

Sail to the Future

Beyond Efficient & Automation

Small steps make
a big leap

TOTAL SOFT BANK

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Since 1988, **Total Soft Bank Ltd. (TSB)**, has devoted to developing the ideal solutions for port and maritime industry, focusing on solutions for shipping, terminal, port community and simulator.

- **Office**
 - Head Office in Busan, Korea
 - Global Networks throughout world
 - *Regional Offices in Spain, Greece, Egypt, Hong Kong, Vietnam*
 - *Joint Venture in Japan, Sales Agent in Taiwan and Colombia*
- **Human Resources**
 - HQ: Over 150+ employees (Vietnam: 50, Greece: 10+)
 - 70% of employees in Development, R&D and Professional services
- **Qualification**
 - ISO 9001 certified and INNOBIZ certified
 - KOSDAQ listed in 2002
KOSDAQ: Korean Securities Dealers Automated Quotations
 - Green technology certificate
 - Software process quality assurance certificate Lv.2
- **Customer**
 - **Over 135+ marine terminals**
 - **Over 58.6% world's container fleets**



Overview of TSB – Latest Update & Pre-Release



2020

- Next Generation of Logistics Digitization Solution Platform
- Digitization Collaborative Service Platform
- Optimization Services Platform



- A AI Machine Learning**
- B Big Data**
- C Cloud Computing**
- D Digitalization**
- E Edge Computing**

Small steps make a big leap



Overview of TSB – Latest Update & Pre-Release



01

02

03

04

05

06

07

08

2020

- Next Generation of Logistics Digitization Solution Platform
- Digitization Collaborative Service Platform
- Optimization Services Platform
- **Autonomous Truck Operation & FMS Solution**



Overview of TSB – Latest Update & Pre-Release



01

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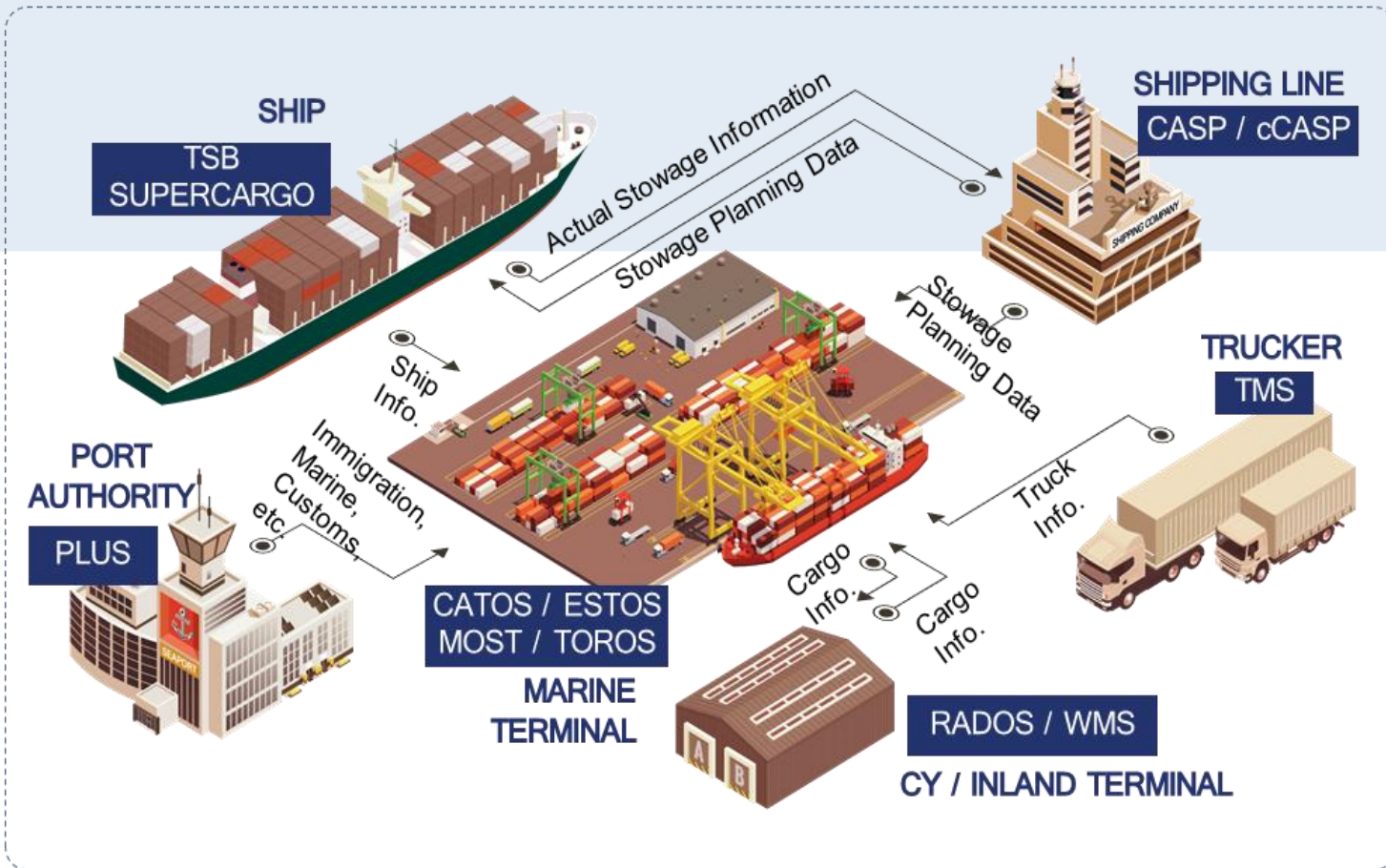
08

