accenture

High performance. Delivered.

CONNECTED PORTS

OVERVIEW

1. Industry trends
2. Ports in Transition
3. The Connected Port

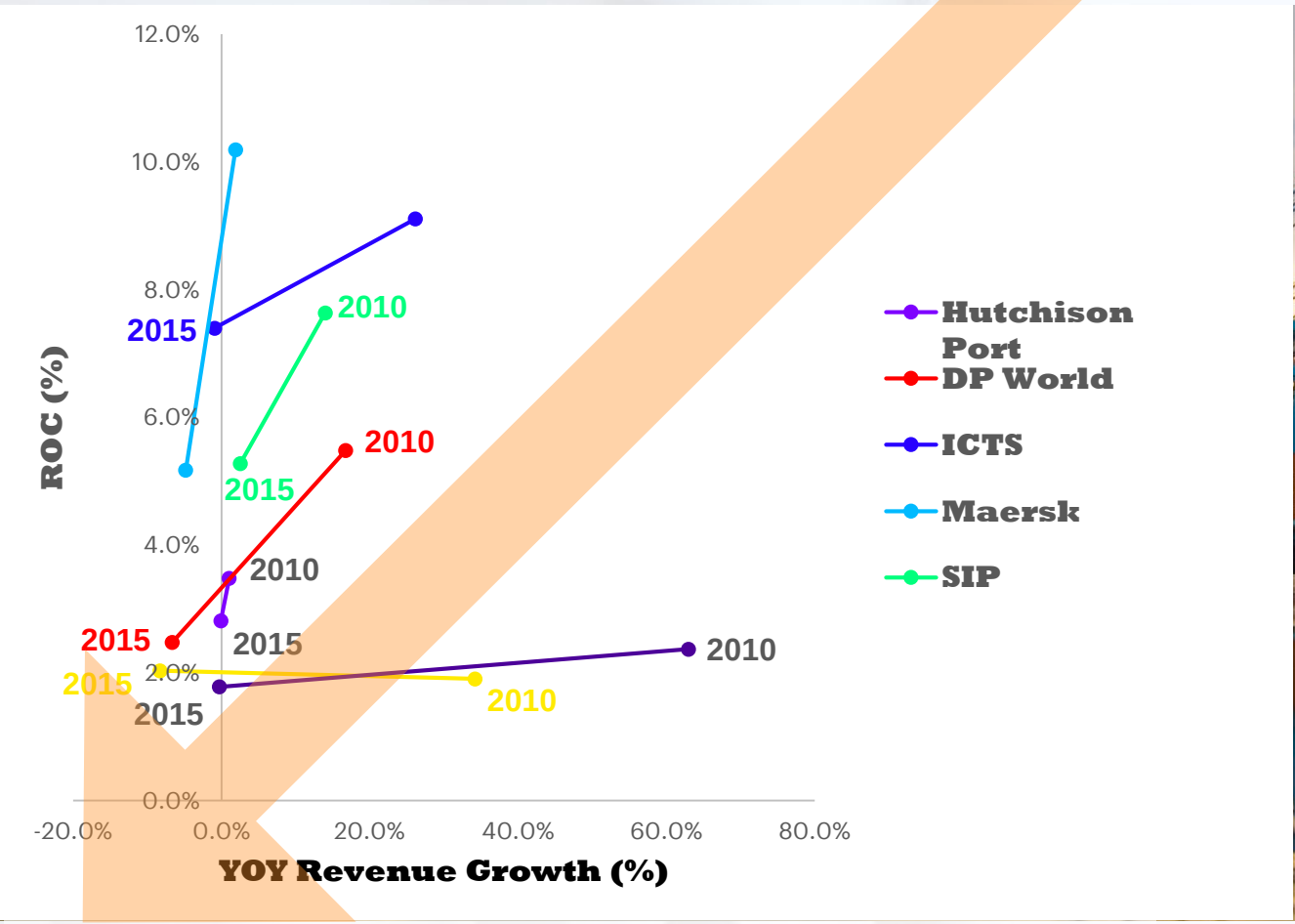
1

INDUSTRY TRENDS

The business environment for port operators is getting more challenging, increasing the urgency for change

