



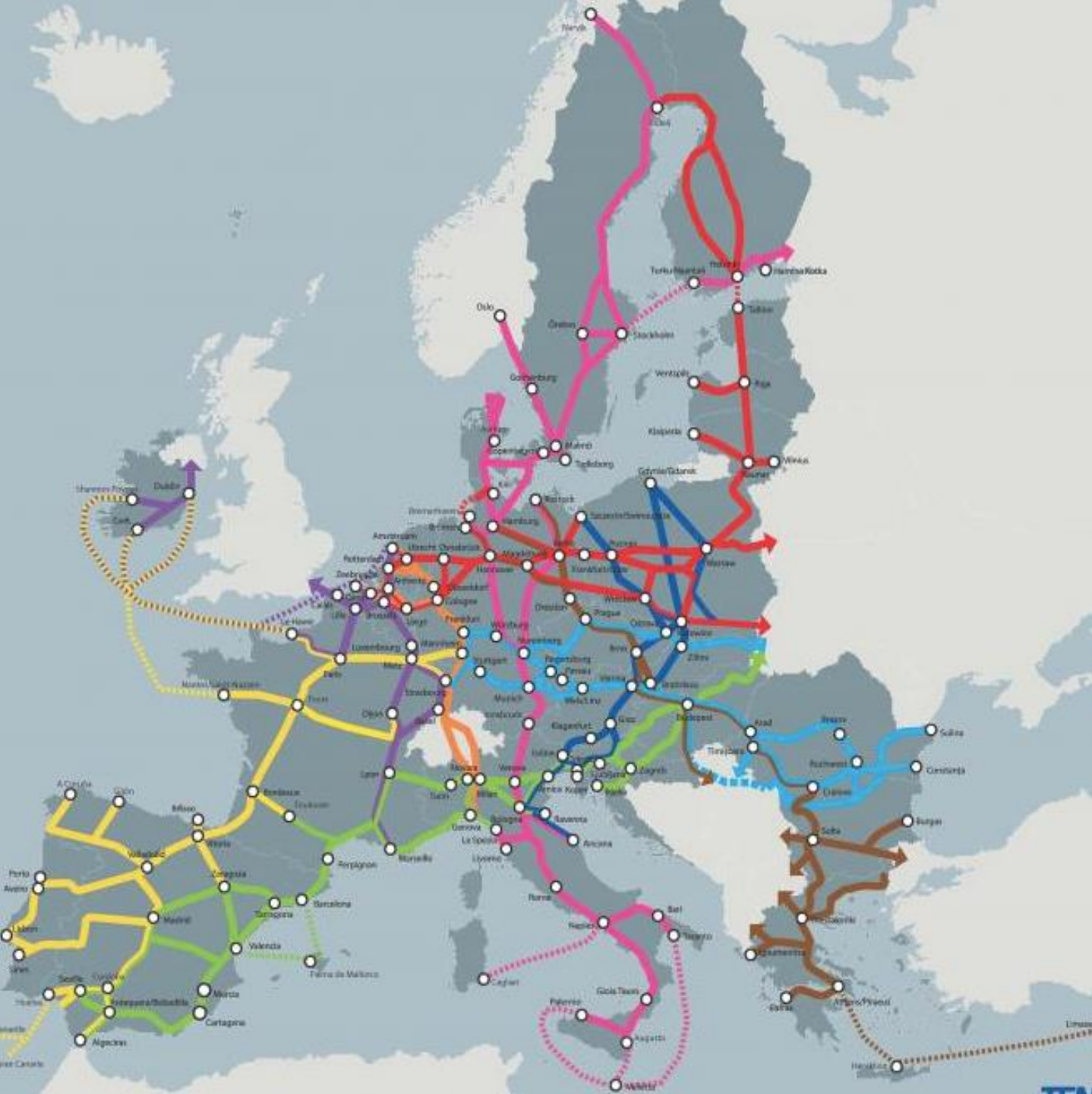
**4^ο Workshop Δικτύωσης
Κέντρο Προώθησης Νεοφυών Επιχειρήσεων
Δήμου Πειραιά
Πέμπτη 10 Νοεμβρίου 2022
ώρα 11:00**

