

# MOBILISATION FOR COLLABORATION AND PROGRESS IN SHIPPING





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Knowledge is more robust when built conjointly. But there is more to collaboration. If a (diverse) group of people is mobilised to co-create ground-breaking solutions to drive change along a value chain, an industry, or an ecosystem, the collaboration is expected to gain real buy-in for execution. This article is about mobilisation for collaboration and co-creation, outlining the results of recent research on key maritime issues, a framework for partnering, and the three collaborative initiatives Maritime Informatics, Maritime Decarbonization, and the Virtual Watch Tower (VWT).

**IDENTIFYING WHERE PROGRESS IN SHIPPING IS NEEDED**

In February / March 2023, 49 maritime industry experts from all over the world reported 20 issues considered to be major challenges in the maritime sector over the next three years. [The Delphi study yielded three schools of thought](#). The first identifies standardisation as an important school of thought. Maritime standardisation is associated with digitalisation, but aspects, like standardised procedures, processes, and physical infrastructures, are included. The outcome of the analysis indicates disagreements on the topic of data sharing. The second school identifies decarbonisation, energy efficiency, and cybersecurity as highly important. Those dimensions may seem scattered, but decarbonisation and energy efficiency are complementary pieces of the same puzzle. Given

**FIGURE 1.**  
[Generic Partnership Framework](#)

		Creation of joint efficiencies for ...			
High	Degree of scope and complexity	Ecosystem	partners in a cross-industry value chain	peers in cross-industry value chains	partners and peers in cross-industry value chains
		Industry	partners in an industry value chain	peers in industry value chains	partners and peers in industry value chains
		Chain	partners in a company value chain	peers in parallel company value chains	partners and peers in company value chains
Low			Vertical	Horizontal	Diagonal
		Degree of integration and complexity			
		Low	High		

damaging cyber-attacks and the need to respond to societal concerns around sustainability, this school of thought is characterised by business threats that challenge existing practices. The third distinctive school of thought mainly addresses social and environmental sustainability. All schools are about sustainability and digitalisation, all only achievable through collaboration.

**DIFFERENT PARTNERSHIPS FOR DIFFERENT GOALS**

Collaboration is not an easy business. But we know now that tackling challenges like decarbonisation and digitalisation requires that stakeholders engage in different forms of partnership (Figure 1). The different types of partnership are determined by scope of relationship, ranging from chain to industry and ecosystem

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collaboration, and the degree of integration, ranging from vertical along a chain to horizontal between peers to diagonal partnerships where chain partners, peers, and possibly other parties collaborate.

**THREE COLLABORATIVE INITIATIVES TACKLING MAJOR CHALLENGES**

Mobilisation requires an object of common interest. Therefore, collaboration can best be initiated through specific initiatives. We have selected three case studies to illustrate how we mobilise stakeholders and built communities. All three cases are diagonal partnerships but with different scopes.

**CASE STUDY 1: Collaboratively enhancing the knowledge base on Maritime Decarbonisation**

In an effort to enhance the knowledge base over, 70 practitioners and researchers have documented in 34 chapters their observations, knowledge and practical experiences in tackling the pressing challenge of maritime decarbonisation ([www.maritime-decarbonization.org](http://www.maritime-decarbonization.org)) in a [foundational book](#). The book Maritime Decarbonization builds on the [Practical Playbook for Maritime Decarbonisation](#) and a series of articles released in 2022. The publications are examples of how writing furthers thinking for action, providing four core components outlined as key concerns: scenario analysis, value chain mapping, enabler prioritisation, and partnership selection (Figure 2).

This initiative is diagonal and ecosystem-focused, as it cuts across adjacent value chains, such as [marine fuel](#), [shipbuilding](#), and [maritime operations](#).

**CASE STUDY 2: Collaboratively establishing Maritime Informatics as an applied research field**

Maritime Informatics ([www.maritimeinformatics.org](http://www.maritimeinformatics.org)), coined in 2013, is concerned with the [application of information systems](#)



