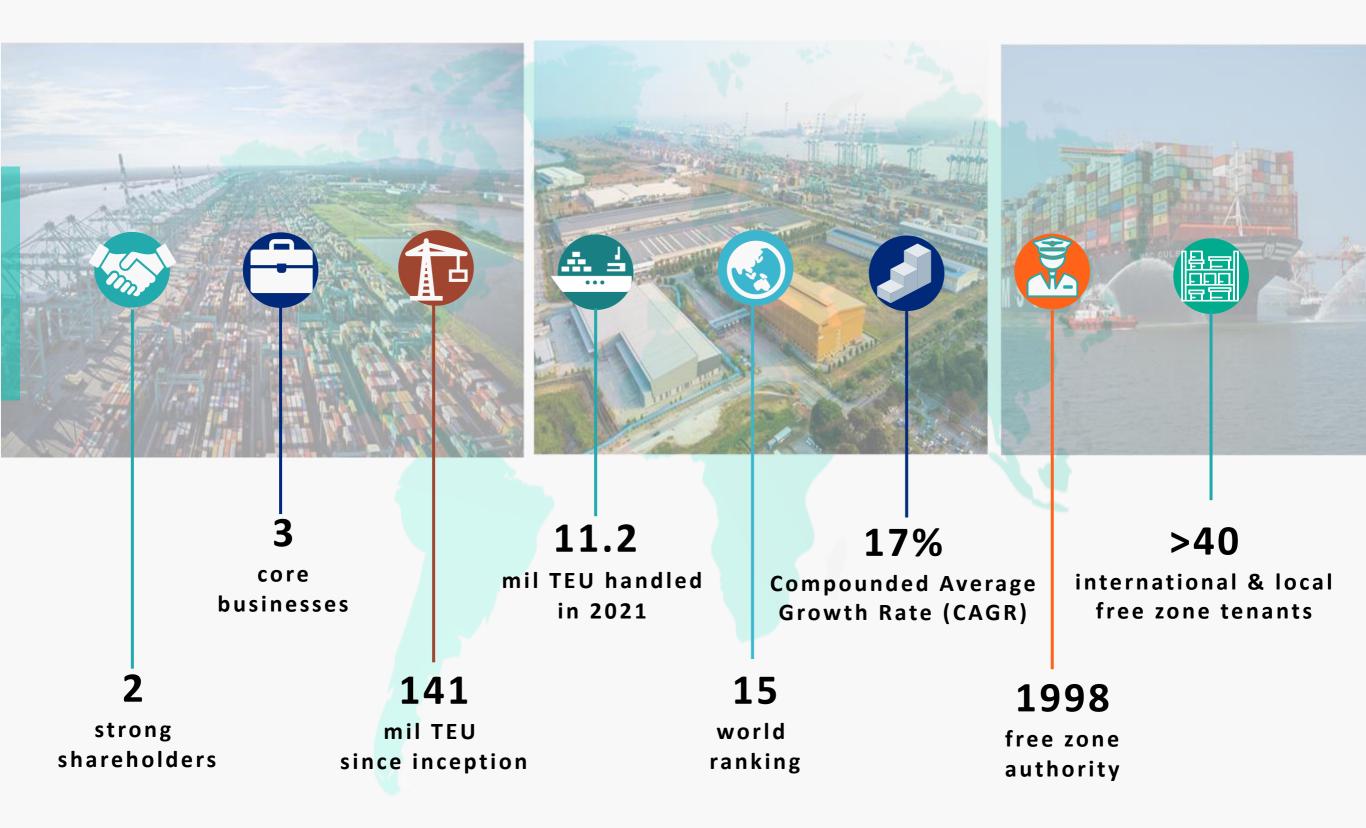


PORT OF TANJUNG PELEPAS

EVOLUTION ON DIGITALIZATION AND TRANSFORMATION IN TECHNOLOGY FOR A COMPETITIVE EDGE

2 MARCH 2022

BUSINESS OVERVIEW







PTP DIGITAL EVOLUTION

PROVIDING A COMPETITIVE EDGE THROUGH DIGITALIZATION AND TRANSFORMATION

SMART TECHNOLOGY - CHANGING IT

Creating customer advantage through the digital technology life-cycle

OPERATIONS MANAGEMENT Control and manage all port operations

BUSINESS MANAGEMENT Managing office management functions

TRADE AND TRANSPORTATION **MANAGEMENT**

> Smart and secure exchange information of all parties in the port and logistic chain

