UNCTAD Multiyear Expert Meeting on Transport, Trade Logistics and Trade Facilitation

21-23 November 2018, Geneva

"Sustainable freight transport in support of the 2030 Agenda for Sustainable Development"

IPCSA
International Port Community Systems Association

by
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IPCSA

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International Port Community Systems Association

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23rd November 2018,
UNCTAD, Mutli Year Expert Meeting
UN Palais de Nations Geneva

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Content

- Who is IPCSA ?
- PCS Concept
- Examples of PCS
- Intergration into Single Window
- How to develop a PCS
- Globally Connected Logistics
- Conclusion

Details – Logistics and Customs Flows
Example – Portnet, Morocco

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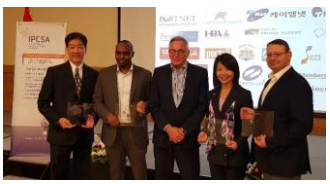
So who is IPCSA ?



- 39 members operating in over 40 Countries.
- 1 million + users – many small and medium sized organisations
- Estimated 30m plus electronic messages per day
- Members currently handle the exchange of information for over 100 air and sea ports, this equates to over 400m TEU and 8bn tonnes of cargo
- IPCSA membership is open to:
  - ✓ Air and Sea Port Community System Operators
  - ✓ Air and Sea Port Authorities
  - ✓ Single Window Operators
  - ✓ International and Regional Organisations

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So what is a Port Community System ?

"A Community System is not an IT project, but a change management project."

- Provides for the electronic exchange of information in the supply chain for B2B, B2G and G2B.
- An exchange platform interfacing with existing IT systems within a Port Environment
- Trusted Third party
- Use international data model standards (UN/EDIFACT, WCO, ISO) and message formats (EDIFACT, CARGOXML, WCOXML etc.)
- First Community Systems in late 1970's

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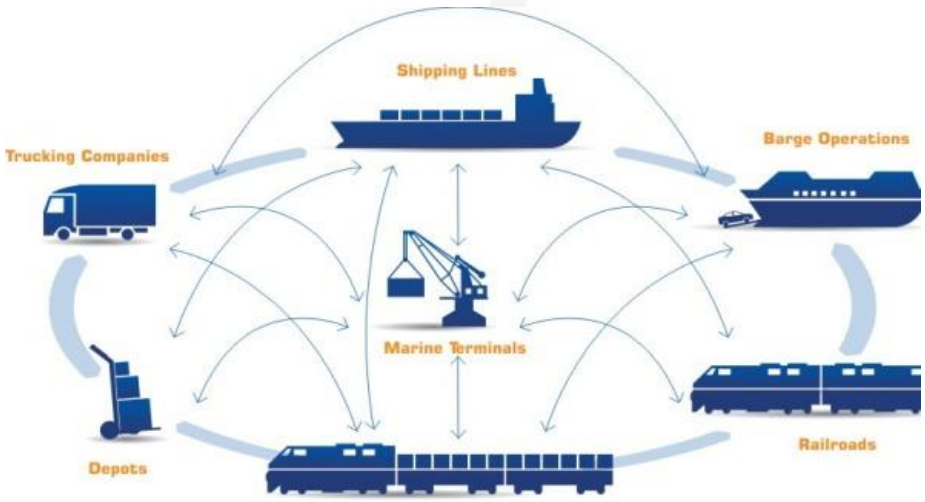
Traditional operational processes



In addition to operational processes there are administrative reporting process for Customs, Maritime Authorities, Security and Safety and other administrative requirements