2020

- Next Generation of Logistics Digitization Solution Platform
- Digitization Collaborative Service Platform
- Optimization Services Platform
- **Autonomous Truck Operation & FMS Solution**



Smart Port & Terminal Development



Terminal Operating Solution

- Container Terminal (CATOS, ESTOS)
- Inland Terminal (RADOS)
- Multi-purpose Terminal (MOST)
- Car Terminal (TOROS)
- Simulator/Emulator (simTOS)

Automated Solution

- Auto-dispatch of yard truck (CHESS)
- Unmanned equipment control system (ATCSS)
- Truck Booking System (TBS)

Shipping Solution

- Ship Stability (TSB Supercargo)
- Stowage Planning (CASP)
- Fleet Management (Cloud CASP)

Training Solution

- Simulation (VRARXR)

Port Community Solution

- Port Information Management (PLUS)

Logistics Management Solution

- Transportation Management System (TMS)
- Warehouse Management System (WMS)



TSB Operating Environment Solution

**Port Authority
Port Community System
(PCS – PLUS 2.0)**



**Optimization & Alert
Automation
Global Monitoring**

**Terminal Operating
System
(CATOS 8.1)**



**Optimization
Automation
AI Dashboard**

**Multi-Purpose
System
(MOST 4.0)**



**Optimization
Automation
IoT Integration**

**CFS / Warehouse /
M&R Solution
(TSB-CFS)**



**Optimization
Automation
BI Dashboard**

**ITT Operation
(CATOS 8.1 / TMS)**



Efficient

Efficient refers to achieving a desired outcome with minimal waste of resources, such as time, effort, or money, maximizing productivity and effectiveness.

Automation

Automation is the use of technology to perform tasks without human intervention, aimed at increasing efficiency and productivity while reducing errors and resource use.

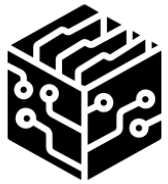
TOS
(Optimization)

Infrastructure
(WiFi, 4G LTE, 5G)

New Energy
(Green Solution)

Automation
(ARMG, AT, IGV)

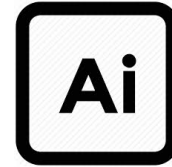
Digital-Twin
(IoT, Forecasting)



Big Data



Automation



Cost
Optimization



TOS
(Optimization)

NOVATION



FMS

Fleet Management System

FMS designed to streamline the operations of a fleet of terminal vehicles used by organizations for terminal & ports or service delivery. Key features include: Vehicle Tracking, Maintenance Management, Fuel Management, Charging Management, Driver Management, Live Route Optimization, BI Reporting & Analytics and etc.





4G LTE & 5G

Safety Solution

Both 4G LTE and 5G play essential roles in modernizing terminal operations, enhancing communication, efficiency, and the ability to leverage advanced technologies in the port & terminal, e.g. remote operation, autonomous vehicles, video to everything (V2X), and etc.

