



# MARITIME SHIPPING

## PATHS TO PROFITABILITY

Kris Kosmala, Industry Thought Leader, Malaysia

Recent economic events around the world look like a news form a global battlefield consisting of flared up trade battles between some major economies. Clearly, the entire shipping industry is watching those developments and tries to de-risk their long term investment decisions and short term tactical moves. It is a little bit like playing a game of tennis blindfolded and estimating the trajectory of the incoming ball from the sound made by the racket of the opponent. This uncertain world is reflected in the different strategies employed by the various carriers and various ports aiming to protect their trade volumes and contain their huge capital investments in infrastructure and equipment.

### **THE CARRIERS: BIGGER AND BIGGER SHIPS**

Among the members of the investment community, a pessimistic view of the industry sees a third of carriers unlikely to survive another serious economic downturn irrespective of the variations in their respective business models. The

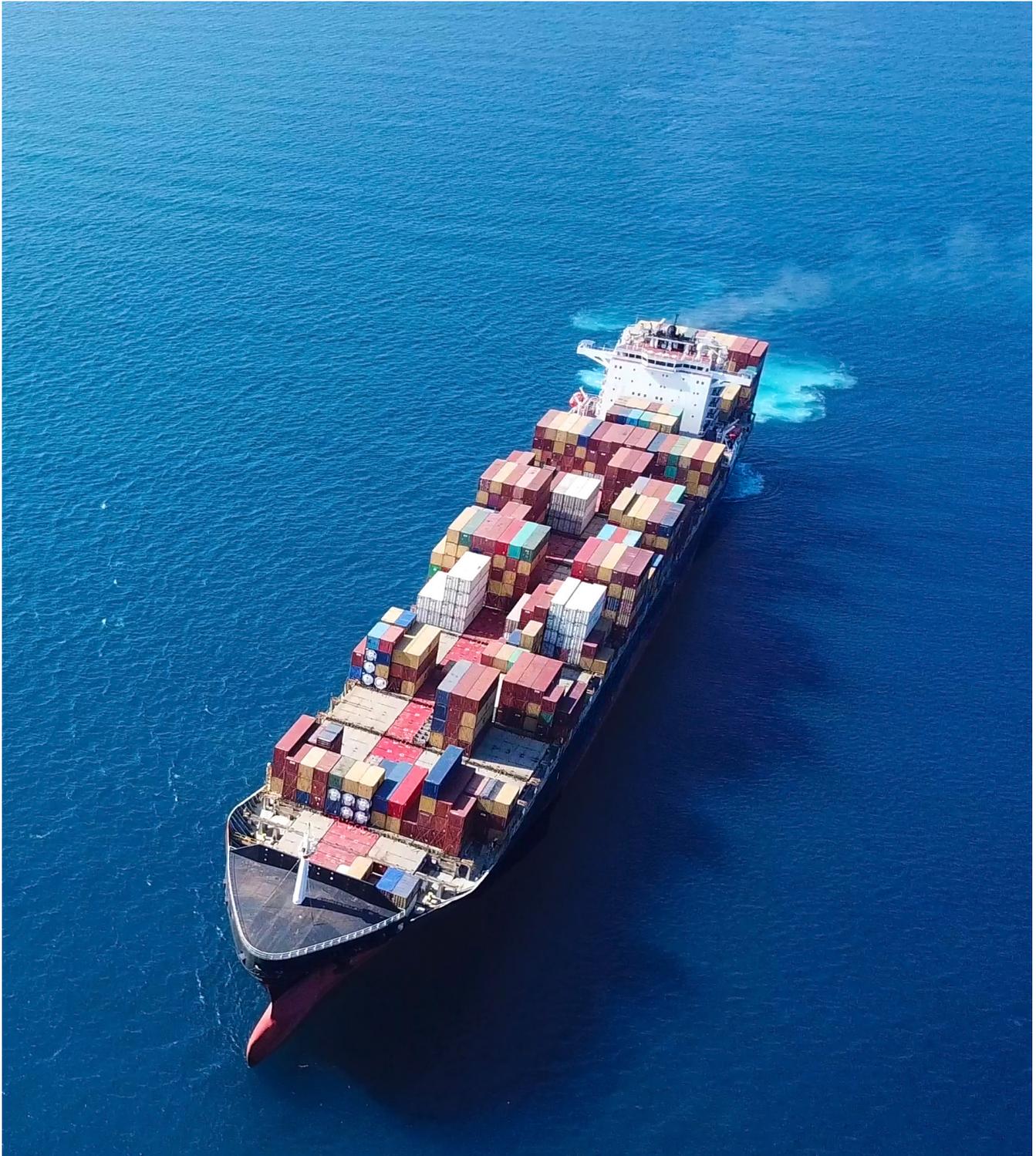
health of the industry in aggregate suffered for many years, as fierce competition and regulatory compliance wiped out the effects of any temporary surges towards profitability. The next decade features more of the same: tight margins, slow growth in revenues, and increasing environmental compliance costs. The advantage of new, ultra-large container vessels initially enjoyed by a few carriers dissipated, as cheap credit combined with government incentives to shipbuilders led to an explosion of orders and deliveries of ever larger vessels.