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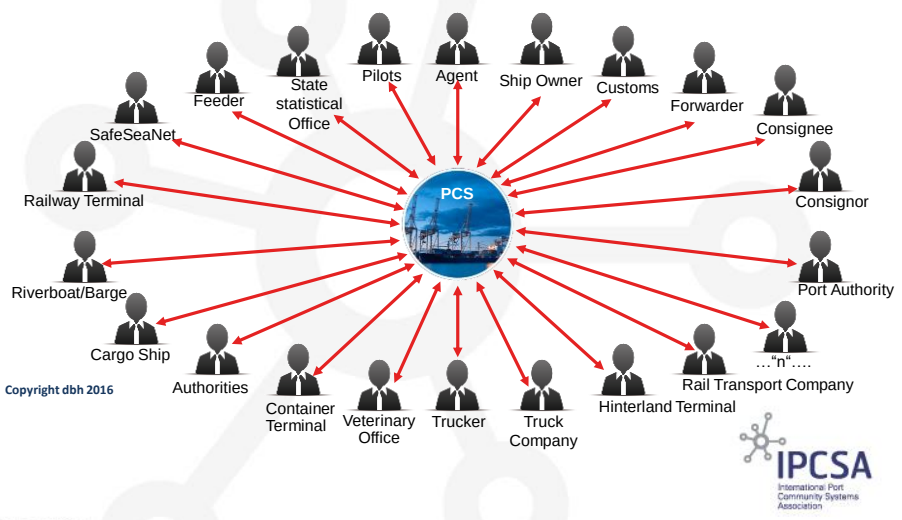
The Port Community System – a typical example



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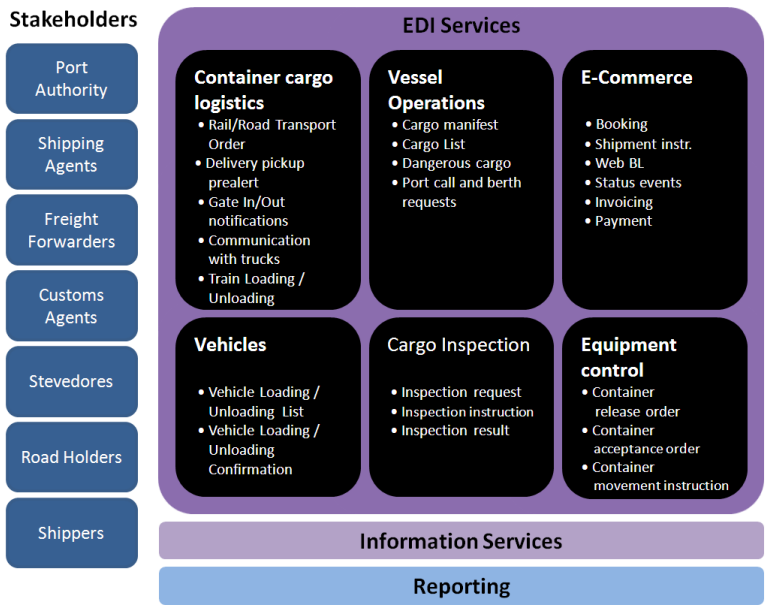
Typical PCS Services



Useful Definitions

A Port Community System is:

- a neutral and open electronic platform enabling intelligent and secure exchange of information between public and private stakeholders in order to improve the competitive position of the sea and air ports' communities.
- optimises, manages and automates port and logistics efficient processes through a single submission of data and connecting transport and logistics chains.

A Port Community System Operator:

- is an organisation that is either public, private or public/private that operates and maintains a Port Community System and where the Port Community System represents the core of that organisations business.
- has a board, or some form of steering committee, made up of representatives from different internal and external groups within the Port and Logistics community
- has "service level agreements" with PCS users to manage the electronic exchange of information between different parties on their behalf.

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Useful Definitions

A Single Window Operator is:

- The organisation that has the legal responsibility for implementation and operation of a Single Window within a country or region and which operates the Single Window within that remit, whereby the Single Window allows parties involved in trade and transport to lodge standardised information and documents.

A Cargo Community System (CCS) is:

- a neutral and open electronic platform linked to the cargo flows of any kind of freight passing through an identified port, airport, or multimodal site(s) to improve the competitive position of sea, air, inland and dry port communities for the benefit of public and private stakeholders.
- which enables the renewal, optimisation, automation and management of logistics, ports and administrative processes through a single submission of data, connecting transport and logistics chains.