- External truck path & positioning
- Safety alert
- RTG ground & pickup trigger
- Container position update
- Dashboard & broadcasting
- Junction traffic's status
- Queuing situations in the block/under RTGC

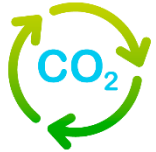
TOS
(Optimization)

Infrastructure
(WiFi, 4G LTE, 5G)

WATATION



Green Energy The next green solutions in terminal operations are likely to focus on sustainability, efficiency, and reducing the carbon footprint.



- Electrification of Equipment
- Renewable Energy Integration
- Automated & Electric Autonomous Vehicles
- Battery Swapping
- Carbon Footprint Measurement on CO₂ emissions routing via ISO14083



TOS
(Optimization)

Infrastructure
(WiFi, 4G LTE, 5G)

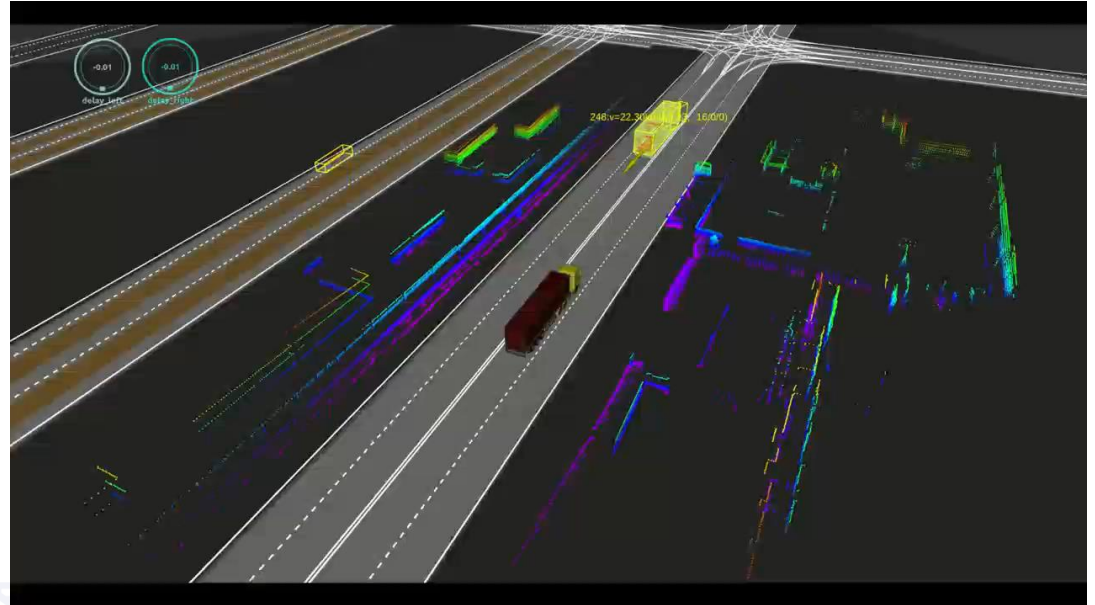
New Energy
(Green Solution)



Automation

Automation refers to the use of technology to perform tasks or processes with minimal human intervention, e.g. industrial automation, process automation, IT automation, hybrid automation and etc.

- Increased Efficiency
- Cost Savings
- Improved Accuracy
- Enhanced Safety
- Scalability & Stable



TOS
(Optimization)

Infrastructure
(WiFi, 4G LTE, 5G)

New Energy
(Green Solution)

