CHALMERS UNIVERSITY OF TECHNOLOGY | Department of MECHANICS AND MARITIME SCIENCES

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Maritime Informatics - a contributor for a high performing and sustainable maritime industry

MIKAEL LIND

CHALMERS UNIVERSITY OF TECHNOLOGY

RESEARCH INSTITUTES OF SWEDEN (RISE)

MIKAEL.LIND@RI.SE

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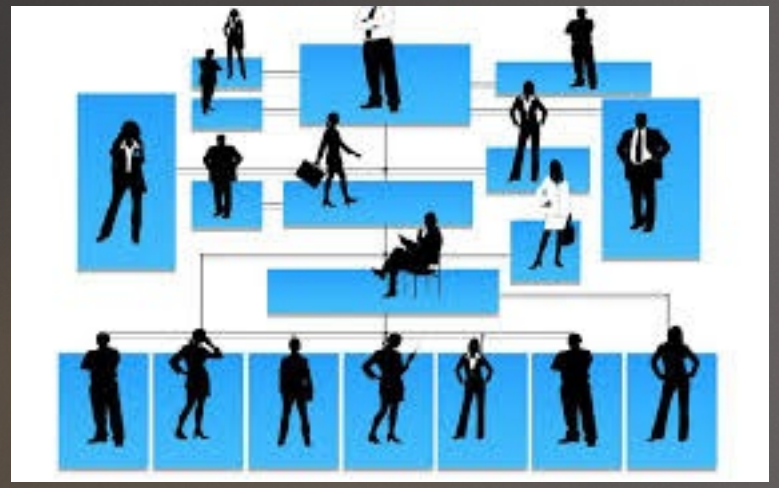
The maritime ecosystem is unique

- Oldest and largest **sharing economy**
- **Global**
- **Flat**
- **Self-organized**
- **Federated** and **democratic** governance
- **Asset intensive** with **high demands** on **optimized resource utilization**
- **Not allowing for one owner**
- **Episodic interactions**

An emerging paradigm: Collaboration and Digitalization as enablers

Balancing capital productivity and environmental sustainability



VS.

Simultaneously managing supply chain performance and global commons through leveraging the power of Collaboration (C) and Digitalization (D) to achieve positive Economic (E) and Societal (S) impact.[*)]

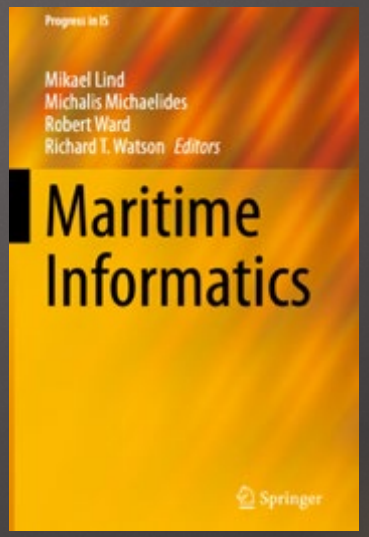
Maritime informatics …

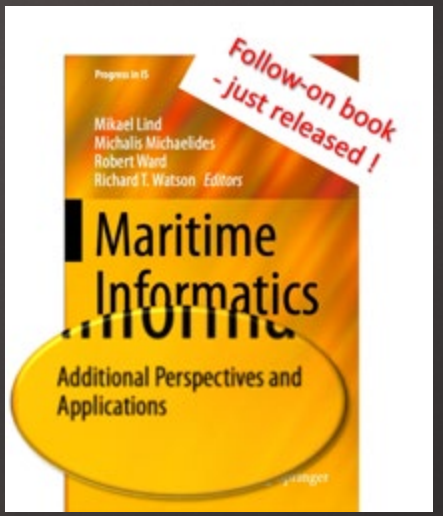
- Focused on Collaboration and Digitalization
- Balancing capital productivity and energy efficiency
- Responds to organisational, global, and humanitarian concerns
- Three focus areas:
  - **Digital Collaboration**
  - **Digital Data Sharing** and **Decision-Making**
  - **Data Analytics**

The application of information systems to increase the efficiency, safety, ecological sustainability, and resilience of the world's shipping industry

