

In 2015, world seaborne trade surpassed 10 billion tonnes for the first time in history, according to the United Nations Conference on Trade and Development. The value of global merchandise exports totaled USD 15 trillion last year, rising by 32% over the last decade, as per World Trade Organization data. However, McKinsey & Company has also estimated that there is a staggering USD 17 billion of waste in the port and carrier business processes alone. These internal inefficiencies stand in the industry's way of delivering higher profit margins and providing better services to the world economy.

he global maritime shipping sector must prepare itself to compete in the modern data-driven world. Despite the fact that the industry has traditionally been slow to change in general, and to adapt to new technology-driven business models and processes in particular, it simply needs to pivot toward 21st century solutions in order to stay competitive and better satisfy customer expectations.

Getting rid of the ballast

The global maritime shipping industry players are still utilising their aging technology infrastructure, which is one of the key barriers for real-time data exchange. Furthermore, they often use their own tailored systems with proprietary message formats. While the cost and complexity of running these legacy systems are sufficiently high left alone, they're also more and more slowing down the much needed progress of adopting new solutions, hence further fanning the flames of the already aggravated operating and cost inefficiencies. In other words, it's a vicious IT-business cycle.

"The main reason for the challenges and inefficiencies is that the core legacy IT system from decades ago is still in place today," said Jaakko Elovaara, CEO at Youredi, a company specializing in providing the cloud-based Integration and Analytics Platform as a Service (iPaaS) solution, with a particular focus put on global supply chains and logistics. "Making radical changes is perceived as a risky move in the industry, however, cloud-based data integration frees businesses from the burden of owning and operating the required software and hardware that is needed to exchange information efficiently between different applications," he added.

To become a modern business, utilising all available data is crucial. This information has traditionally been located in separate data silos – (over)built multiple times throughout the years for different business applications and purposes, owned by distinctive parties, and developed with the use of various technologies, some of them like chalk and cheese. Now think of multidepartment organizations – such as global shipping companies and their partners, clients, authorities, etc. – that

must utilise and update their data across these different systems, a process typically requiring an extensive amount of manual, error-prone work, updated every so often. "These systems are incapable of real-time data sharing, therefore the coordination between stakeholders and partners is poor. Real-time information sharing adds a layer of visibility and predictability to all processes and operations. It is indispensable for all stakeholders, especially for supply chain partners," Elovaara remarked. He then went on to say, "Additionally, the industry stakeholders use a large variety of different data formats that are not making data sharing less complicated. Data quality is not very good and it's hard to enrich it with old technology."

Electronic Data Interchange (EDI) is the most widely used messaging format in the ocean shipping industry. Dealing with EDI is a burden for the sector, as this format is too restrictive, but most of all because its messages are often full of inadequate or missing data. At many companies, human labour is used to correct the data quality, which by all means does not guarantee



having a quality result in the end. "Much of the processes is still based on paper and human intervention. This is slowing down the operations and it is extremely expensive. Processes need to be automated and digitized rapidly and cost-effectively to save time and improve margins," Dean Baxter, Senior Vice President, Youredi, commented.

Data and system integration can free the industry from its heavy and in the end risky reliance on EDI. Some of the major issues, such as carrier to terminal coordination, difficulties with terminal operations, coordination across carrier alliances, supply chain visibility, information sharing, and predictability could be easily avoided. Industry participants need to prioritize digital transformation, develop a holistic strategy of achieving the desired (and often also surprising yet positive) effects, find the right technology provider, and attack the problem across all segments of the business.

Focusing on the core business

Technology will have a significant impact on shaping the future of the industry – either because the shipping lines will themselves embrace the e-change, or because new parties will enter the market reshaping it on their own bat. Cloud services, automation, data and system management, and the industrial Internet of Things (IoT) are just a few of the technologies that the key players in the shipping industry must incorporate into their daily operations to stay competitive in the game.

Youredi's iPaaS is widely used in the global shipping industry to execute a digital transformation strategy. The company not only helps to tackle integration challenges while ensuring data protection and security, but

also takes cost restraints into account, particularly because the traditional Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT) related transactional and message size-based pricing is getting outdated by modern flat rate, cheaper models and levels. "Youredi helps some of the biggest stakeholders in the industry, such as steamship liners, startups, shippers, and terminal operators to become more competitive by supporting their digital transformation with a wide range of vital services. Our services help with data management, transfer, transformation, and translation, as well automate processes between partners and systems," Elovaara explained.

Better data and connectivity management, coupled with real-time information sharing, brings many benefits to all stakeholders in the industry. "Decision-making is most probably improved the most thanks to our technology, followed by increased cost efficiencies and gross margins, greater transparency and visibility incorporated into processes and shipments, and faster end-customer delivery," Baxter noted.

Youredi has been connecting major industry players' systems and enabling full automation and digitization of their processes. Additionally, Youredi has been validating information about booking requests, transforming the data formats of different information, and transferring this info between relevant stakeholders. Recently, Youredi has also been developing a track and trace solution based on IoT sensors and devices. This equipment can deliver information on shipments through a gateway. This information is central to understanding the status of the goods, which is for example critical in case of perishables, or allows for better planning and optimising vessel loading and unloading.

"Cost-efficient data integration solution and fully-automated digital processes are vital for the global ocean shipping industry. Youredi can rapidly connect and bring onboard new customers and partners while the customer can focus on their core business. The agility of our solutions helps the global shipping industry to overcome major challenges and inefficiencies," Baxter summed up.

The tech-race

"Predicting the future is difficult, but we are confident to say that technology will have the power to shape the future of the ocean shipping industry. Those participants of the industry that are navigating their development initiatives right will have a major advantage compared to those that don't start their digitalization journey. The global ocean shipping industry is an important part of the emerging world economy, but its e-infrastructure requires development," Elovaara underlined.

The 2010-founded company, with offices in Helsinki and in Woburn, focuses on cloud-based integration services. Youredi helps its customers to improve information exchange within their businesses and value networks to simplify operations and provide full visibility into supply chain processes. Apart from the Integration Platform as a Service (iPaaS), the company offers a Business Activity Monitoring (BAM) tool for real-time analytics and a Chatbot. For more info please

visit www.youredi.com or e-mail/call directly at barbara@youredi.com/+358 407623356.