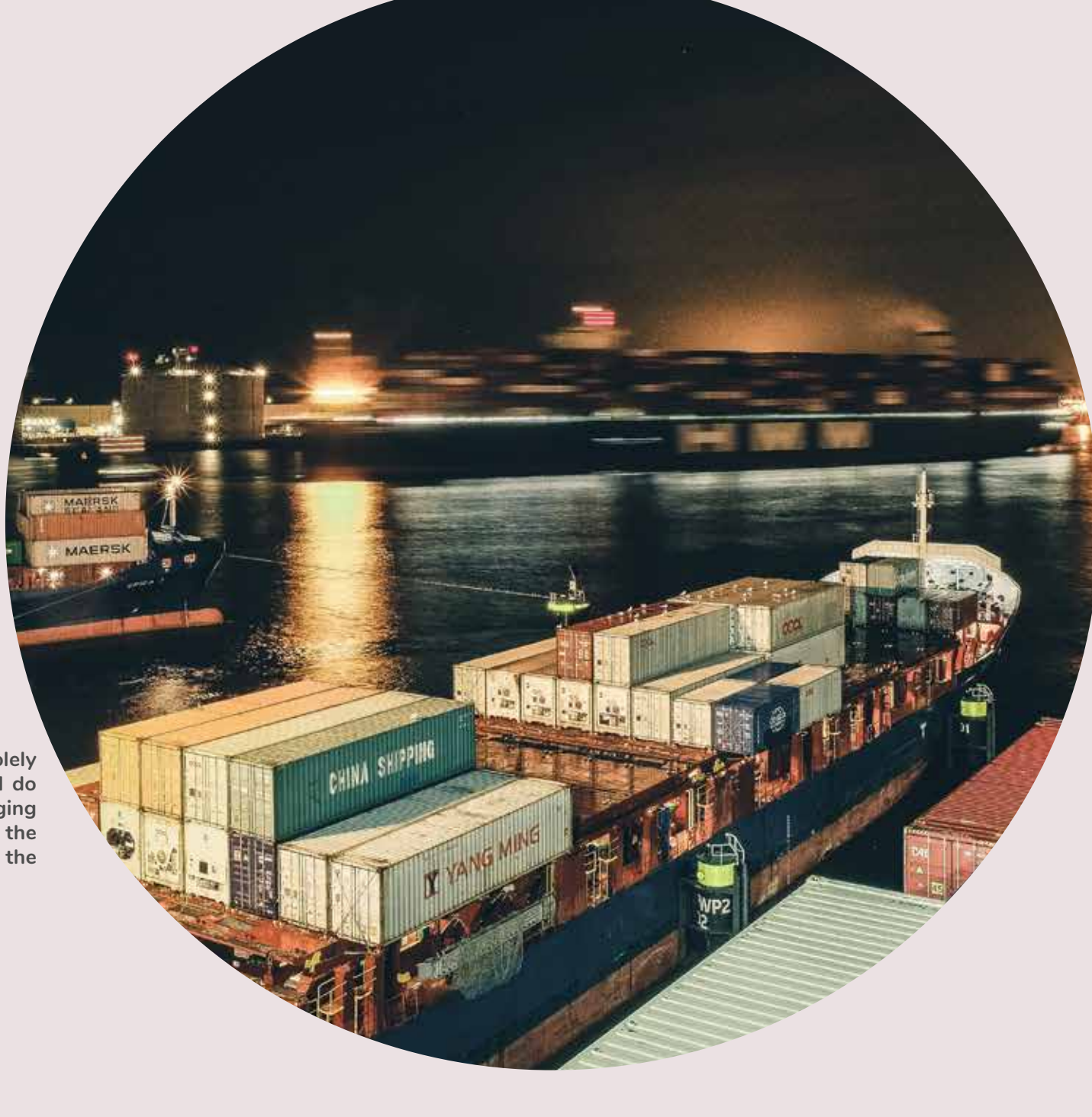# Supply chain digitalisation

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The views expressed are solely from these organisations, and do not represent that of the Emerging Stronger Taskforce (EST), the Alliances for Action (AfAs), or the Singapore Government.