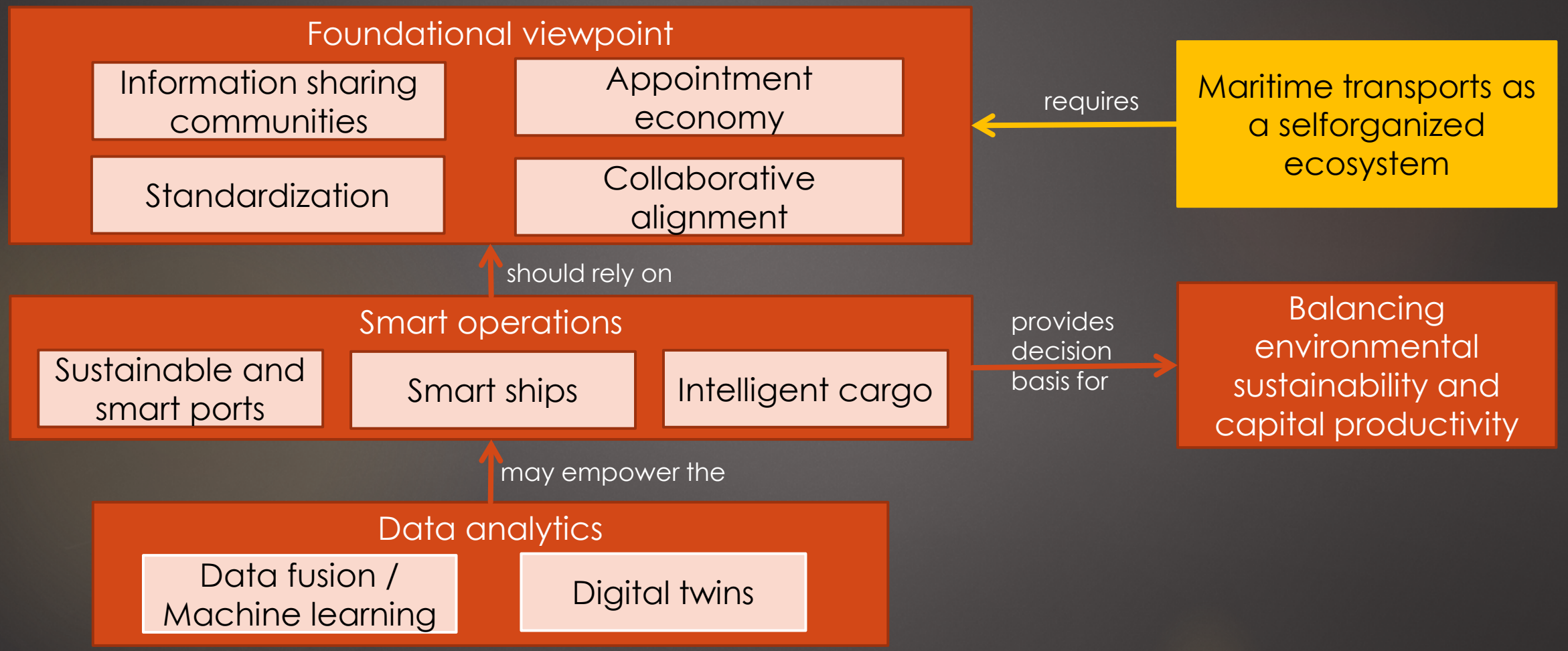
MARITIME INFORMATICS

www.maritimeinformatics.org

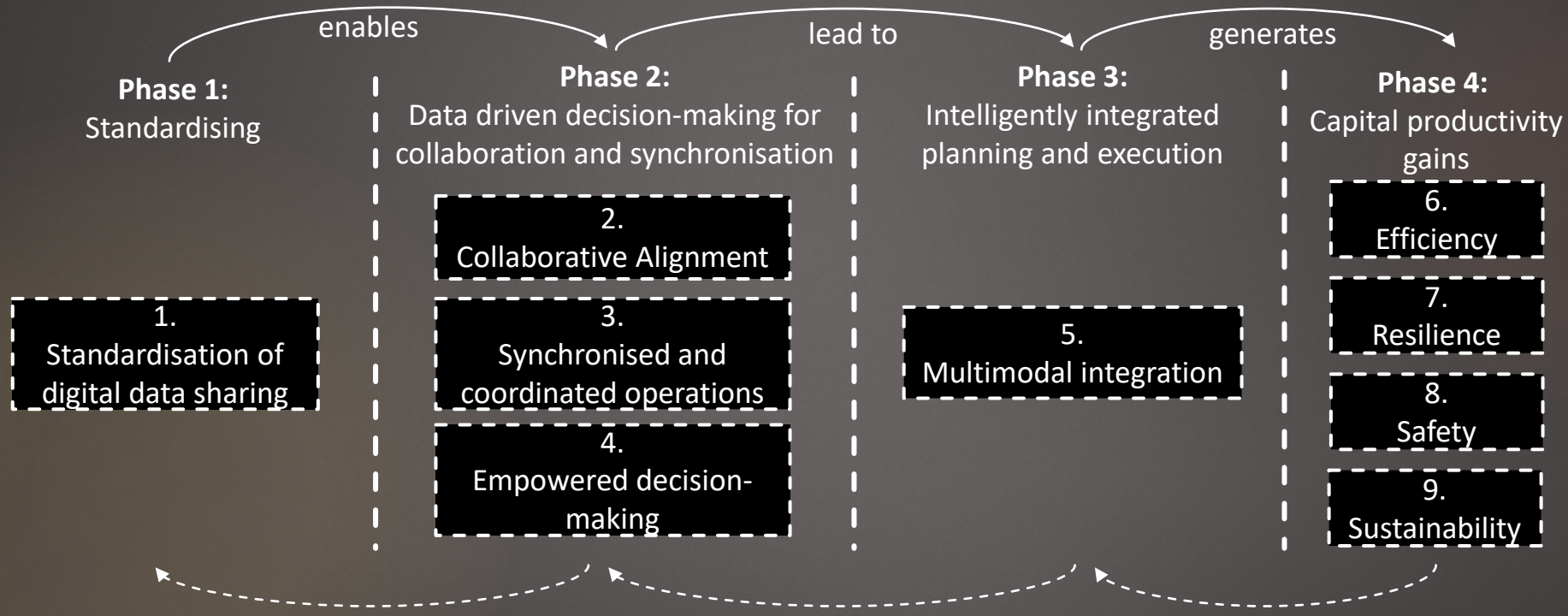


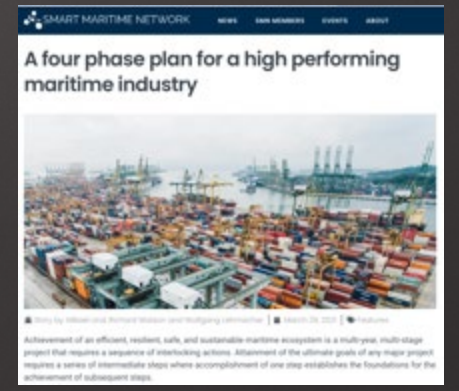


Applicational areas of maritime informatics



What is at focus and desired – Maritime Informatics enablers and effects





Two global challenges

- Challenge 1 – opening up the black box of global supply chains - Virtual Watch Towers

- Challenge 2 – responding to the needs of maritime decarbonisation

Concluding remarks (1)

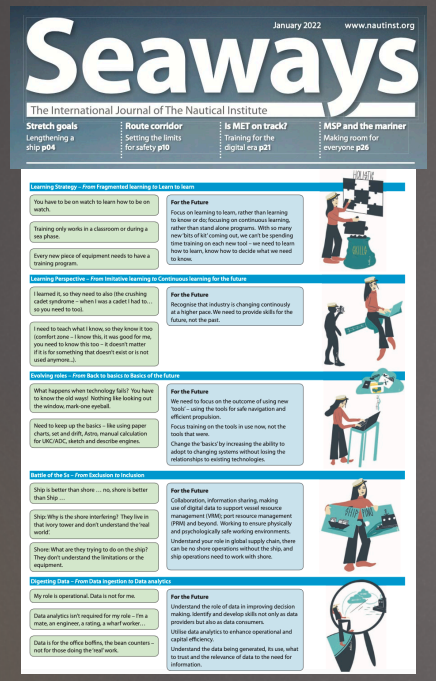
MARITIME INFORMATICS

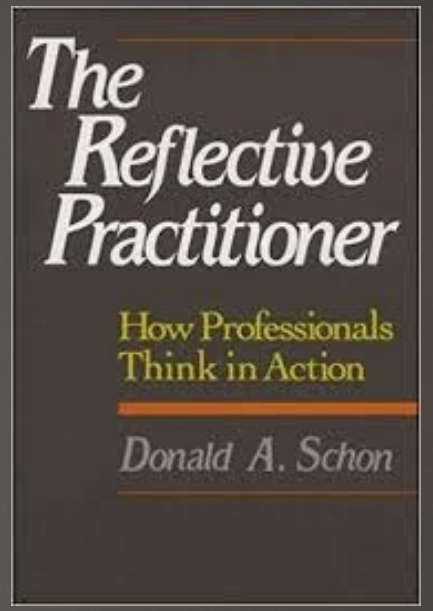
- An applied science for the maritime industry
- Engages both practitioners and researchers for a common goal
- Promotes standardized digital data sharing throughout the cargo chain
- Supports enhanced efficiency, safety, security, resilience, and sustainability in maritime transport