***Ψηφιακός Μετασχηματισμός, πράσινη οικονομία και
ανάπτυξη ανθρωπίνου δυναμικού***

Trans-European Transport Network (TEN-T)

TEN-T comprises two network 'layers':

- The **Core Network** includes the most important connections, linking the most important nodes, and is to be completed by 2030.
- The **Comprehensive Network** covers all European regions and is to be completed by 2050



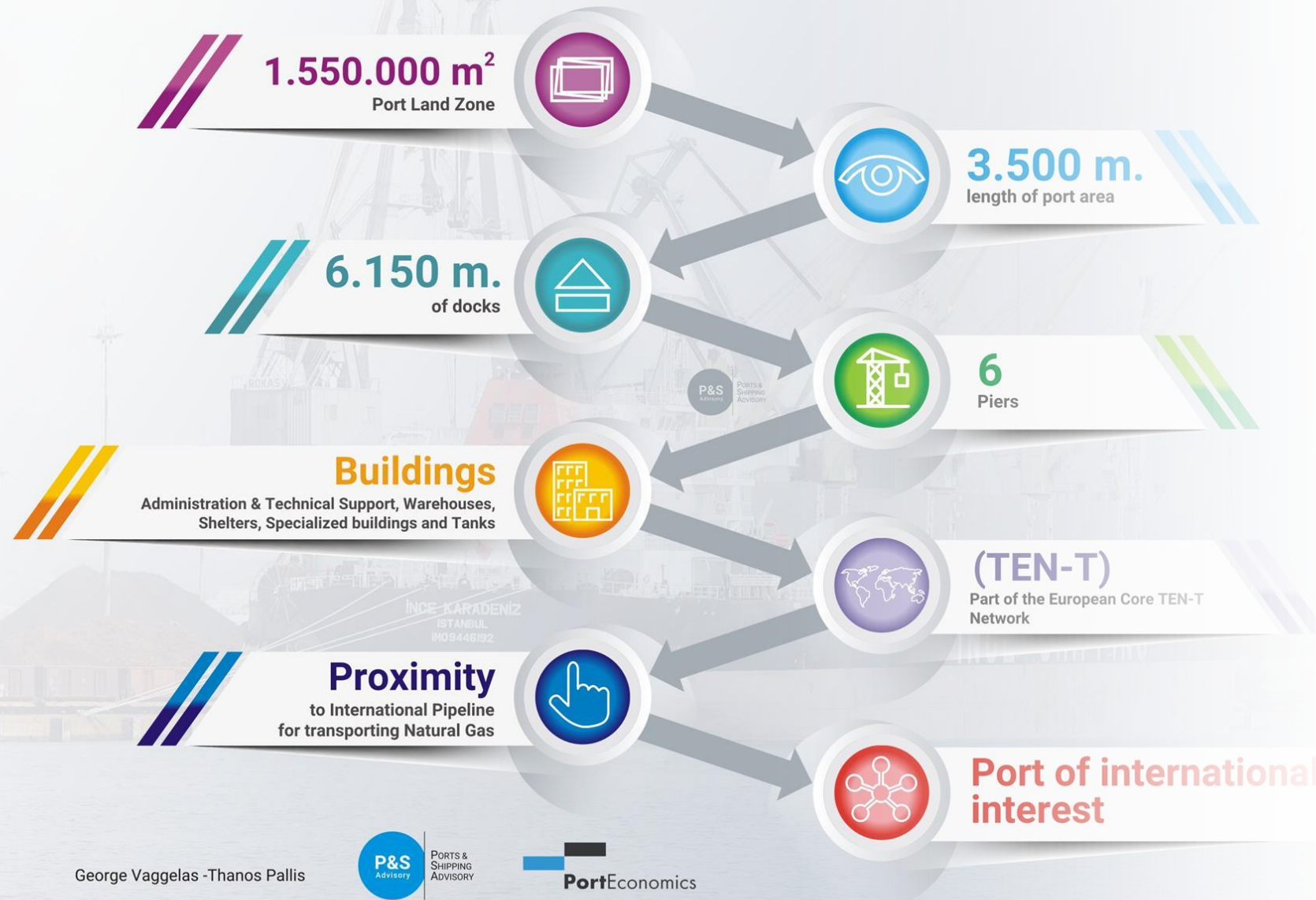
Greek Port System



Privatisation of the Port of Thessaloniki Authority S.A.