COVID-19 has undoubtedly disrupted the way the world economy is trading. Compounded with geo-political tensions, long-established supply chains and networks are being disrupted, and new nodes and hubs are emerging.

Meanwhile, technologies have been advancing exponentially where speed to value, robustness in trust and ease of use have made it possible to accelerate processes from weeks to seconds.

If, as a nation, we seize the opportunities, put in the right investments and have the courage to transform, we will be able to Emerge Stronger.

The centers of gravity in the global network of trade and commerce would be those that offer the most efficiency and cost-effectiveness to the entire value chain.
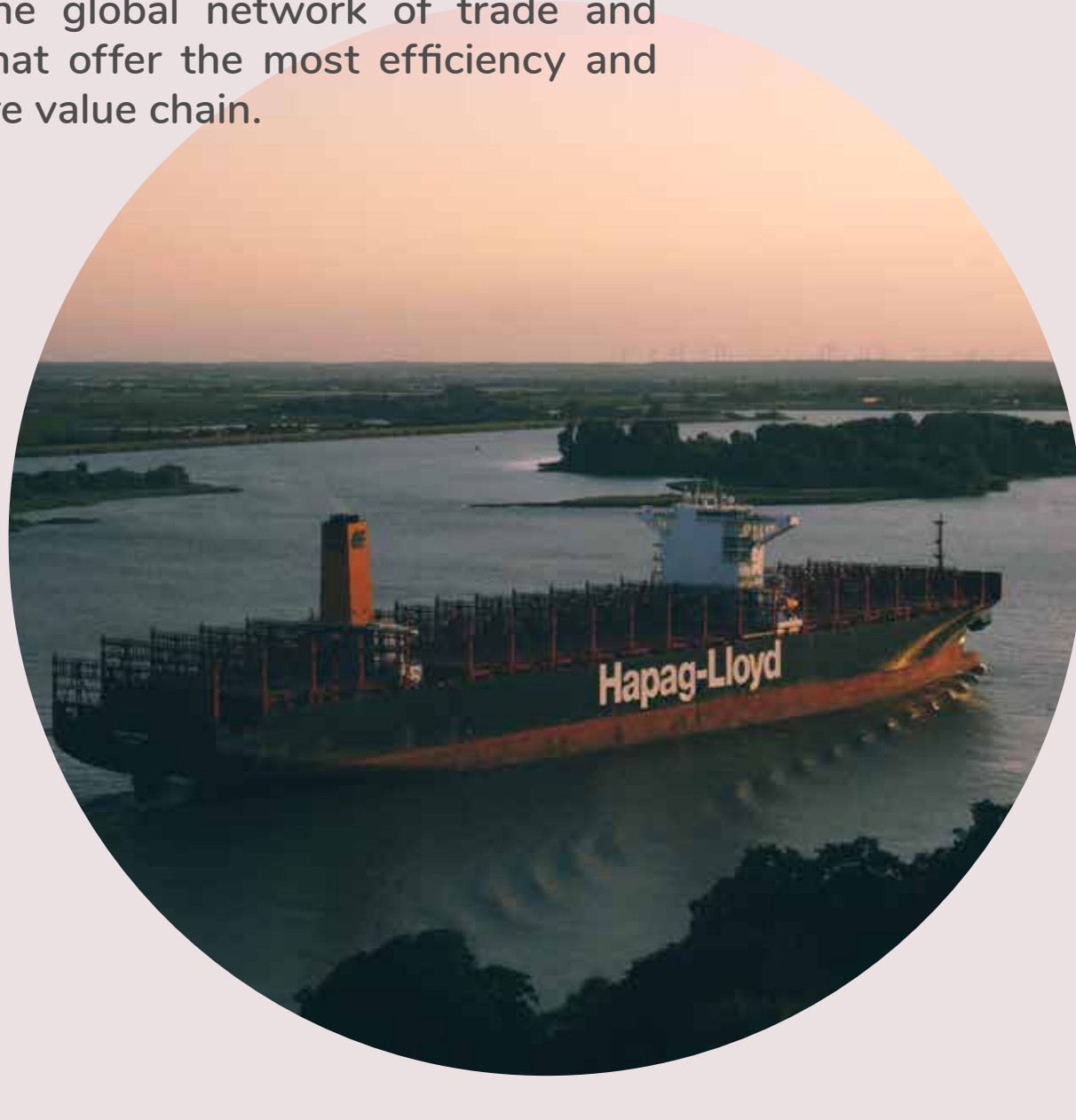
Where we are now