- Enables understanding, predicting, advising and improving maritime activity
- Enables seamless integration to the larger transport system

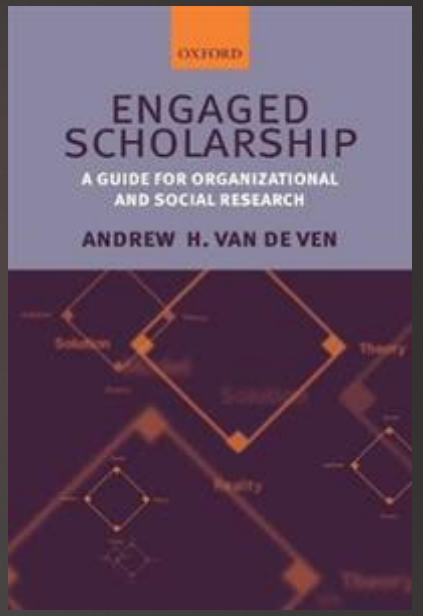
Maritime Informatics is the key to the future of maritime transport

Concluding remarks (2)

- Maritime Informatics:
  - A Science for change
  - Requires Engaged Scholarship AND reflective practitioners
  - Don't pave the cow paths
  - A driver for MET of the future







FOCUS AREAS OF MARITIME INFORMATICS

Digital Collaboration | **Digital Data Sharing** and **Decision-Making** | **Data Analytics**

Thank you!

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Mikael Lind
Research Institutes of Sweden (RISE)
Chalmers University of Technology

(Mikael.Lind@ri.se)

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