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Differences

In general we can see some of the differences

- **PCS**
  - Focuses on Cargo and matching logistics flows with administrational flowsand B2B, B2G and G2B processes
- **Port Single Window**
  - Focus is on Port Regulatory requirements for entry and exit of vessels
- **Single Window**
  - Collaborative environment bringing together public administrations to ensure traders only have to submit information only once for cross border trade (simplified view – see Rec 33, 34, 35,36 and also the associated technical documents of UNCEFACT)

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Single Window Integration

PCS can:

- Act as gateways to Single Window
  - e.g Maritime Single Window
- Be an integral part of a Single Window
  - e.g Trade Single Window (Benin, Togo, DRC Congo)
- Simplify interfaces for Administration
  - Translate from different message formats
- Provide paperless logistics flows in Sea and Air Ports and border crossings linked to administrative flows

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Project at a Glance

FROM SINGLE PORT TO ALL SEA PORTS;
30 DAYS TO 1 Hr (Goods in containers)
From LOCAL TO NATIONAL AND REGIONAL

BALI WTO OMC 13

THE SYSTEM CONNECTS:
REGULATORY AND CONTROL BODIES;
PORT AUTHORITIES;
PORT OPERATORS;
AGENCY COMPANIES;
FORWARDING ORGANIZATIONS;
UKRAINIAN RAILWAYS.

Study on the readiness of Ukraine to implement WTO TFA provisions

TIME RELEASE STUDY

More than 550 000 containers and 2000 vessels processed

Time reduced to 1- 1,5 Hours

WTO Time Release Study in Odessa Seaport

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Before and After PCS implementation SEGUB, Benin, West Africa

Custom Revenue:
- **2011 – Euros 410 million**
- **2012 – Euros 490 million**

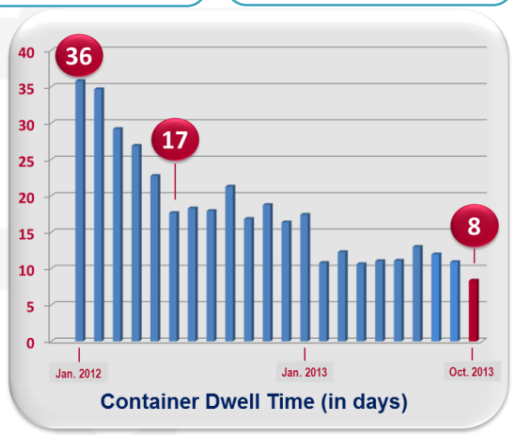
Dwell time:
- **2012 – 36 days**
- **2014 – less than 8 days**

TEU (Twenty-foot Equivalent Unit):
- **2012 – 155 337**
- **2013 – 251 053**

GAIN OF MONEY, GAIN OF TIME for private and public sectors:

- **Gains of productivity**
- **Gains in efficiency**
- **Gains in autonomy / flexibility**

Rapid information exchange, coupled with accurate performance indicators **has reduced dwell time from 5 weeks to less than 8 days** as shown below.



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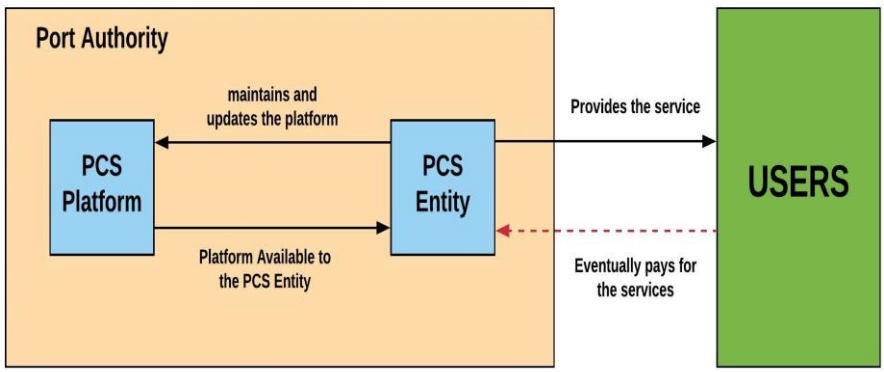
GOVERNANCE MODEL