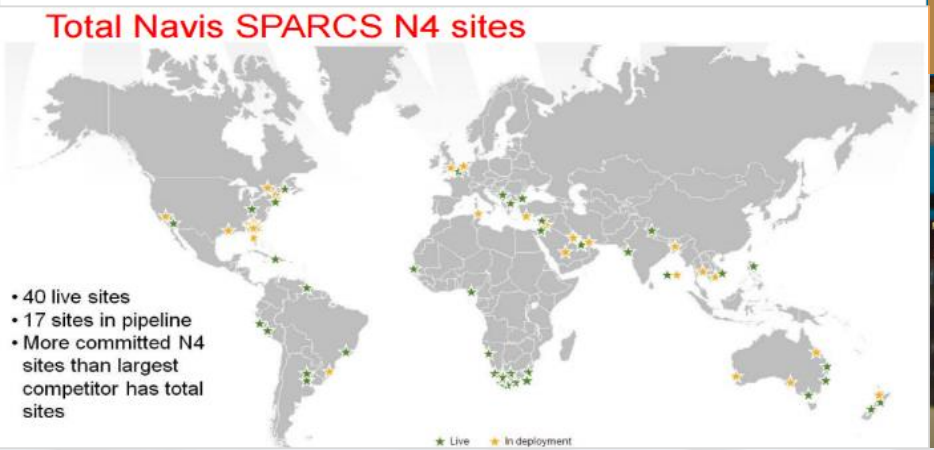
accenture
High performance. Delivered.

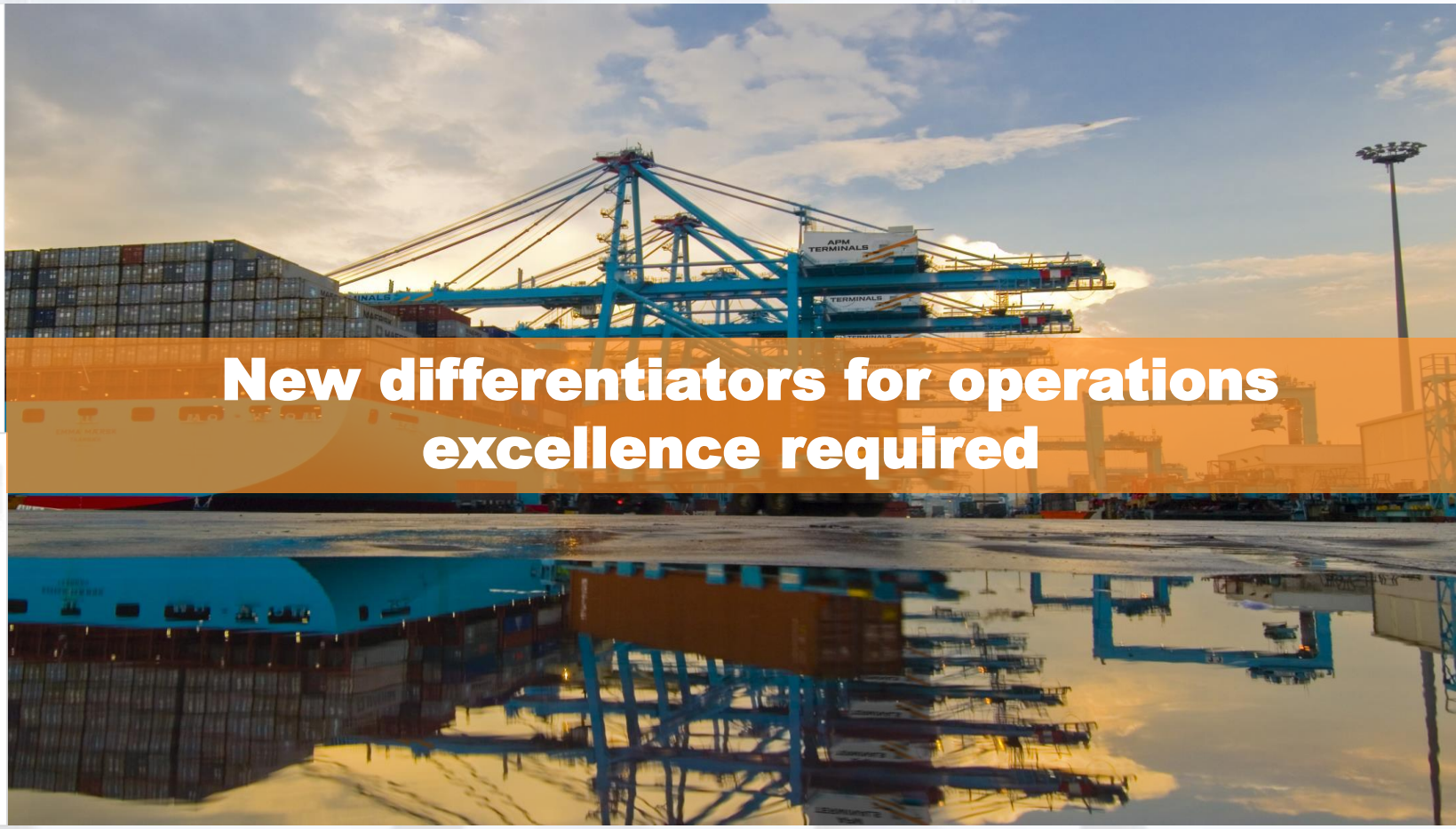
Overall industry profitability is declining – in-depth transformation is needed



