

Port Community Systems – IDB Experience in Latin America and the Caribbean

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How is the maritime sector performing in LAC?

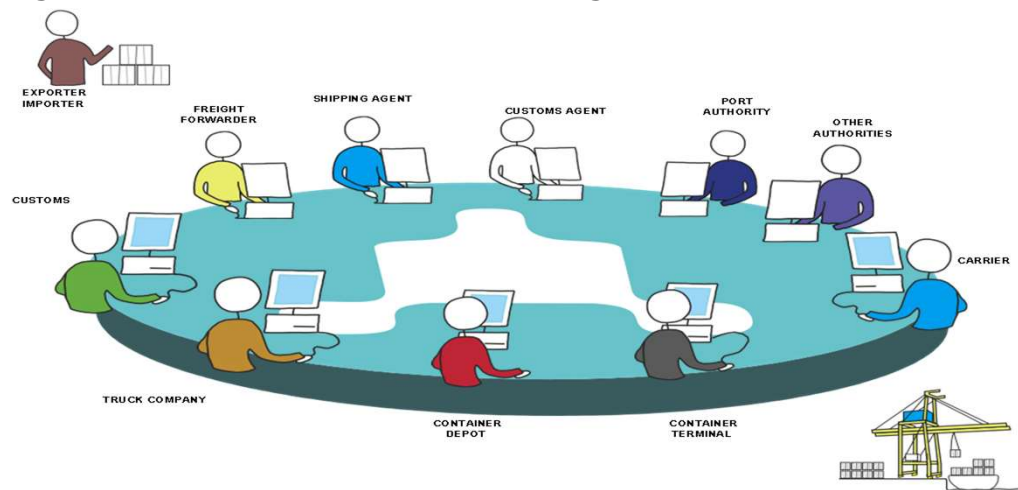
- Many LAC ports remain **pure cargo-handling centres**, without a holistic vision of their role as critical nodes in global supply chains. Those that do are operated by global operators.
- **Smart Port solutions are embryonic in LAC:** Adoption of port community systems and automation at leading hubs, but interoperability and SME inclusion lag
- **Financing constraints:** Large investment gaps, especially for smaller island economies, limit modernization and climate adaptation.
- **Scope for port governance reforms:** PPPs and private concessions driving upgrades, but regulatory frameworks remain uneven, and transparency gaps persist.

How is the maritime sector performing in LAC?

- Ports face rising exposure to storms and sea-level rise; investment needs include **green ports, dredging, and resilient multimodal logistics links.**
- Most ports in LAC countries **lack human capital** and appropriate training institutions to meet the demands of Industry 4.0. Most perform routine tasks.
- **Nearshoring and supply chain diversification present major growth potential**, but success requires faster customs, upgraded logistics corridors, mobilizing private and public finance, and skilled labour.

Port Community Systems

- Port Community System is a **neutral and open electronic platform that optimizes, manages and automates smooth port and logistics processes** through a single submission of data, enabling intelligent and secure exchange of information between public and private stakeholders.



Financial savings associated with the corresponding time savings (IDB Research 2021)

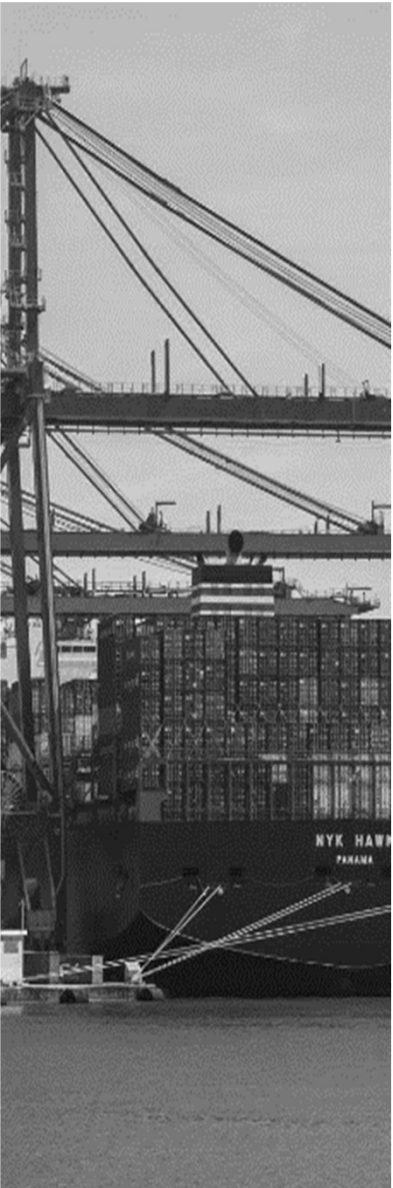
Country / Port	PCS	Savings
The Netherlands	Portbase	US\$ 59 mm/year
Dubai	Dubai Trade	US\$ 6 mm/year
Jamaica	Jamaica PCS	US\$ 13 mm/year
Singapore	Portnet	US\$ 80 mm/3 years

PCS Momentum...

- **Momentum growing** – IMO Maritime Single Window (MSW) mandate accelerating PCS adoption across the region = entry point.
- **Two-speed progress** – Major hubs (Panama, Mexico, Colombia, Chile, Brazil) advancing rapidly with full integration of TOS/MSW/PCS; smaller ports, esp. in the Caribbean, remain early-stage.
- **Customs modernization and logistics companies' digital readiness** (e.g. tracking, IoT, EDI systems) make PCS integration technically feasible.
- **Donor-backed acceleration** – IDB, CAF, and CDB financing readiness studies, pilots, and digitalization investment programs.
- PCS is increasingly viewed as the backbone of smart, transparent, and sustainable port ecosystems.

...and Gaps

- **Interoperability gap** – Customs, port authorities, and private terminals use incompatible systems; harmonization remains weak. Challenge to link actors under shared data standards.
- **Operational benefits are proven but adoption friction persists** – stakeholder onboarding, change management and legacy IT integration slow benefit realization.
- Few **firms offering PCS design and implementation services for small ports**. Implementation cost exceeds the revenue-generating potential of the solution and requires government subsidies.
- Perspective that technology will provide efficiencies rather than **institutional reform**.



Smaller ports can benefit from targeted strategies

- **Phased Implementation:** small ports can gradually integrate PCS functionalities, starting with EDI or MSW and expanding over time.
- **Capacity Building:** ensures that port staff and stakeholders are proficient in utilizing PCS effectively, maximizing its benefits.
- **Collaboration:** Partnering with neighboring ports can provide shared resources and expertise, facilitating smoother PCS adoption.
- Shift towards **cloud-based solutions:**
 - **Software-as-a-Service (SaaS):** Port industry adoption of SaaS is expected to increase to 67% within the next five years, offering scalability and reduced upfront costs.
 - **Open-Source Solutions:** Utilizing open-source technologies allows for greater flexibility and lower costs on software licenses, enabling ports to customize PCS to their specific needs

Thank you!

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