In their traditional response to the customers, the carriers continue to focus only on the port-to-port cargo part of the supply chain journey. Yet the key to carriers' sustained profitability in the next decade will be to integrate themselves deeper and deeper into that overall supply chain execution. For the carriers to be effective, they have to gain better knowledge of each customer's supply chain journeys, approaches to supply chain cost management, and knowledge

of supply chain optimization. Digital-based rethinking of carriers' processes will play a crucial role in achieving that.

Despite the headlines about digital disruption in shipping, the carriers seem to be holding their own. Ship-tech start-ups and large tech companies have not managed to disintermediate the carriers, causing only minor ripples in how the slot space is being offered, the rates are calculated, how the passage is contracted, and how the accounts are settled. While the disruptors kept wooing the VC community, the carriers proceeded with their own internal digitalization agendas and AI-driven data analytics projects.

From what I have seen, many carriers haven't set their sights nearly high enough in response to disruptors or even the lessons they provide. Instead, they've been cautious, preferring copycat digital initiatives designed to emulate moves by competitors rather than using digital strategies to enrich their business models. Inability to look at themselves differently, the carriers find it difficult to know exactly



what to do, leaving them confused about where to focus and where to allocate their resources.

The carriers venturing into digitalization would be advised to watch how Amazon or Alibaba go about penetrating their suppliers' and merchants' supply chains. They use their marketplace platforms as major vehicles of their market expansion, utilizing those very same marketplace platforms to allow their partners to integrate the analytics of various

anonymized transactional data. Henceforth, they improve the end-to-end supply chains of the whole ecosystem, not just their own. As those e-commerce behemoths increase their market presence, their investments into vertically integrated transport chains will create competition to carriers' attempts at establishing the same offering.

When I first heard of Datalens, I thought its natural long term vision would be to turn itself into a marketplace. At this moment, it is transaction-oriented and it

doesn't have any important marketplace features. So, how could it evolve? Well, for one, all carrier Datalens participants could offer a curated and vetted mix of internal and third-party offerings. This services aggregation model could provide customers with easy, one-stop access to shipping, financial and insurance products to name but a few. It would also offer the ability to address multiple customer supply chain needs through a single, integrated channel.

Such a supply chain-servicing supermarket would take the focus away from annual rate negotiations and the nickel-and-dime discussions and allow carriers to focus on the high-return side of their businesses. A common marketplace would enhance customer-carrier relationships by including recommendation engines, which use transaction, supplier, and customer data generated from the platform to provide personalized suggestions and offers to the buyers, yet also to the suppliers. This is exactly what the Amazon marketplace does. This segment-of-one style service would substantially reduce the risk of disintermediation by many external disruptors.

### THE PORTS: NOT BIGGER AND BIGGER

In the wake of the ever expanding fleet of ever larger vessels, the carriers forced the ports to spend significant money on infrastructure and equipment. Bigger ships required wider channels, stronger berths, farther reaching cranes, bigger yards, and superb hinterland logistics network to both evacuate and deliver containers. In essence the approach was to build bigger, using bigger machinery to process greater quantities of cargo. Those infrastructure investments are not cheap. They take long time to deliver and an even longer time to realize the desired ROI.