accenture
High performance. Delivered.

Automation and software will accelerate commoditization of operating terminal expertise





accenture
High performance. Delivered.

2

PORTS IN TRANSITION

Transformation is needed for port operators, both operating model and business model

Transition to new business model

Optimize the Core Port Business

Port Operators Need to Explore New Business Models and Move Up the Value Chain

accenture
High performance. Delivered.

Port operators should strategically re-position to become "Trade Facilitators"

Grow the NEW

Open, Public Platform for the **ecosystem** participating in **world-trade**

Financing offerings

Service Extension for **carriers** and port users from **hinterland** for collaborative supply chain solution

Optimize the CORE

From

- Ports as isolated island
- Box Lifting services
- Productivity as the single metric

To

- **Port Network** to align with carriers' network operations
- Act as **Gateway** or **Hub** for **Connectivity** services
- **Optimizing** Productivity and Asset Utilization (Cost-to-serve)

accenture
High performance. Delivered.

3

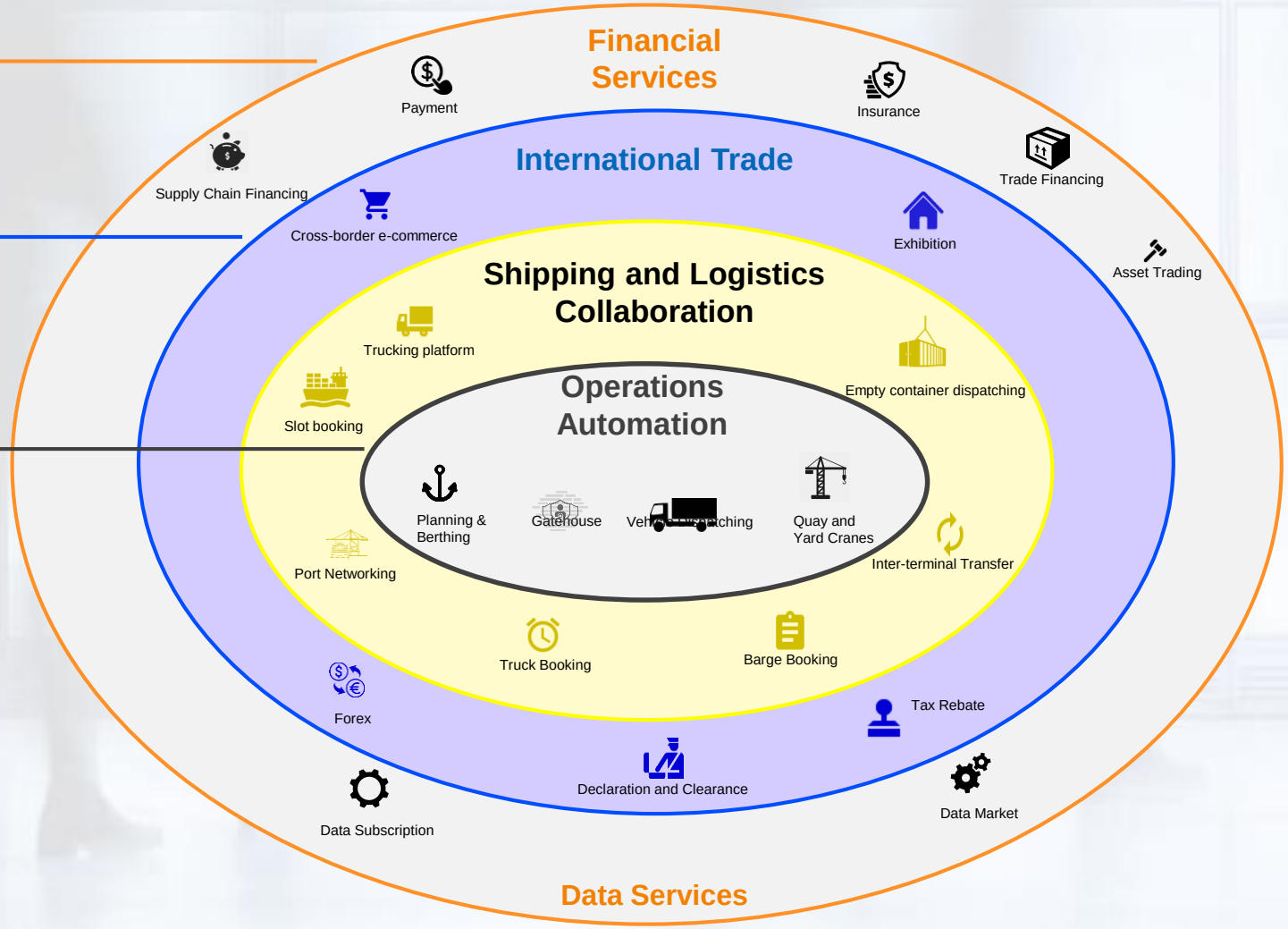
THE CONNECTED PORT

A “Connected Port” is defined as one where the ecosystem is extended, terminal operations are excelled, and new opportunities are explored

Explore
For the New

Extend
For Ecosystem Facilitation

Excel
For Terminal Operations



accenture
High performance. Delivered.