Option 1



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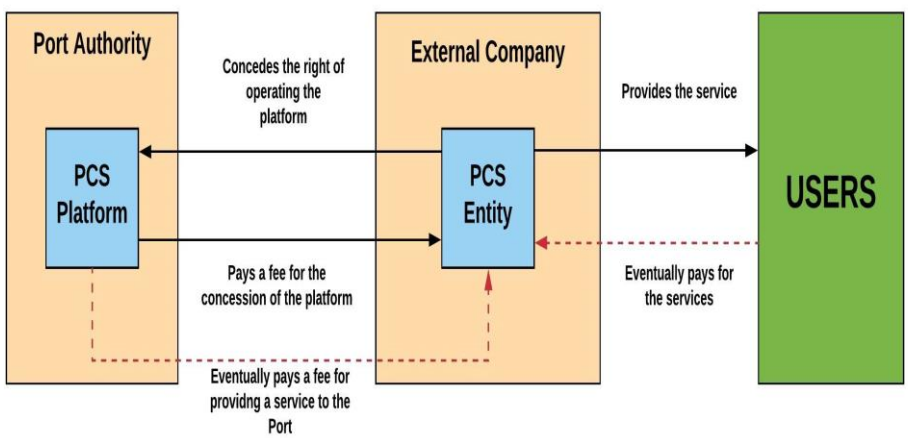
GOVERNANCE MODEL

Option 2



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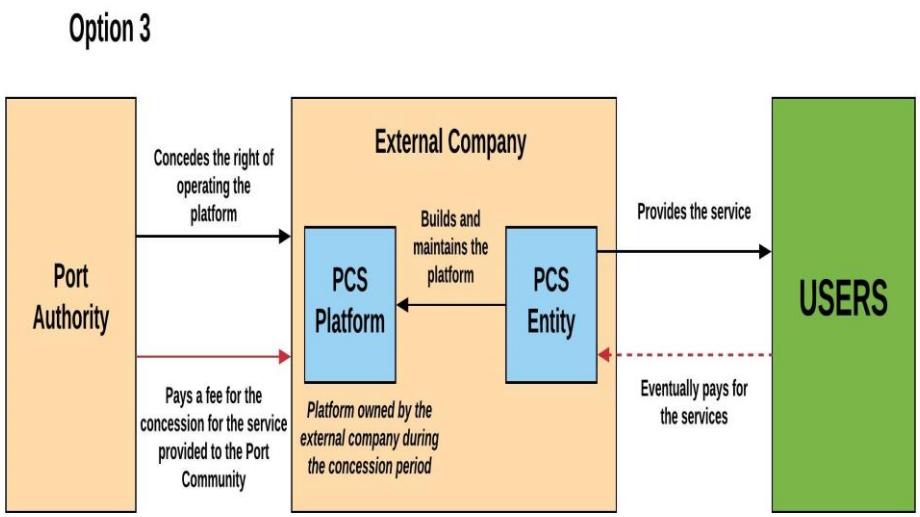
GOVERNANCE MODEL



