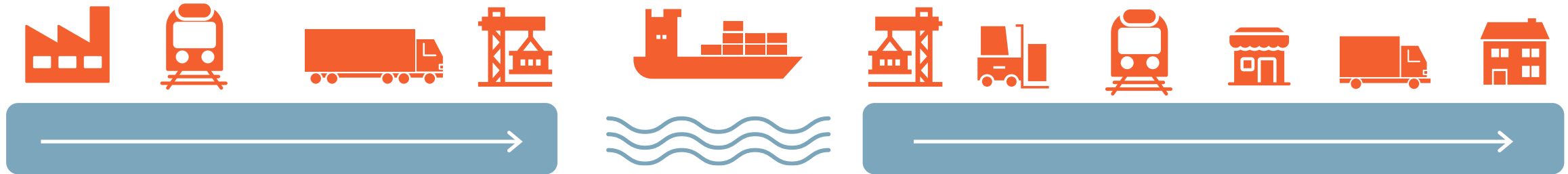
Supporting Complex Technological Chains Through Integrated Road, Rail and Sea Logistics



<5>

Modern Ports Shifting to Extended Supply Chains Through Improved Rail Logistics

INTERNATIONAL TRADE SUMMARY



- Moving to Global Supply Chain
- Strengthening Inland Connectivity Through Integrated Rail Corridors
- Global Information Environment Connecting All the Elements of the Supply Chain
- End to End visibility – to final customer

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Modern TOS as a full Supply Chain solution and an integration platform

Driving Competitiveness Through Workflow Digitalization and System Integration



Manual Workflow Challenges

Manual processes cause fragmented documentation, delays, and increased human error in logistics operations.



Impact on Supply Chain

Inefficiencies affect visibility, cost control, and service reliability across the supply chain.



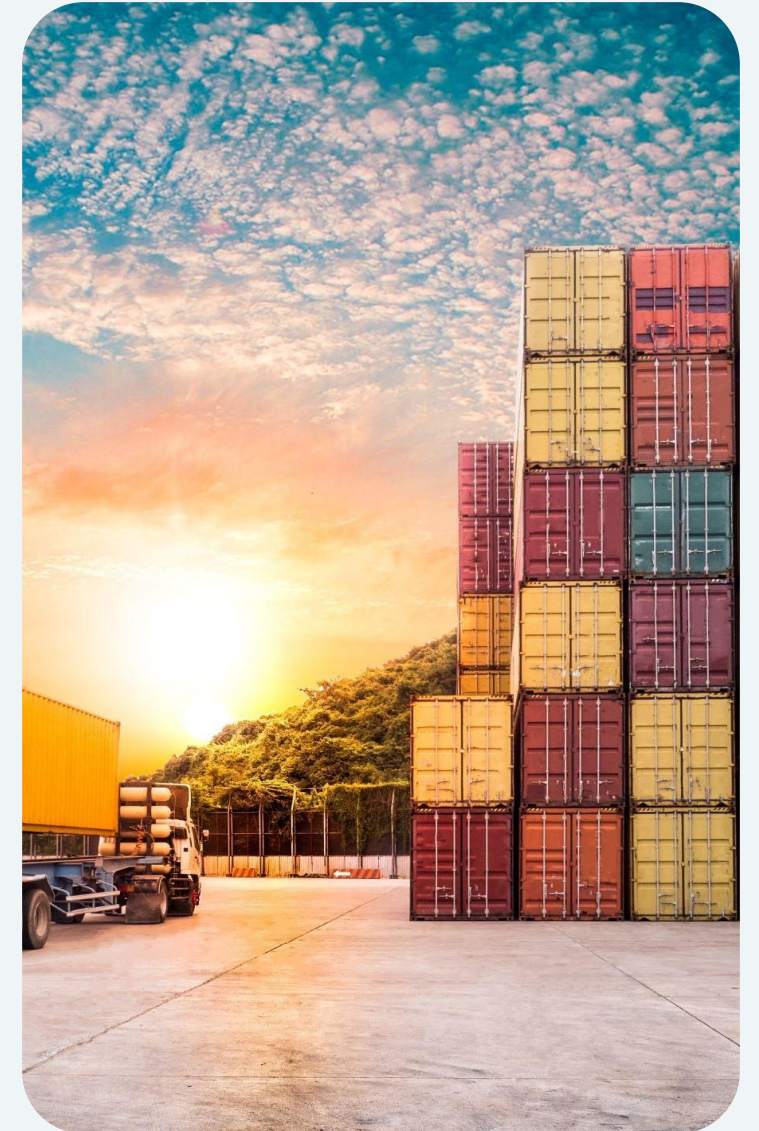
Need for Digital Adoption

Adopting real-time data analytics and automation is crucial to stay competitive globally.



Advanced Systems Integration

Integrating advanced systems like Solvo.TOS overcomes legacy constraints and boosts regional leadership potential.

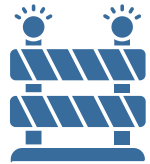


Building a Smarter Terminals: Workforce Upskilling and Modular Digital Integration



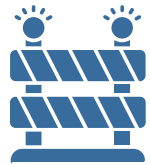
Paper-Based Documentation

Many operators rely on paper documents that complicate customs and slow cargo processing.



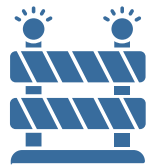
Workforce Digital Skills Gap

Limited digital skills among staff hinder the transition to fully automated systems.



Infrastructure Constraints

Outdated equipment and poor system interoperability impede seamless digital integration.



Modular Solutions for Modernization

Scalable, modular systems with intuitive interfaces support bridging technological gaps.



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Market Growth Trends



Smart Port Market Growth

The smart port market is projected to grow significantly, driven by digitalization and rising cargo volumes.