How Organizations can benefit from IoT

Prevent disruptive events and act informed

Gain control of assets

ACHIEVE
Operational efficiency

Predict ROI for IoT initiatives

TRANSFORM
Business models

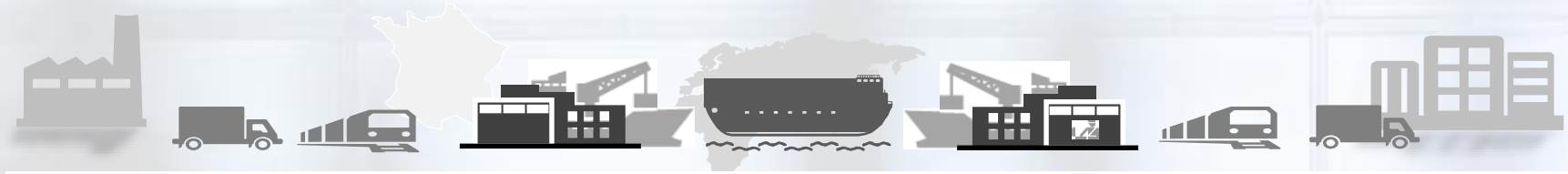
Discover new revenue streams

MOVE
From product to service focus

Personalize customer experience on products and services

Build ecosystem and service marketplace

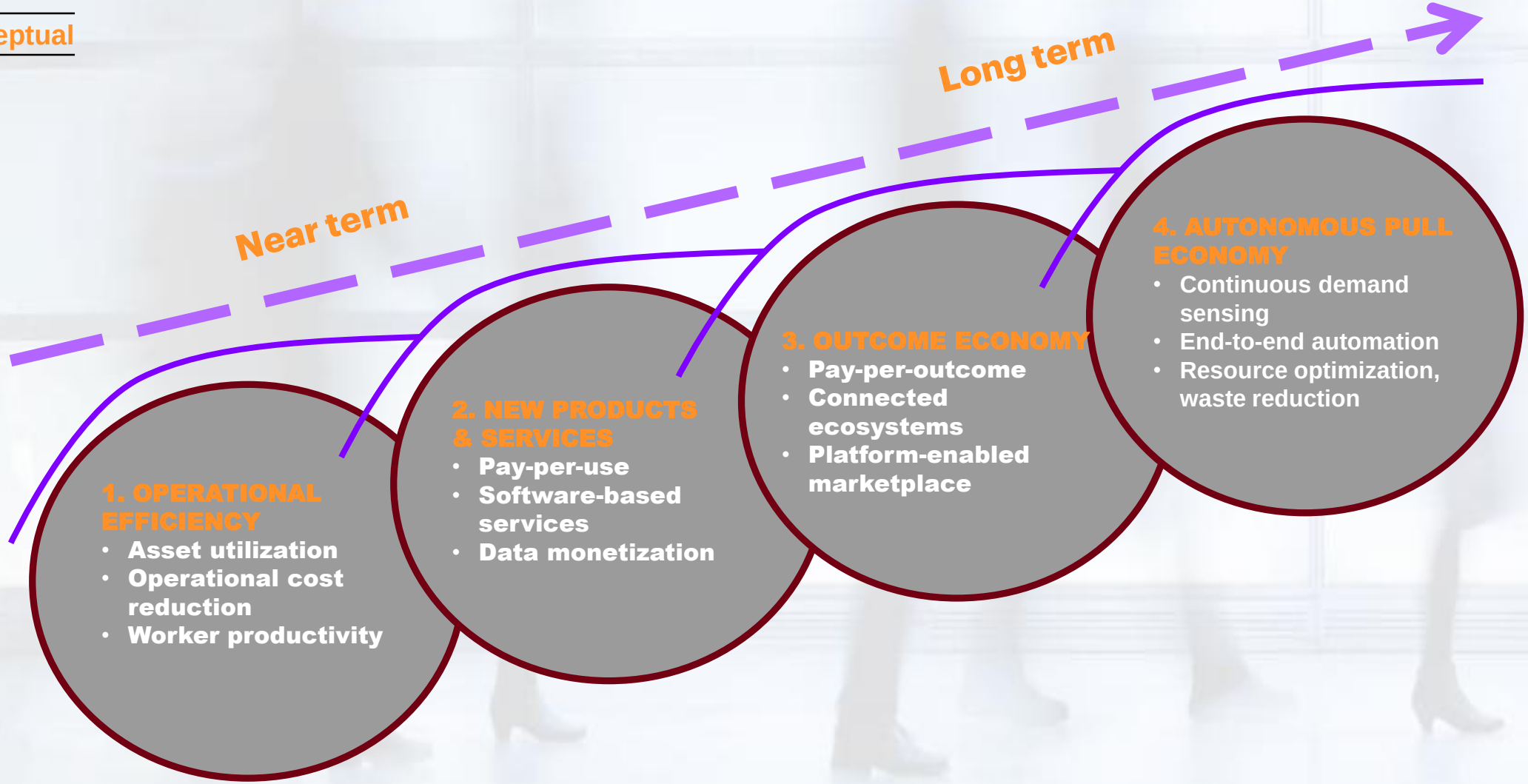
With ports having such a pivotal role in the trade value chain, “connected ports” is a logical expansion of port offerings to other nodes



	Shipper Factory	Transport from Factory	Terminal Loading	Ocean Transport	Destination Port Processing	Inland Distribution	Consignee Delivery
Excel in “Core”	**Remote Equipment Contr.** Decoupling of control and equipment, from the “remote control tower”		**Collision Prevention** Provides automatic monitoring of container stacks for collision prevention			**Connected Worker** Mobile, safety, tracking analytics and technology to increase worker efficiency	
Extend in the Ecosystem	**Connected Trucks** Monitor in real-time & analyze to support better vehicle, driver, operations & regulations mgmt.		**Cargo (e.g. DG) Tracking** Intelligent track-and-trace, compliance monitoring and process analytics			**Port-Liner Alliance Colla.** Joint planning process on routing, stowage, and settlement across alliance	
Explore the “New”	**Financing services** With accurate declaration and historical data, offering convenient supply chain financing		**Data services** End to end monitoring, analytics, automation and integration			**Blockchain** Secure transaction ledger database, elimination of handling, smart contracts	