For many stakeholders in the industry, pain points arise from the inefficiencies and lack of information transfer between the stakeholders in the supply chain ecosystem. It is common to see information being exchanged through manual processes, such as through hard copies or ad hoc channels like text messages or emails, followed by frequent phone calls between the various parties.

While a lot of this data is already available in individual stakeholder's systems, there is no common digital highway that facilitates the exchange of information in an efficient and secured way between the stakeholders in the ecosystem. Having a Common Data Infrastructure (CDI) for the supply chain ecosystem would help address many of these pain points.

To illustrate, we'll first look at trade financing. Today, the primary way that banks assess creditworthiness of borrowers in the supply chain is through requesting for information which borrowers would provide. Where possible, alternative sources of information related to the application could be tapped on to enable further checks and verifications.

With a CDI, pertinent information about the trade could be leveraged on and efficiencies and risk controls would be greatly improved. Instead of banks having to separately ask organisations for the relevant information for cross-checking, which can take days or weeks, the CDI would be able to achieve this electronically within seconds.

Examples of data points could be the key data elements of the sales contract for the trade, and the vessel details including the dates, and type of cargo. Since this data already resides in the systems of each corresponding stakeholder in the actual trade, what is needed is to feed the data into the CDI.

Another use case is around logistics congestion. Container cargo that arrives at Singapore's ports is transported by hauliers to warehouses and depots. Cargo that is to be exported through our ports is also packed into containers and transported by the hauliers from these locations. It is not uncommon for the trucks to queue for hours at pick-up or drop-off locations. There have also been occurrences of wasted trips where upon arriving at the locations, there are insufficient containers to be picked-up.

Throughout the logistics process, many phone calls, text messages and emails are exchanged between the parties in order to coordinate the arrangements. Information for each trip could contain data elements like the depot inventory data, booking time slots and GPS location of the trucks. Similarly, this information is already residing in the various systems and can be contributed to the common data infrastructure, which can then be tapped on to enhance the planning process.

The potential upside of the solution would not only mean improved labour and asset productivity for the hauliers - throughput at the depots would also increase and carbon footprint greatly reduced, with fewer trucks waiting in queues with their engines running.

There are other use cases where having data exchanged along the supply chain digitally through a common data infrastructure could reap benefits, especially for data elements that are already exchanged through manual and ad hoc means today.

What it takes for us to get there

We have to remain grounded and pragmatic in order to bring every member of the ecosystem along in this journey. We shouldn't transform for the sake of transforming, nor take solutions from elsewhere and force them into our context. The initiatives identified address real issues and pain points that we see on the ground. This is critical to ensure adoption and take-up by the stakeholders in the industry.

In addition, this digital transformation needs to go beyond technology to also consider the people in the process. There will be individuals with the view that current processes have served us well and have brought us the success we see today. Why change when nothing is broken?

Furthermore, what will happen to the tasks that some people have been doing for decades, such as filing papers, processing forms, couriering binders and making calls?

Upskilling is thus a critical and key pillar of this transformation. No effort should be spared to upskill every single person and help them grow in their digital maturity. It is no longer a question of if, but when manual and repetitive labour can be automated.

This is a chance for all individuals and organisations in the ecosystem to come together as one, to make a difference. This is a chance for all to open up on the pains and issues they have been facing every day in their operations. This is a chance for all to contribute their ideas on how we can build a better tomorrow.