SAFETY AND SECURITY

Protect port facilities from attack and protect all assets and users within the digital environment

SUSTAINABILITY AND ENVIRONMENT Energy efficiency and the protection of

maritime environment









SMART TECHNOLOGY – CHANGING IT

CREATING CUSTOMER ADVANTAGE THROUGH THE DIGITAL TECHNOLOGY

IT BECOMING AN ESSENTIAL DIFFERENTIATOR - DATA DRIVEN, INNOVATIVE, SMART, CYBER RESILIENT & FUTURE FOCUSED







Transparency and accuracy through data analytics

Customer Satisfaction through proactive service, analytics and quick response

FOCUS ON SMART TECHNOLOGY, INNOVATION & SKILLS

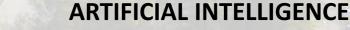












Improves operations decision making and efficiency

DATA ANALYTICS

Analyse data for insights and decision making

INTERNET OF THINGS

Sensors to collect real-data on all equipment











OPERATIONS MANAGEMENT

CONTROL AND MANAGE ALL PORT OPERATIONS THROUGH DIGITALIZATION

- **OPERATIONS CONTROL CENTRE Centralising Operations Control**
 - **Terminal Operating System**
 - **Analytics Dashboard**
 - Asset Digitalization



Smart Applications that increase the efficiency of PTP's equipment and operations connected via 4G wireless network

- Marine Resource Management System
- **RTG Optimization**
- **Gate Automation**
- **Expert Decking and Prime Route**
- **Optical Character Recognition**













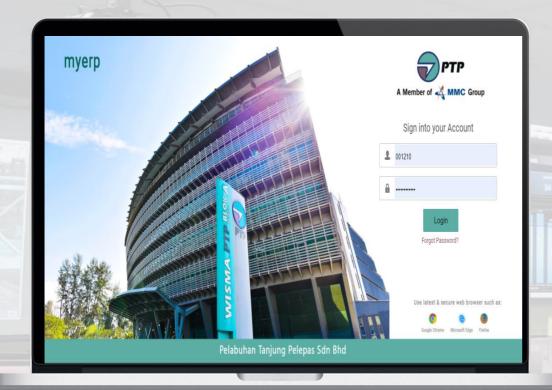






BUSINESS MANAGEMENT

MODERNISING BACK-END ENTERPRISE AND OFFICE MANAGEMENT DIGITAL SOLUTIONS

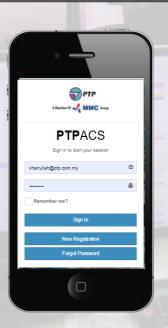




01 ENTERPRISE RESOURCE **PLANNING (ERP) & BILLING**

Modernizing and improving processes of corporate functions:

- 1. Human Capital Management
- 2. Finance
- 3. Supply Chain & Warehouse
- 4. Engineering & Facilities
- 5. Customer charges & Billing





02 ACCESS CONTROL

WWW.PTP.COM.MY

Managing staff and visitor access





03 PTP CONNECT

Provide a workforce mobile application for:

- 1. Ideas/Feedbacks
- 2. Terminal Transportation Request
- 3. Incident Reporting
- 4. Gemba
- 5. Pre-Work Checklist
- 6. Process Confirmation









TRADE AND TRANSPORTATION MANAGEMENT

SMART SECURE INFORMATION EXCHANGE WITHIN THE PORT AND LOGISTICS BUSINESS USING AUTOMATION & BLOCKCHAIN

Q 01 TRADELENS (BLOCKCHAIN)