Advanced Technology Integration

Smart ports use AI forecasting, IoT monitoring, and blockchain to improve operations and transparency.



Global Trade and Competitiveness

Smart ports enhance efficiency and competitiveness, supporting national and international trade expansion.

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Technological Enablers of Smart Ports



Core Smart Port Technologies

Automation, predictive analytics, robotics, blockchain, and digital navigation drive smart port transformation.

Benefits of Digital Integration

Integration enhances safety, lowers costs, and optimizes resource use in port operations.

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Variations in Digital Maturity

Digital maturity varies due to regulations, capital, and organizational factors across ports.

Solvo.TOS Integration Advantage

Solvo.TOS enables ports to adopt best practices and accelerate their digital transformation journey.

Drivers of Digital Transformation



Automation and AI in Ports

Automation and AI improve operational accuracy and reduce turnaround times in maritime logistics.



Emerging Digital Technologies

IoT sensors and blockchain enhance real-time monitoring and secure cargo tracking at smart ports.



Government Investment and Economic Modernization

Government funding supports digital infrastructure to modernize port operations and economy.



Adoption of Advanced Digital Platforms

Platforms like Solvo.TOS align with international standards for resilient port operations.



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How Solvo.TOS Supports Operational Automation



Automated Yard Planning

Solvo.TOS automates yard planning to optimize any cargo placement and improve operational efficiency.



Optimized Cargo Handling

The system streamlines cargo handling processes, reducing lead times and enhancing accuracy.



Real-Time Cargo Visibility

Solvo.TOS provides real-time tracking of cargo movements for proactive exception management.



Configurable Workflows and Alerts

Configurable workflows and automated alerts help maintain consistent service levels and improve reliability.

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Enhancing Documentation, Tracking & Systems Integration



Digital Documentation Flows

Solvo.TOS streamlines logistics by providing end-to-end digital documentation reducing inefficiencies and bottlenecks.



Real-time Cargo Tracking

The platform's real-time cargo tracking enhances supply chain transparency and minimizes delays caused by limited visibility.



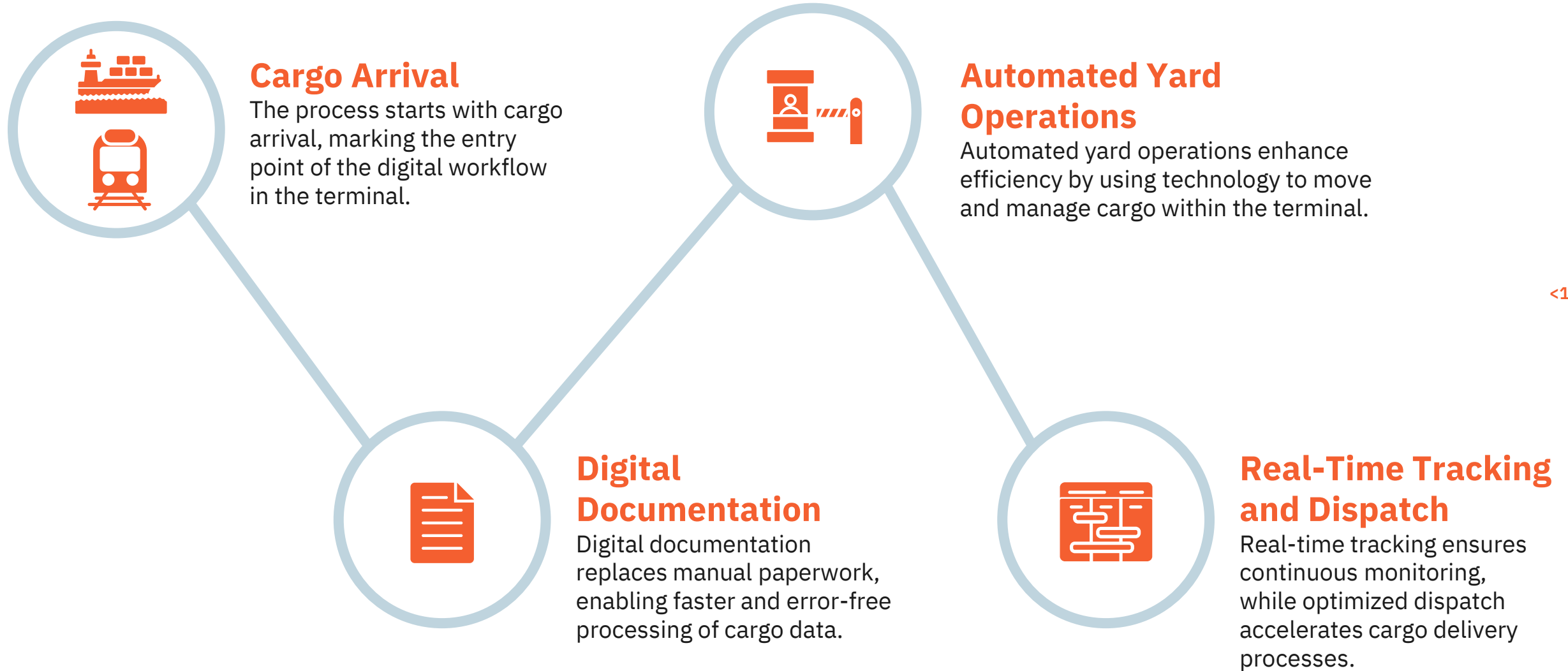
Systems Integration & Interoperability

Solvo.TOS integrates with government and private sector systems to support smart port technologies and national digital strategies.



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Digital Process Flowchart



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The solution is here!

Giovanni Migliaccio,
Vice President
Sales & Marketing