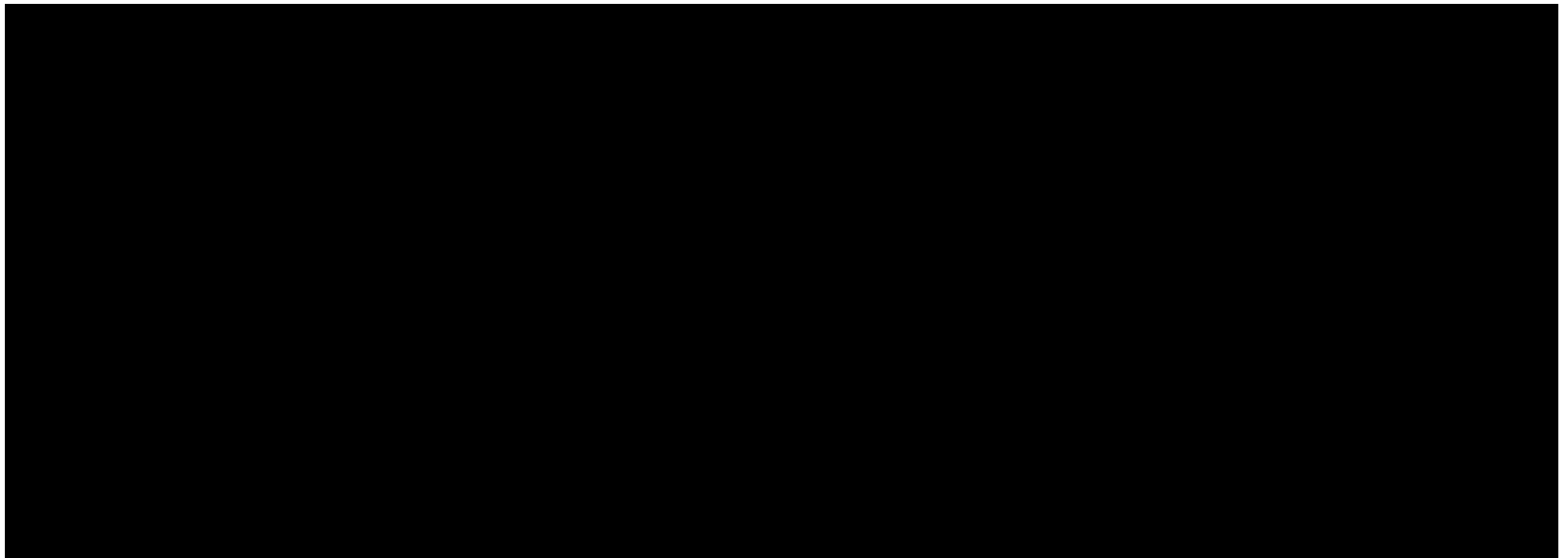
Automation
(ARMG, AT, IGV)



Digital-Twin

Simulation & Forecasting

A Digital-Twin is a digital representation of a physical object, system, or process that simulates its real-world counterpart in real-time. It can be used to optimize processes and systems, leading to improved efficiency, reduced costs, and better resource management.



TOS
(Optimization)

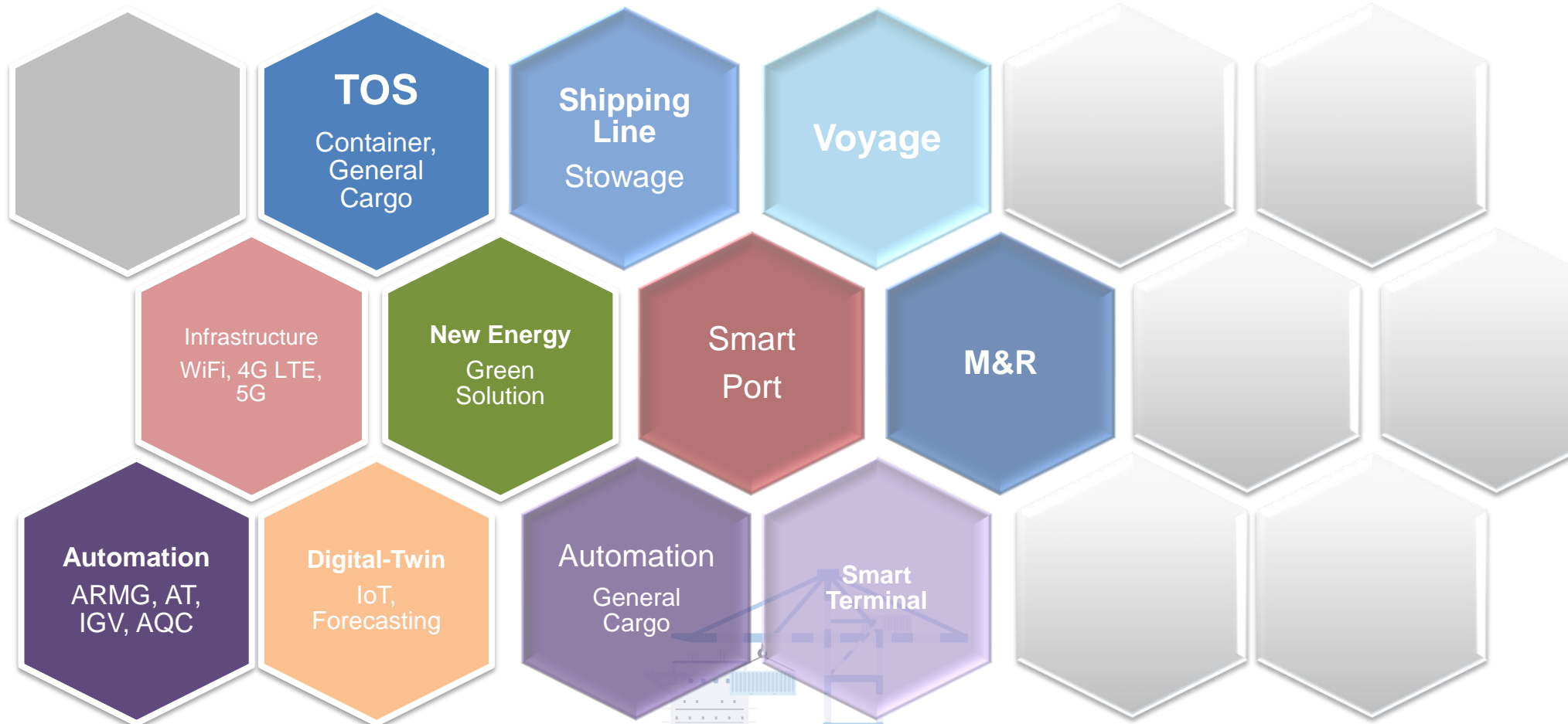
Infrastructure
(WiFi, 4G LTE, 5G)