Further, the big ship phenomena, evolving carriers' operational practices, and more intelligent fleet/service/rotation alignments will make the next decade quite risky for container-focused ports and terminal operators. Also, many ports will see their cargo volumes changing as of China refocusing from a manufacturing, export-oriented economy to one with growing GDP on the back of services and consumption. Secondary impact on volumes will come from rapid erection of protectionist trade barriers that will affect global economies for years to come. While in 2018 the ports handled over 1 billion containers, the predicted 10-year growth by some 70% will most likely materialize in smaller ports spread across developed and developing economies.

With a lot to gain in operational efficiencies, many ports keep innovating on the basis of new technologies arriving daily, but any material impact will be felt from the artificial intelligence-driven analytics fleshing out hidden opportunities to cut costs and grow revenue by improving services for customers. The issue of data analysis in ports is not new, but ports settled on old technologies and old thinking about data will be held from performing meaningful analysis and making impactful decisions. Thus,

the emphasis is still on better reporting instead of on any meaningful business model changes. Abundance of IoT enabled equipment shifted focus to equipment-based analytics, taking attention away from macro-decisions at port and terminal levels based on data other than that generated by IoTs.

Unfortunately, even with that explosion of data inside and outside of the ports and terminals, not many ports have shown that they converted all that new and bigger data into better planning, investing, commercial and operational decisions. This could be rooted in two problems: firstly, a lack of commercial-off-the-shelf, comprehensive AI solutions that cater to business needs end-to-end, and secondly from suggested actions and the level of internal knowledge about how to go about using more data for all types of decisions happening within ports and terminals.

As an example, massive amounts of commercial and operational data has been made available to ports, yet they have not managed to convert it into any new transformational approach in how they price and negotiate contracts for vessel calls. However, such new thinking is already needed, as those ultra-large vessels changed the operational natures of the calls themselves. Essentially, traditional contracts for ports-carriers services and the way those contracts are being discussed and enforced are too divorced from their context to predict the behaviours of all carriers the port and terminals would like to handle.

Alternative data sources such as vessel management platforms and the aforementioned service offering-oriented marketplaces could be a reliable source of supply chain behaviour data that is not invasive of vessel operators and shippers commercially private information. Developed methods and technologies assuring data privacy is consented and permissioned are there for the ports to leverage, but that will not happen until the ports develop capabilities to ingest that data and use it to improve effectiveness of how they operate and how they manage increasing their profitability.

### CAN COLLABORATION WORK?

Then there is the issue of port collaboration to better handle the carriers and to let the ports become actors in the end-to-end supply chains of owners of the cargo that flows through the ports. They need to coordinate and ensure carriers can efficiently operate their larger ships in the confined spaces of the ports and exchange more information about vessels' activities in their ports, so that ports on each vessel journey make proactive decisions

benefiting ports early, rather than last minute decisions benefiting the carrier, but representing major unplanned costs to the ports.

Above all, the ports need to think of creating a common port-operated marketplace to counter what the carriers will eventually do about creation of their own. Ports jumping onto Datalens is a double edged sword. They could spend their precious few IT resources on joining and utilizing transaction-driven platform, or they could create their own Datalens-like platform, but with focus, that is more useful to ports and their terminals.

There are already port-oriented platforms that could be adapted for this task, most notably CALISTA and the Global Shipping Business Network (GSBN), yet in reality there are too many. Development of a single, universal platform acceptable to all ports and their partners will be very difficult, hence, connecting multiple platforms implemented by various ports might be a better approach. The Connected Ports organization is currently developing a standard API and a data hub that enables connecting disparate port platforms into one coherent mechanism to serve the sea and the land operators.

There is no doubt that we are living in the transformational years of the maritime industry. There is sufficient internal will to support this transformation, so whether you work for a port, a terminal, or a carrier, get interested, get involved, and push the innovation forward for the benefit of everyone in the maritime shipping industry.

## MORE KRIS KOSMALA PAPERS

### ABOUT THE AUTHOR

Kris Kosmala brings many years of extensive global experience as a business operations executive in the services and technology industries. He has held senior roles at global organisations with a specialism in the supply chain including Quintiq and Royal HaskoningDHV. He regularly speaks at industry events and features in industry media discussing application of the latest information technology and automation innovations in business and operations related to global supply chains.

### ENQUIRIES

kriskosmala@yahoo.com