Port Of The Future

Nelson Quek, Head of Tuas Development
PSA Singapore
PSA’s Transformation Journey
From Statutory Board to Global Brand

Port of Singapore Authority
Terminal Operator + Government Statutory Board

1964
1972 Arrival of first container vessel
1997

PSA Corporation Limited
Commercial entity

1997 14 mTEU

PSA International Pte Ltd
Premier port developer & operator

2003 29m TEU
2019 85m TEUs

Maritime and Port Authority of Singapore
Port regulatory functions

1964
1972
1997

PSA
The World’s Port of Call

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PSA’s Transformation Journey
From Statutory Board to Global Brand
Key Emerging Trends in Global Shipping
Accelerated by Geo-Politics and COVID

• **Slowdown in Container Growth**
  - More Pronounced Long-Term Deceleration.
  - Shifts in transhipment models (eg Hub+Spoke vs Cross-Strings).

• **Technology Enables & Disrupts**
  - Structural Changes to how People Work, Play & Consume.
  - Innovation to meet demand for increased Reliability & Transparency.

• **Cross Integration will Occur**
  - Reducing Value Chain Risks.
  - Tighter integration between Production, Warehousing & Stockpiling.

Cargo will Change
In both Content & Flows

US-China Tensions + COVID
Examples of Trade Shifts
Threats, but also Opportunities

Globalization
Single-Source Dependency
Just-in-Time

Regionalization
Multi-Level Sourcing
Just-in-Case

Switch from N Europe to S Europe on proximity to production centres & nearshoring

Switch from USWC to USEC underpinned by trading opportunity in India & Southeast Asia, big ships, nearshoring

China could lose its central position in global supply networks to Brazil, Mexico and emerging markets in Southeast Asia

% Share of US Imports ($)

% Share of China Exports ($)

Source: ITC
Towards Tuas

The Future of Singapore Hub

Tuas Terminal (From 2021)

Pasir Panjang Terminals (Up to 2040)

City Terminals (Up to 2027)

4 Phases
2021 - 2040

1337
ha of land

65
MTEU Capacity

65
MTEU Capacity
Incremental Innovation…
Compounded over decades!

2020

1994

Automated Charge Point
Tuas: Supply Chain Ecosystem

Co-locating synergistic industries near to Tuas port

- RDC
- Cold chain
- Energy & chemicals
- Advanced manufacturing

Connecting to other business zones

- Extending SG hinterland
- Intermodal logistics corridor
- SG inter-district logistics network

Collaborating on Cargo Solutions via CALISTA

- Digital platform
- Trade documentation
- Integrated processes
- Analytics
PSA SG’s Workforce Transformation
Build Future-ready Human Capital

Key Thrusts

1. Organisation
   
   Fostering closer Engineering-Infocomm Technology-Operations (“EIO”) integration in business units to drive innovation and automation

   **Examples:**
   - Agile transformation in ICT
   - Closer integration in Tuas Terminal organisation design

2. Jobs and Career Redesign

   Dual-skilling, rotation across functions, reskilling and upskilling staff to take on higher value jobs

   **Examples:**
   - Executives on Dual Track Schemes
   - Frontline staff upskilled to take on supervisory roles

3. Building Future Competencies

   Equipping our workforce with future ready competencies

   **Examples:**
   - Systems Engineering training with SIT
   - Automation Familiarisation
   - Robotic Process Automation (RPA)
   - Capability Transfer Programme with technology partners
Thank You