The Adoption and Impact Path of IoT

Conceptual



SIPG AND ACCENTURE JOINTLY COMMISSIONED THE RESEARCH FOR THE NEXT GENERATION "CONNECTED PORTS"

CASE STUDY: SHANGHAI INTERNATIONAL PORT GROUP (SIPG)

Background:

Shanghai International Port Group (SIPG) is the operator of the World's largest port in TEU throughput.

The Challenges:

With Worldwide economy slowing down and cargo growth stagnates, competitions becomes more intense. SIPG would like to understand how ports should evolve themselves into the "next generation port"

Scope of Collaboration:

Accenture, as the long-term partner of SIPG, jointly commissioned a research into the "digital journey" of ports. We believe ports should evolve from a mere "port operator" into a facilitator in the trade corridors.

Ports should develop excellence in the core operations, but it serves only as the foundation as they should also logically expand their foothold to connect all parties in the ecosystem, and eventually exploring opportunities derived from the enormous (and accurate) data that is derived from the trade.

We also believe that port leadership should lead their enterprises to reposition, while innovate, and be future-driven.

accenture
High performance. Delivered.

WE JOINTLY DEVELOPED THE DIGITAL STRATEGY FOR THE NEXT-GENERATION PORT AND CONGLOMERATE FOR CHINA MERCHANTS GROUP

CASE STUDY: CHINA MERCHANTS GROUP

Background:

China Merchants Group (CMG) is a conglomerate focusing on three core sectors: transport (port, highway, etc.), finance and property.