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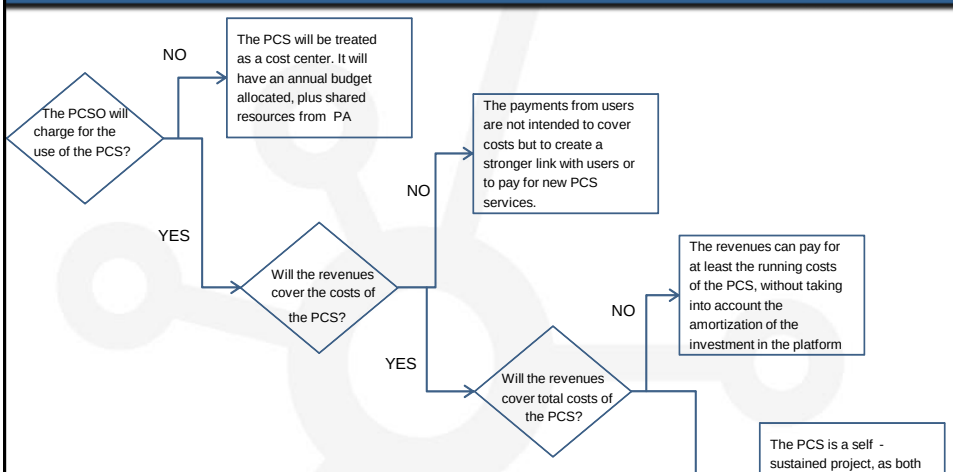
BUSINESS AND REVENUE MODEL



Basic tariff concepts

1. **Upfront fee, to sign-in with the PCS.**
2. **Fixed fee (or flat rate).**
3. **Transaction fee**

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Network of Trusted Networks

Globally Connected Logistics

Value Proposition of Community Systems

- Existing global network of Systems with over 1 million users
- Trusted and Neutral
- Using and developing international open standards

Vision:

- A neutral and trusted network
- Globally Connecting Logistics
- Use of existing IT Infrastructures not new ones
- APIs to connect Community Systems
- Simplified User Authorization

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What and How to Exchange

Problem: Visibility and the lack of it

- **Public versus Private Data**
  - Survey or participants
    - Vessel Status
    - Container Status
- **APIs (Application Program Interface)**
  - No current standards for API, IPCSA has developed it's own for exchanging information
  - Relatively easy to implement
- **Standards**
  - Use of international standards

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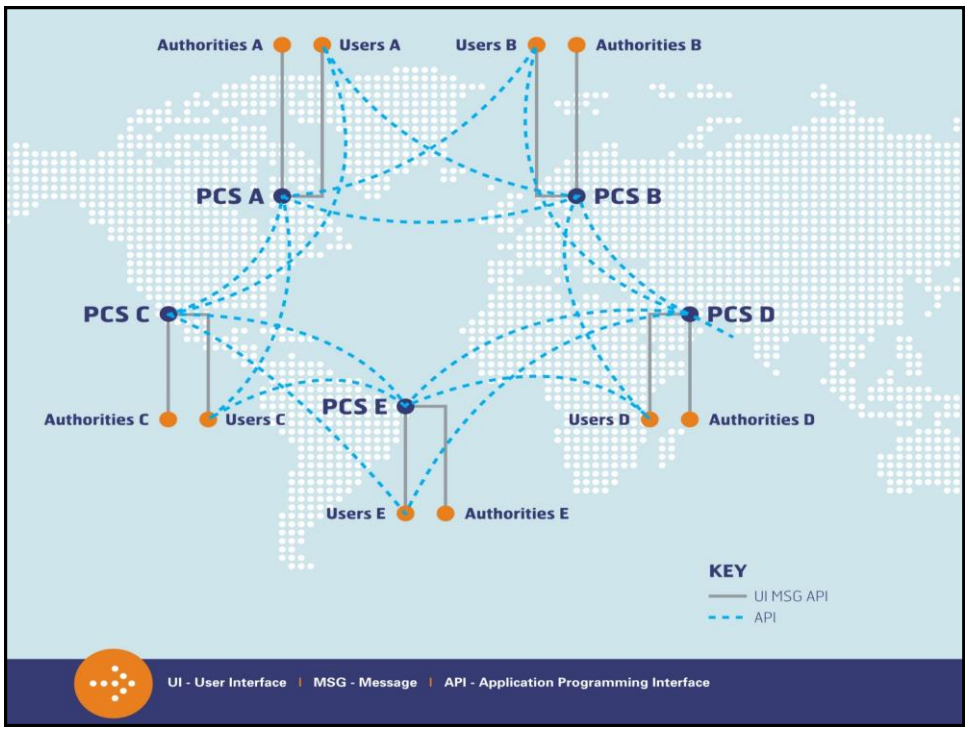
Network of Trusted Networks – The Vision