Infrastructure handed to the new owners

Port of Thessaloniki (ThPa)

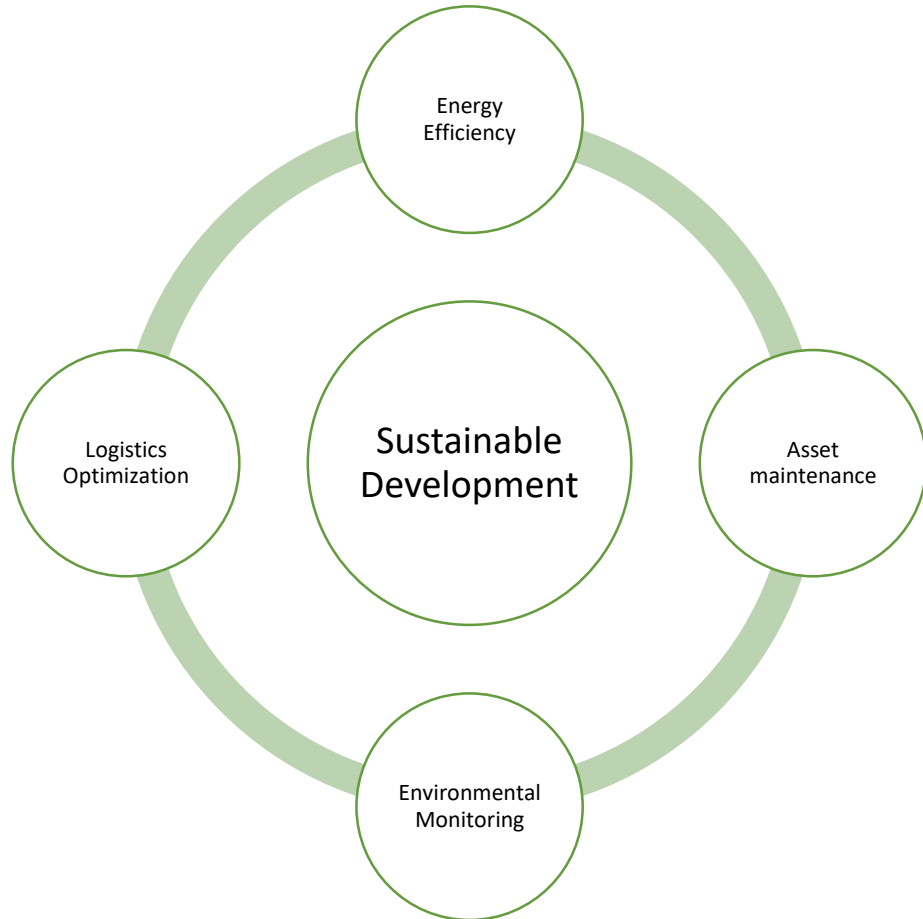


Creating the Smart Ports of the Future



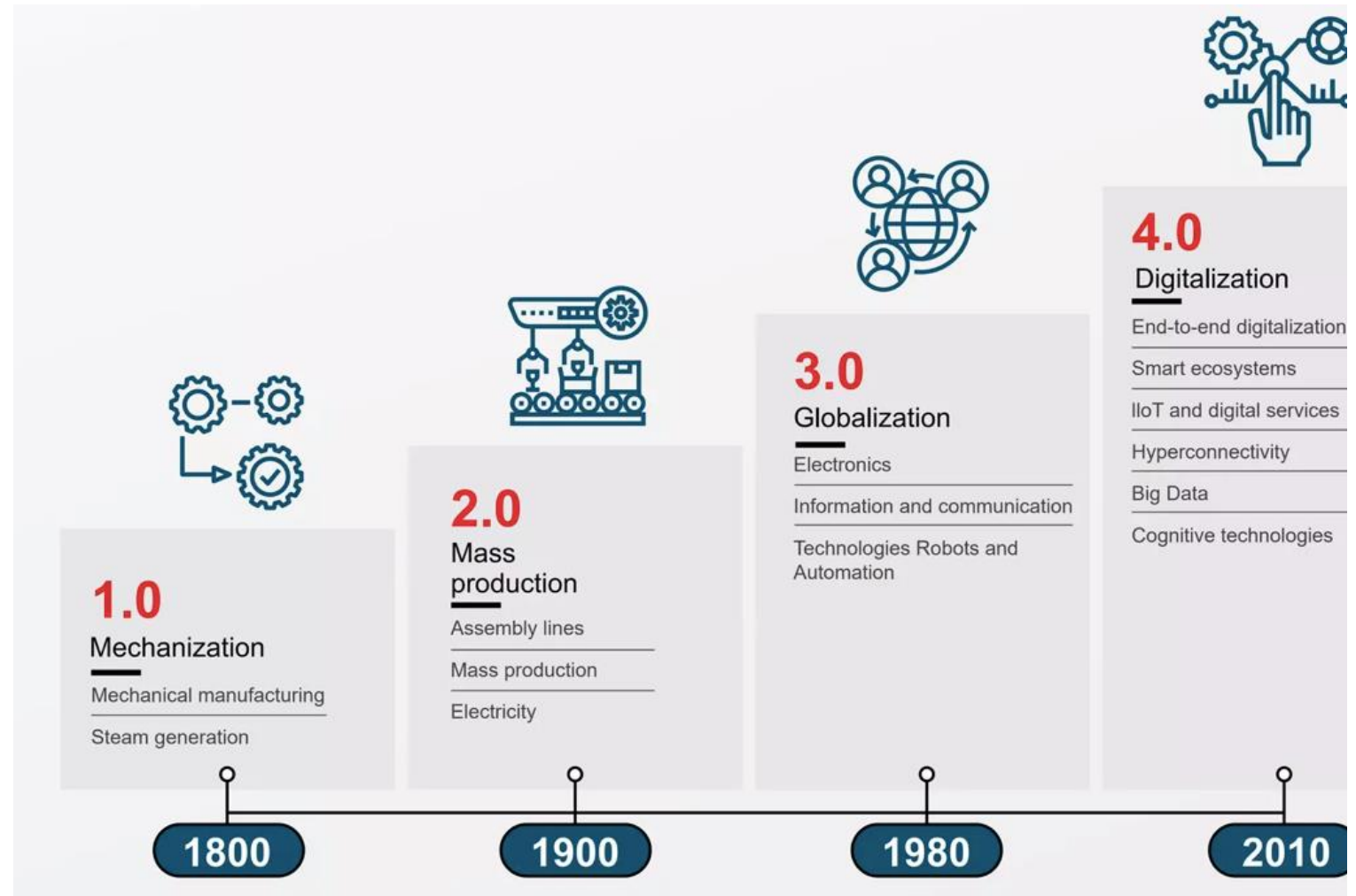
The IoT, Big Data, Ai Vision

Sustainability of the Port Industry



"Digital ports" refers to application of digital technologies such as machine learning, data analytics, visualization, cloud and advanced wireless communications technology to the Port Ecosystem that are driving innovations and enabling business efficiency.

