The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.

PHILIPPINE PORTS AUTHORITY

From Ports to Platforms

PPA's Digitalization Journey



Josephine M. Napiere

September 17, 2026

Agenda

A quick look at where PPA's digital transformation has been — and where it's headed

PPA Overview

Mandate, structure, and the scale of the national port system

01

Early IT Initiatives

From standalone LANs to e-Governance and pandemic-driven acceleration

02

PPA Innovation — POIMS

A unified cloud platform for port operations

03

Future Initiatives

The digitalization transformation roadmap

04

PPA Mandate & Corporate Duties

MANDATE

To establish, develop, regulate, manage, and operate a rationalized national port system in support of trade and national development.

Plan & Develop

Formulate and implement the national port development program

Oversee Operations

Establish policies and oversee port services and terminals

Build & Modernize

Construct, expand, rehabilitate, and maintain port infrastructure

Facilitate Trade

Enable efficient movement of passengers and cargo nationwide

Manage & Operate

Operate and administer government ports and facilities

Ensure Safe Ports

Promote safety, security, resilience, and sustainability

The Philippine Port System at a Glance

PPA oversees a nationwide network spanning base ports, terminals, and government/private facilities

25
Port Management Offices (PMO)

84
Terminal Management Offices (TMO)

944
Total Ports Nationwide

5
Regional Clusters

Cluster	Base	Terminal	Govt.	Private	Total
Manila / N. Luzon	4	11	36	91	142
Southern Luzon	6	22	122	112	262
Visayas	6	28	124	105	263
Northern Mindanao	5	12	63	80	160
Southern Mindanao	4	11	33	69	117
Total	**25**	**84**	**378**	**457**	**944**

Early Digital Transformation Journey

Four decades of steady progress from isolated systems to connected e-governance



Stand-Alone LAN System

Isolated, office-level computing

LAN-based & WAN System

Sites linked across wide-area networks

Entry to e-Governance

Digital public-facing services begin

COVID-19 Acceleration

Rapid push toward remote, digital operations

Modernizing Core Systems

Upgrading key e-platforms while rolling out new operational tools

Upgraded e-Platforms

- e-Payments
- i-Ports
- oREMS
- TAPPS
- PULSO
- HRIS
- AFMS
- e-Permit Systems
- COMMSYS

Additional Initiatives

- **CASPAS**
  Customized Assets Status and Performance Automation System
- **MPOS**
  Mobile point-of-sale for port charges
- **PPES**
  Port Profile and Engineering System
- **Oracle Database Upgrade**
  Modernized data backbone
- **Vessel Traffic Management System (VTMS)**
  Real-time vessel monitoring
- **Online Port Charges Exemption System (OPCE)**
  Digital exemption processing for port charges
- **e-Library**
  Centralized digital document and knowledge repository

POIMS — Port Operations Information & Monitoring System

Vision

A robust, cloud-based SaaS ecosystem tailored for port management — integrating operations, compliance, and administrative services into one platform, with real-time visibility across all levels.

Architecture

A single cloud SaaS platform serves as the source of truth for operations:

- Centralized database
- Role-based access & security controls
- API integrations with existing systems (e.g., iPorts)
- Web-based and mobile-accessible interfaces

POIMS Module Ecosystem

Fifteen specialized modules, organized into four functional groups — unified under one SaaS platform

Regulatory & Permits

- Permit to Operate (PTO)
- Holdover Authority (HOA)
- MOA MODAM (LGU agreements)
- Rate Application Mgmt (RAMS)

Operations & Safety

- Vessel Entrance/Exit Clearance
- Port Situation Report (PSR)
- Port Operation Bulletin (POBA)
- Harbor Pilots Management

Compliance & Reporting

- Safety & Environmental Mgmt (SEMS)
- Centralized Incident Reporting
- Tree Planting Compliance
- Port Police Quality Rating
- Monitoring & Ops Reporting (MORS)

Asset Management

- Private Port Management
- Online Real Estate Mgmt (OREMS)

Expected Outcomes

What POIMS delivers for PPA and its stakeholders



Faster Processing

Streamlined port operations with reduced processing times



Real-Time Visibility

Live insight into port activities across all levels



Stronger Compliance

Improved efficiency, transparency, and governance



Better Communication

Enhanced coordination among stakeholders



Agile Management

A more responsive, data-driven port environment

PPA Digitalization Transformation Roadmap

PHILIPPINE PORTS AUTHORITY

PPA Digital Transformation Roadmap 2026–2030

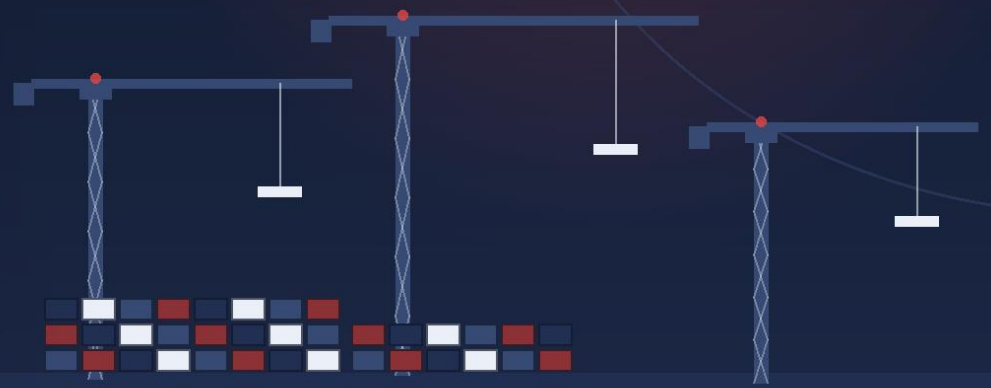
Strengthening the Digital Foundation Towards a Digital Port Ecosystem



FIVE-YEAR PROGRAM · PORT SYSTEMS & DATA · GOVERNANCE-LED

Thank You

Questions & Discussion



Josephine M. Napiere | Philippine Ports Authority