New Energy
(Green Solution)

Automation
(ARMG, AT, IGV)

Digital-Twin
(IoT, Forecasting)

Beyond Efficient & Automation



INNOVATION

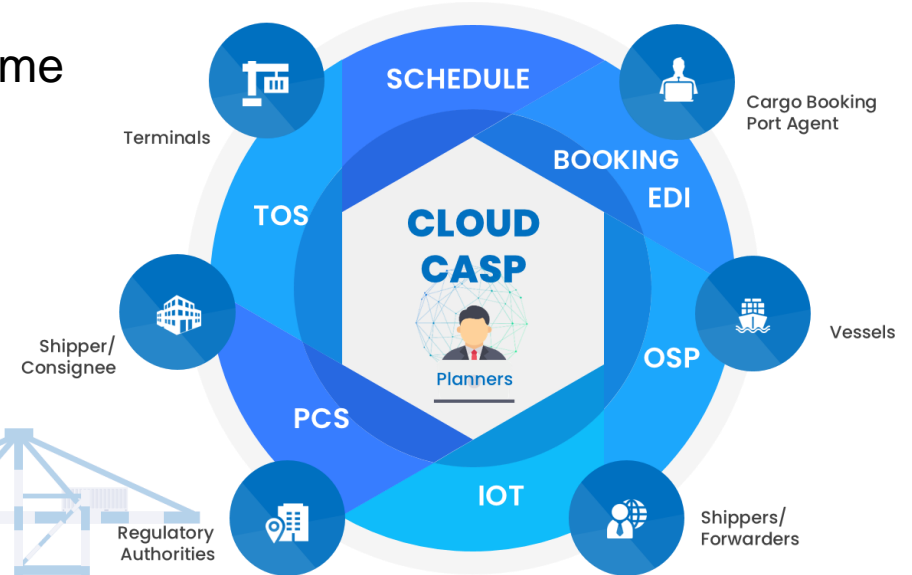


Collaboration

Shipping Line, Vessel, Terminal

A Collaboration Platform is a digital solution that facilitates communication, teamwork, and the sharing of information among individuals or groups, regardless of their physical location

- Enhance Communication
- Improve Data Quality in real-time
- Fostered Innovation



Terminal

Shipping Line

Vessel



Automation

General Cargo & Container

Automation refers to the use of technology to perform tasks or processes with minimal human intervention, e.g. industrial automation, process automation, IT automation, hybrid automation and etc.



INNOVATION



Vision Focus on making progress with each small step, and together, we can achieve remarkable advancements in the terminal, port, shipping line, and logistics industry.

- Incremental Improvements on TOS CATOS, MOST, PLUS & BI Tools
- Process Optimization on Manual terminal, Automated terminal & Hybrid terminals.
- Renewable Energy Integration & IMO14083
- Collaboration and Communication Platform (Terminals, Ports, Shipping Lines and etc.)
- Data-Driven Decisions Platform
- Innovation Platform



THANK YOU

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NET
ZERO

calculate. understand. reduce.