The Evolution of Industry

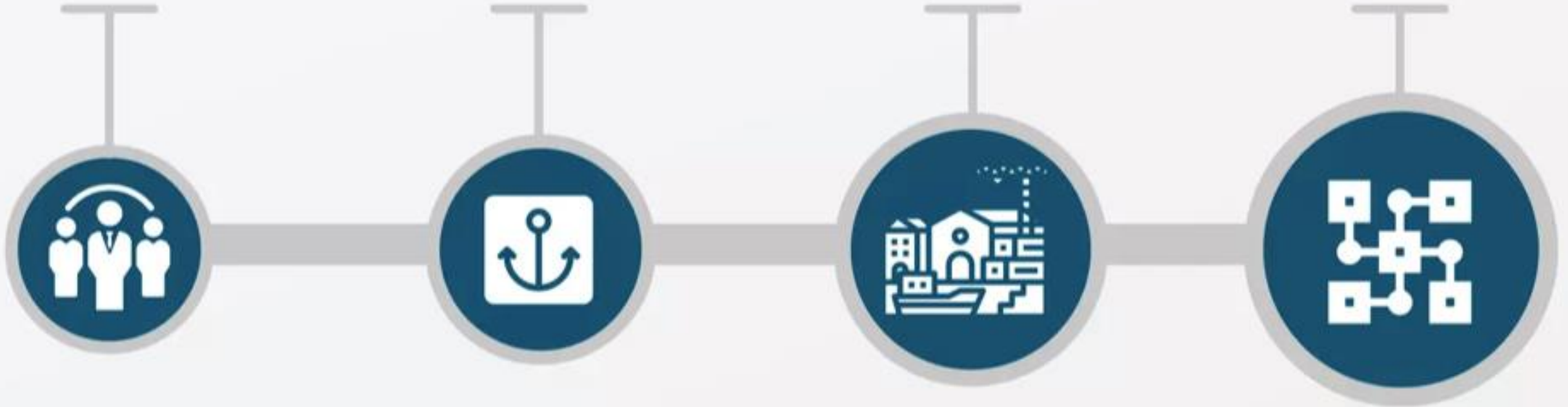


Internal Level

Port level

Port community
level

Hyperconnected
port level



- Levels of Digital Transformation into a Smart Port

Smart Calls

Digital Twins

- Modelling a virtual representation of Port to ease both operations and planning

Blockchain

- Build cargo information platform to ease and secure sharing freight information. Speed and secure security checking, customs and logistics management.

GIS

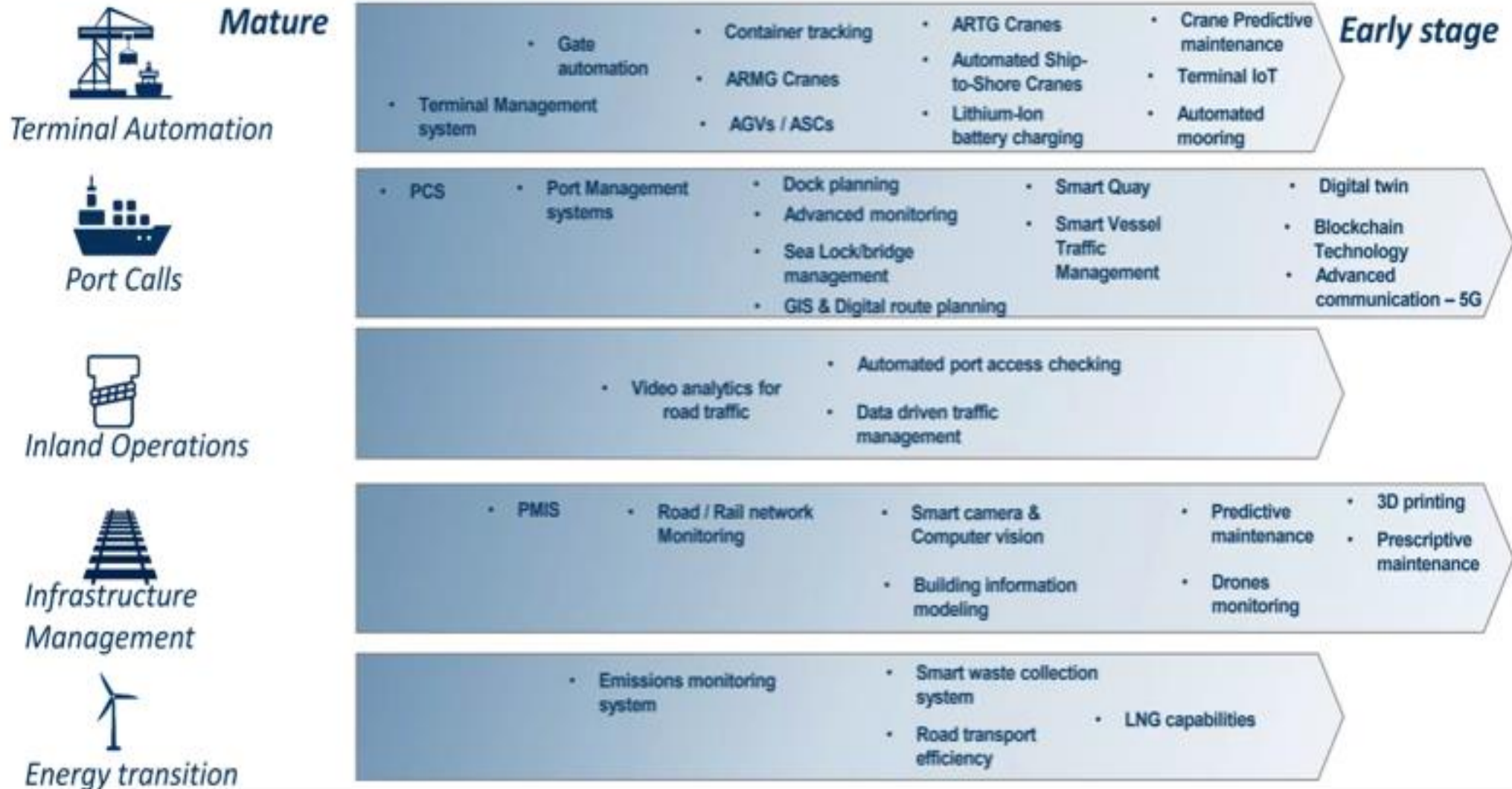
- Using multiple data resources from AIS, Hydrographic, Economics e.t.c is enabling visual managing tools that can optimise operations

