



COLLABORATIVE WORKSHOP ON MAY 27, 2019 AT THE SWISS RE CENTRE FOR GLOBAL DIALOGUE

Digitalization and data sharing: making the maritime industry, safer, cleaner and more efficient

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Appendix 2: Short Summaries of Group Work

At the beginning of the workshop the participants were asked to choose either a safety, clean, inclusive or efficient lens. Later they self-divided themselves into roughly equal groups based on their lenses. In the end there were three efficiency groups, two safety groups and one clean group. In these groups, they were asked to reflect on the presentations they attended, how digitalization can be utilized to improve their group issue area and develop ideas for collaborative action.

Group Clean

The clean group recognised that reaching the IMO 2030 and 2050 emission targets, as well as financial and environmental unsustainability were two major concerns for the maritime industry. They also stressed that there is increased pressure from capital investors and customers to address climate change through clean business practices. Moreover, increased digitalization makes it harder to hide one's business practices thereby causing companies to become more transparent and accountable to investors and customers. Therefore, the maritime industry is ripe for a change in its business model to become more financially and environmentally sustainable. The group proposed that data collecting and sharing allows better for analytics, which in turn improves environmental benchmarks and standards. These benchmarks and standards will help create economic and social incentives for maritime industries to adopt and invest in better and cleaner business practices.

Group Safe 1

The safe #1 group observed that technology for increased digitalization is a reality and most everyone agrees in principle that embracing these technologies will improve business practices and make the maritime industry safer. They also recognized that digitalization creates new cyber security concerns which should be addressed, otherwise it can negatively affect safety. They highlighted how automation will free up and destress crew members, allowing them to focus more on safety. They also stressed that data sharing will improve standardization and regulation, thereby improve safety systems. However, there is still a resistance to change and adapt to these technologies. As such, basic tech infrastructure is not in place, making it harder to implement these new technologies. Moreover, there is no maritime body that is trusted enough to handle and manage data. Therefore, the group proposed an RFP (request for proposal) be issued to independent third parties, potentially tech giants like Google or Microsoft, to collect, standardize and benchmark the data.

Group Safe 2

The safe #2 group observed that the maritime industry is lacking standards and infrastructure required to digitalize. They highlighted how new technologies like sensors create simplified processes which improves the efficiency and the safety of ships. Also, they identified data sharing can produce incident pattern recognition, allowing the industry to effectively see and address common causes of incidents. Furthermore, they discussed how the short-term competitive advantage of "hiding" data creates a long-term disadvantage by preventing improvements to efficiency and safety through standardization. Therefore, it is in the long-term best interest of the maritime industry to overcome its competitive mindset and share data. The group proposed that an anonymous data sharing platform with independent governance be created to address the competitive and transparency concerns of the maritime industry. The main contributors should be ship owners/managers, port authorities and charterers. This platform would only be accessible by contributing members and the data would be submitted anonymously.

Group Efficiency 1

The efficiency #1 group identified that the competitive mindset of the maritime industry prevents companies from collaborating with each other to improve efficiency and create standards. Furthermore, there are no effective



governmental controls that'll set standards and force these companies to comply and cooperate. Therefore, in order to fully benefit from digitalization, the maritime industry needs find a way incentivize data sharing to overcome the competitive mindset. Using the example of the airline industry's Skywise data sharing platform, the group discussed how if a few industry leaders cooperated to share data amongst themselves this could improve the efficiency of their operations. This would create an incentive across the maritime industry for other companies to cooperate and reap the benefits of improved efficiency, creating a bandwagon effect. However, due to lack of knowledge in the maritime industry, there first needs to be an analysis of successful data sharing platforms in order to understand how it is done, how it would work, what are the rules and how to make it a success.

Group Efficiency 2

The efficiency #2 group identified the lack of on shore integration, imbalanced information flows, different port administrative systems and disparities in shipping capacity and cargo availability as some of the important efficiency problems in the maritime industry. The group found that digitalization can improve information flows and predictive analytics for cargo shipments. Also, it can create the impetus for standardizing systems. In this way, the maritime industry can use digitalization to effectively address its efficiency concerns and become more transparent and profitable. They also observed that the technology for digitalization exists, but the current lack of standardization of data and systems prevents its full implementation. Therefore, the group proposed that the first step the maritime industry should take is creating a common language and understanding across the players of the industry. Once everyone is on the same page, meaningful collaboration and data sharing can begin.

Group Efficiency 3

The efficiency #3 group identified that despite the seemingly obvious fact that digitalization is the future and the future is here now, there is still a surprising lack of motivation to digitalize and there are no global standards for digitalizing and data sharing. This lack of standards makes it hard for the maritime industry, with little knowledge on the subject, to implement digitalization for the use of improving efficiency. They highlighted how currently 85% of goods are transported inefficiently and pointed out a couple of key efficiency issues which could be improved from digitalization. These were the duplication of standards and functions, port planning, collaboration and effective regulation. They discussed how data sharing can help improve these inefficiencies and by optimizing the supply chain. They suggested developing a PoC (proof of concept), which should start small and simplified in order to decrease complication/complexities and increase accessibility. Once it's become useful in its certain niche, it can then be expanded to include other aspects of the maritime industry.