The Challenges:

With the recent adoption of digital technology like mobility, IoT and emerging ecosystems, CMG would like to stay competitive — and to transform its business into a "next-generation" conglomerate.

Scope of Collaboration:

Accenture helped CMG summarize key digital trends and identify market leaders locally and internationally.

They looked at how these digital leaders disrupted their industry — or multiple industries — and applied similar concepts to CMG's business.

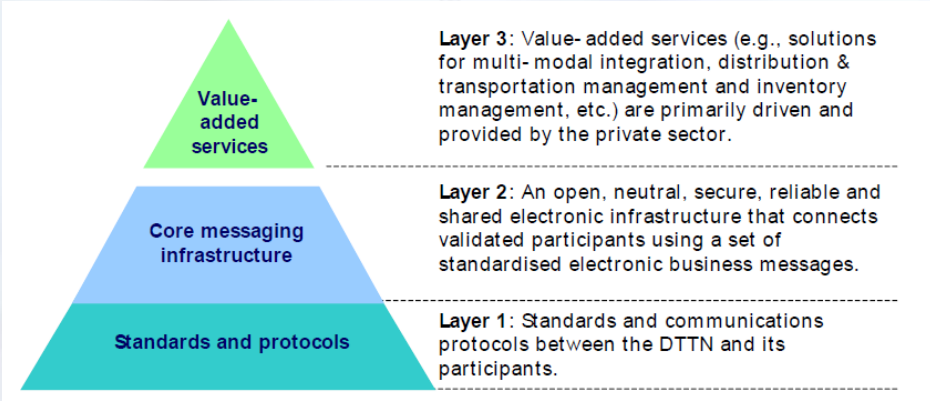
Together, they developed key areas of improvement for CMG across and within subsidiaries, including new business models, cross-sector platform economies and ecosystems. Looking at CMG's core competencies, vision and contextual factors, the team then created CMG's digitalization strategy, focusing on technology infrastructure, building six cross-sector platforms, and corporate capabilities such as ecosystem incubation and data operations.

WE DEFINED THE FUNCTIONAL AND TECHNICAL FRAMEWORK OF THE PORT AND LOGISTICS COMMUNITY SYSTEM FOR HONG KONG PORT

CASE STUDY: HONG KONG GOVERNMENT DIGITAL TRADE AND TRANSPORTATION NETWORK (DTTN)

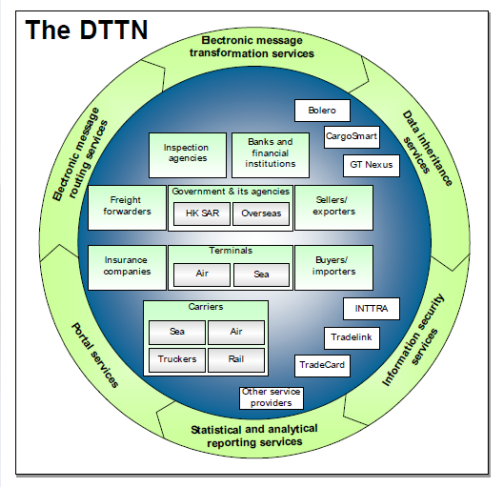
Background:

Hong Kong Government (HKSARG) would like to strengthen Hong Kong's role as the preferred transportation and logistics hub.



The Challenges:

To achieve this goal, HKSARG commissioned accenture for the study for developing DTTN, specifically functional and technical blueprint, standards and protocols, business case and ownership, management and governance structures.



Scope of Collaboration:

Accenture helped HKSARG to define and summarize the key components of the DTTN, including its guiding principles, 3-layer model, scope and roles, architecture, business case and implementation roadmap of the DTTN.

The DTTN is one of the first and foremost single-window trade ecosystem platform suggested to promote trade. The roles of the DTTN as a neutral e-platform to facilitate information flow and service integration, stable and reliable environment and a state of the art technology platform for the exploration, development and delivery of innovative value-added services, and catalyst to promote electronic business adoption, especially by SMEs was followed worldwide as the key goals and principles of any port ecosystem platform.

CONTACT

Diegane Dione (DiDi)

Connected Logistics Offering Lead for North America

diegane.dione@accenture.com

accenture

High performance. Delivered.


APM TERMINALS
APM TERMINALS
APM TERMINALS
APM TERMINALS
MAERSK

Q & A