Digital route planning

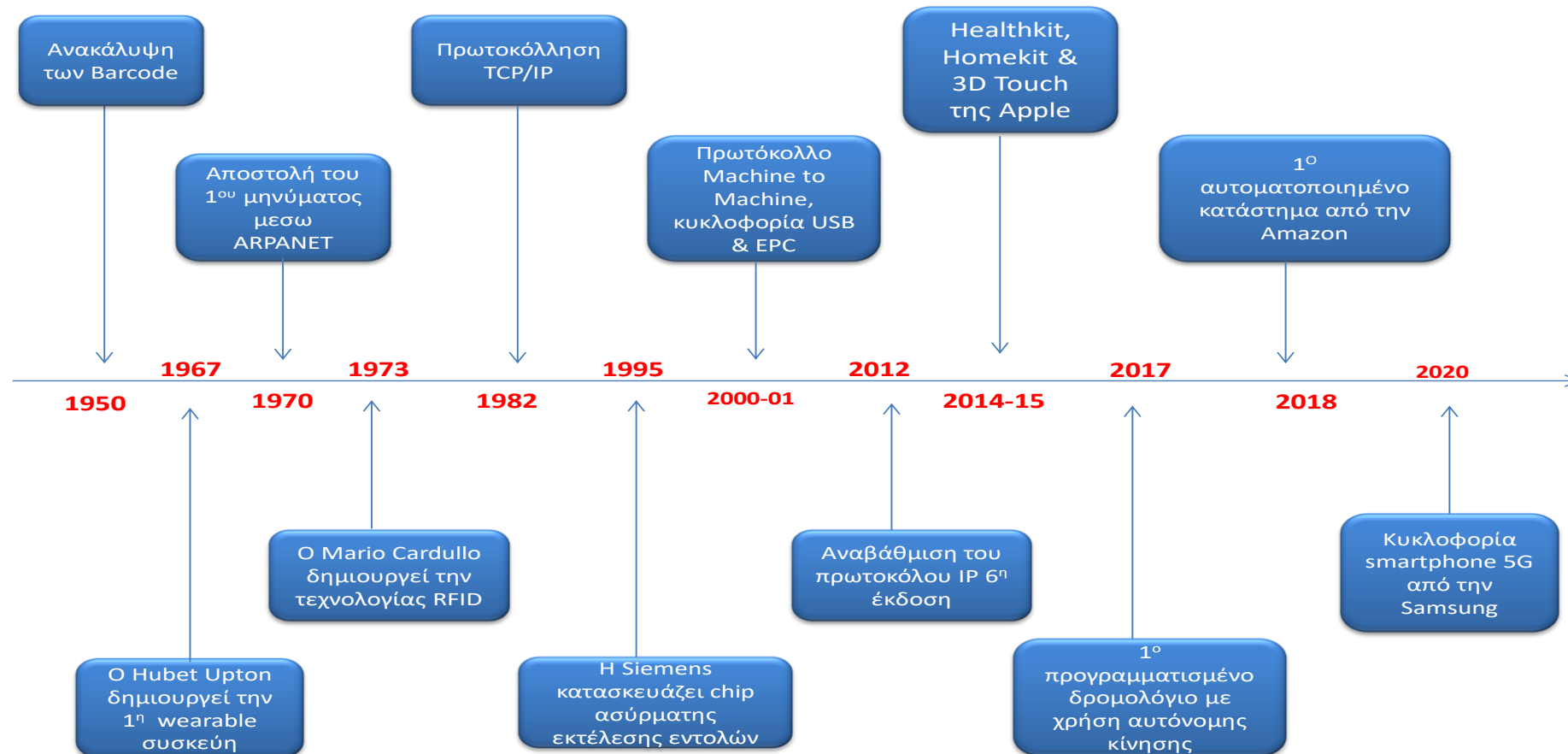
- With digital tools powered by AIS and related fleet mgmt. used by shipowners, waiting time can be reduced and port can optimise their navigable areas, dock capacity and port call