**FIGURE 2.** 4-step path to structured decarbonising actions  
Illustration: Sandra Haraldsson

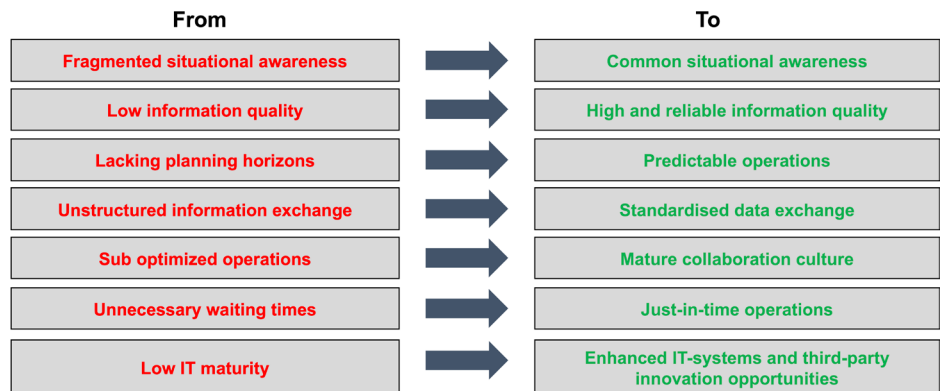
to increase the efficiency, safety, ecological sustainability, and resilience of the world's shipping industry. The applied research field emphasises three focus areas: digital collaboration, digital data sharing and decision-making, and data analytics. The community has grown to 250 practitioners and researchers, spread across the globe from different types of organisations, joining forces in developing concepts and sharing experiences from diverse test beds to enable transitions in the self-organised ecosystem of maritime transports (Figure 3). The Maritime Informatics knowledge base is reflected in many articles, and a [first](#) and [follow-up](#) book.

This is a diagonal industry partnership as contributors include practitioners, researchers, and government representatives, but the area in scope is the maritime industry.

**FIGURE 3.** Transitions at focus within maritime informatics

**CASE STUDY 3: Collaboratively co-creating a novel approach to supply chain management**

This case is the Virtual Watch Tower (VWT) ([www.virtualwatchtower.org](http://www.virtualwatchtower.org)), a cargo owner-driven and terminal-centric networked system-of-systems initiative to better manage supply chain disruptions in today's world of VUCA (Volatility, Uncertainty, Complexity, and Ambiguity), revolutionising data sharing and collaboration in value chains (Figure 4). The VWT is community-driven with a diverse set of actors in the global supply chain ecosystem – currently 19 industry partners plus a group of advisors – joining forces to prototype a solution led by the Research Institutes of Sweden (RISE) and Institute of High Performance Computing (IHPC)/ Agency for Science, Technology and Research (A\*STAR).





This initiative is diagonal and company-focused as vertical partners, peers, and academics contribute to creating value along individual end-to-end value chains.

### THE ART OF MOBILISATION FOR COLLABORATION

The above initiatives have only been possible through the contributions of participants from different areas and parts of the world. The global “community of experts” (individuals) and pioneers (organisations) that we are mobilising for specific tasks belong to a self-organised ecosystem (SOE) of independent parties that collaborate on an ad-hoc basis to co-create, like writing an article, white paper, and book, or running a change programme. In the global SOE, decision rights are distributed. In this informal setting, collaboration and contributions are voluntary. Participation is largely intrinsically motivated. Of course, there are some (in)tangibles that can be seen as incentives, like contributions to brand value or privileged access rights to information or tools. Collaboration is more common in crisis situations. Change-makers like COVID-19 and the US-China tensions can be considered contributors to crisis situations.

**FIGURE 4.**  
Networks of collaborating VWTs creating economic and societal capital  
Illustration: Sandra Haraldson

Decarbonisation and digitalisation became serious goals. Global warming is an existential threat far larger than any recent exigency. Digitalisation is now a must. Large-scale shifts require alignment and collaboration, which is not automatic. But increasingly, people accept that the world needs change and follow those that take initiative. Our cases prove the point.

Collaboration needs orchestrator(s) who act on behalf of the partnership. An initial step is to select a challenge and establish co-ownership by describing an appealing common object of interest. Providing a framework facilitates the effort ensuring clarity and efficiency. The orchestrator needs to ensure transparency. Communication on milestone achievements keeps things going. Real-time feedback greases collaboration, and sharing products of co-creation is the simplest form of reward.

### FINAL REMARKS - A CALL FOR REBALANCING OUR PRIORITIES

Collaboration is paramount in tackling global systemic challenges like climate change, unprecedented concentration of economic powers on few digital platforms, and global geopolitical tensions. This article showcases practical examples of successful (voluntary) collaboration as inspiration for those that seek guidance. The art of mobilisation for collaboration and co-creation is a critical capability in today's economy and society. “Survival is not mandatory,” as professor and consultant W. Edwards Deming said. But if we wish to create a more inclusive and sustainable world, which is required to make protecting the planet a similar priority as making profit, we better take collaboration seriously and learn fast.

### ABOUT THE AUTHORS:

Wolfgang Lehmacher is a partner at Anchor Group and advisor at Topan AG. The former Director at the World Economic Forum and CEO Emeritus of GeoPost Intercontinental is an Advisory Board Member of The Logistics and Supply Chain Management Society, Ambassador F&L, Advisor GlobalSF, Advisor RISE, and a member of think tanks Logistikweisen and NEXST. He is co-author of the Practical Playbook for Maritime Decarbonisation and co-editor of the forthcoming book Maritime Decarbonization.

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