Global Data Sharing – ISO TC154/JW8

Working Together to create practical International Standards for data sharing

ISO TC154 ----> JWG8

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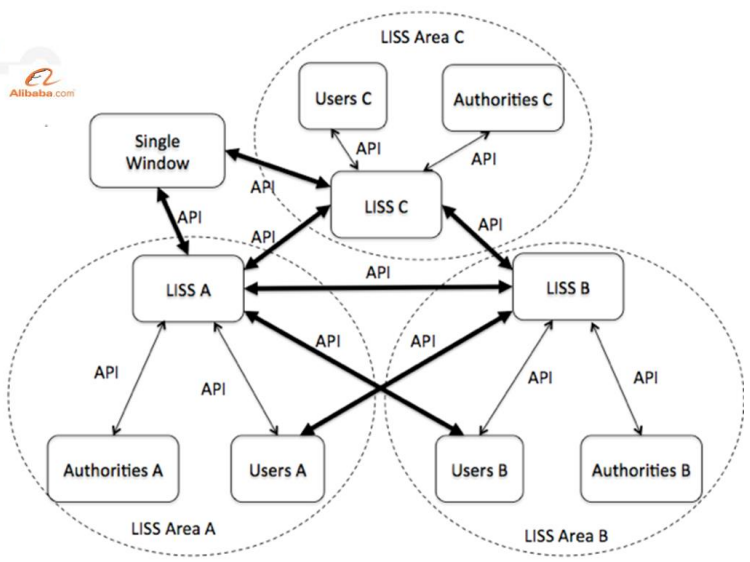
LOGINK

Alibaba.com



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The Reality: Network of Trusted Networks

IPCSA and NEAL-NET Cooperation

(North East Asia Logistics Network)

IPCSA:
PORTIC, Spain
Antwerp Port, Belgium
Trieste Port Italy
Odessa Port, Ukraine
Portbase, Netherlands
Maqta Gateway, Abu Dhabi
1-STOP, Australia
DBH, Germany
DAKOSY, Germany
ValenciaportPCS, Spain
Bilbao Port, Spain
PORTEL, Spain
MCP, UK
Israel Ports

China:
Ningbo Port
Qingdao Port
Dalian Port
Zhoushan Port
Wenzhou Port
Jiaxing Port
Qinzhou Port
Fangcheng Port
Beihai Port
Zhuhai Port

Japan:
Tokyo-Yokohama Port
Kawasaki Port
Osaka Port
Kobe Port
Yokkaichi Port
Niigata Port

Korea:
Busan Port
Kwangyang Port
Incheon Port
Ulsan Port
Pyeongtaek Port

"Soon to Come SEAL-NET" (South East Asia Logistics Network)

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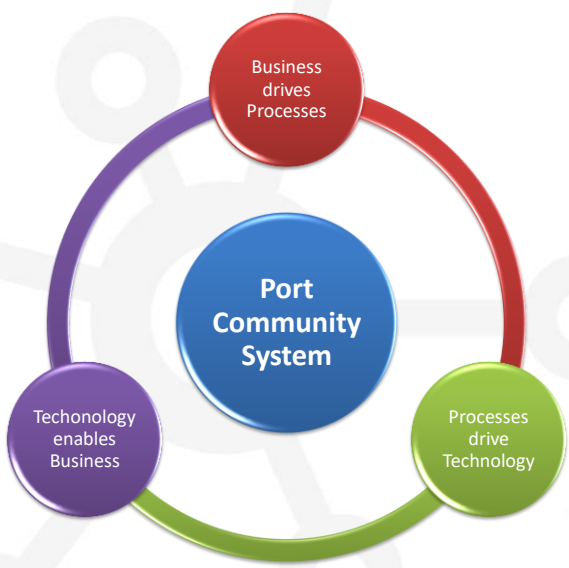
Conclusion



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