TECHNOLOGY ADOPTION EVOLUTION

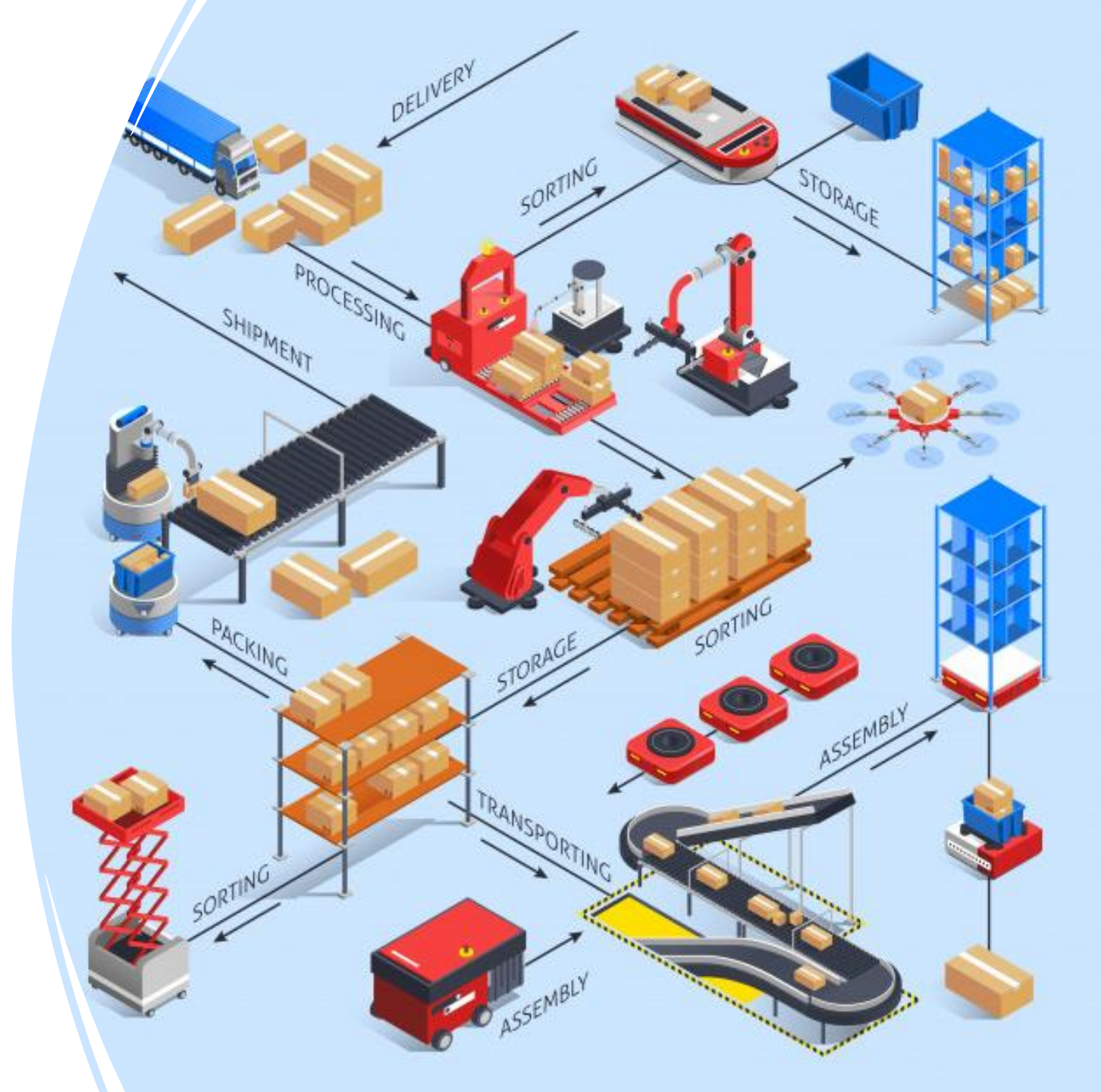
Adoption differ from port to port but general trend can be observed