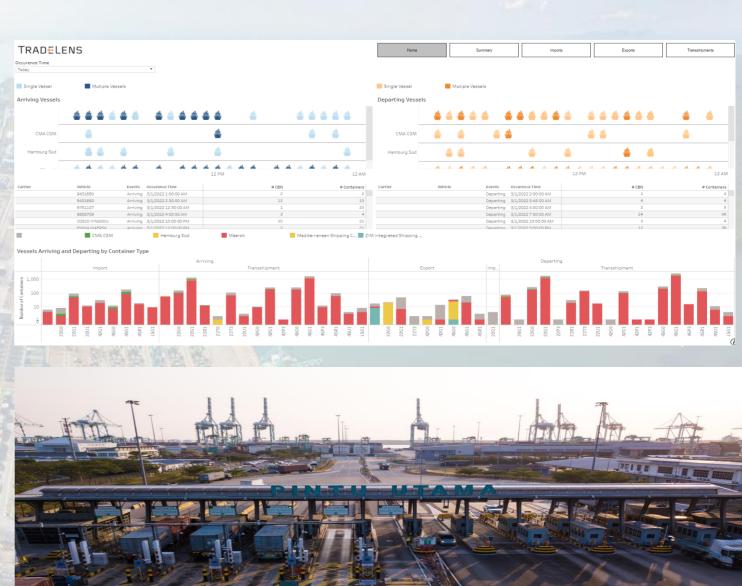
 TradeLens is an interconnected ecosystem of supply chain partners

02 TERMINAL ACTIVITY RECONCILIATION (BLOCKCHAIN)

 Redefining reconciliation using Blockchain enabling efficient, Integrated, transparent and financially compliant validation processes

Q 03 GATE AUTOMATION

- Improve Gate transactions.
- Increase Safety and Security.



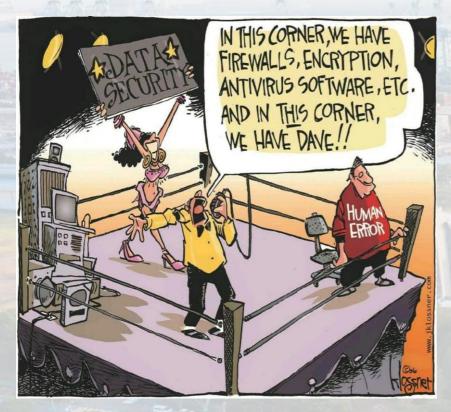






SAFETY AND SECURITY

PROTECTING PTP DIGITAL AND PHYSICAL ASSETS WITH DIGITAL TECHNOLOGY





Fatigue - drowsiness

P825

P1001229-S00000197 (1.3.0.435193)

(VSIM) PTP MY

(UTC+08:00) Kuala Lumpur, Singapore





Download recording

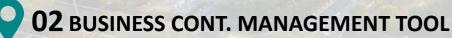
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Download recording

Show map



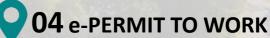
 Protect and reduce the risk of cyberattacks



 Automation of BCP and emergency response.

03 INTEGRATED INTELLIGENT SECURITY SYSTEM

Control Surveillance System
Centre enabling centralized security
CCTV monitoring.



 Online and advance permit to work applications and approvals.

05 FATIGUE DRIVING

 Real-time monitoring of fatigue and dangerous driving of prime movers.











SUSTAINABILITY AND ENVIROMENT

PTP'S FOCUS ON SUSTAINABILITY AND CARBON FOOTPRINT REDUCTION

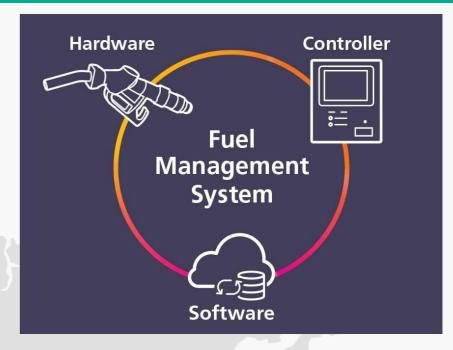
SMARTER AND MORE EFFICIENT ENERGY TRACKING AND CONSUMPTION

SMART PORT WITH ENVIROMENTAL SUSTANABILITY

PTP technologies, systems and concepts developed will prioritize to enable a cleaner and safer mobility for everyone and everything



Fuel usage and tracking





17 Autonomous Prime Mover

 Test autonomous mobility solutions for PTP's digital future.

03 SCADA System

Analyse, monitor
 and process real-time
 data from sensors,
 valves, pumps, motors
 to monitor electrical,
 water and other
 utilities.