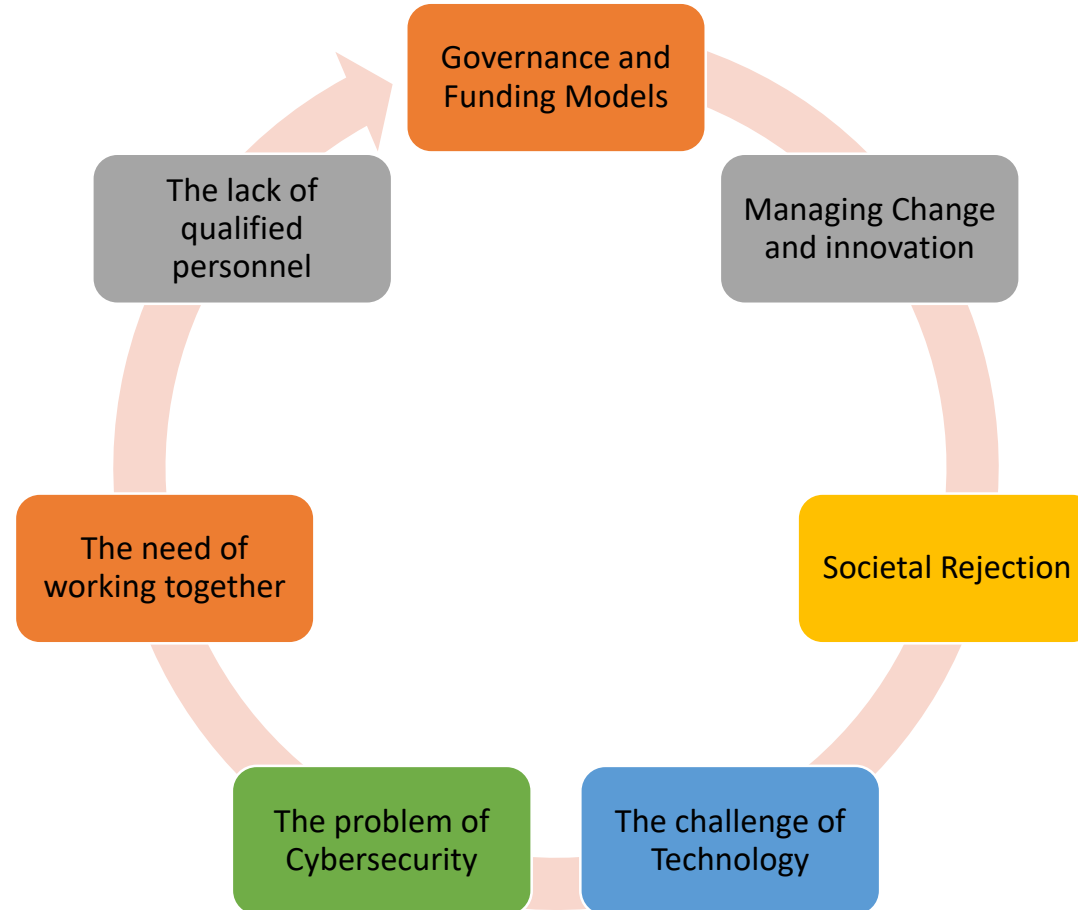
IoT Historical Review



Smart Logistics



Barriers of Developing Smart Ports



Σας ευχαριστώ για την προσοχή σας!!

Αλέξανδρος Κωτσόγλου, PhD
Διεθνές Πανεπιστήμιο Ελλάδος