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RESEARCH & INSIGHTS

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Dependency and Vulnerability In Our Supply Chains

We spent much of last year making sure that our supply chains were adaptable and resilient to the market conditions and ensuring a consistent flow of goods from manufacturers to consumers. Largely, the industry rose to the challenge and now more than ever, consumers know about and understand what a supply chain is and how it affects them.

We did a good job navigating 2020, but the question that remains is - how do we best prepare our supply chains for further disruption whilst maintaining business continuity?

Like most industries it is easy and simple to follow current operating procedures with very little emphasis on their potential risks, but is that enough? This week, global supply chains are facing the consequences of this maintenance of the status quo with

the Ever Given in the Suez Canal. The current event has highlighted the need for continued risk evaluation and mitigation.

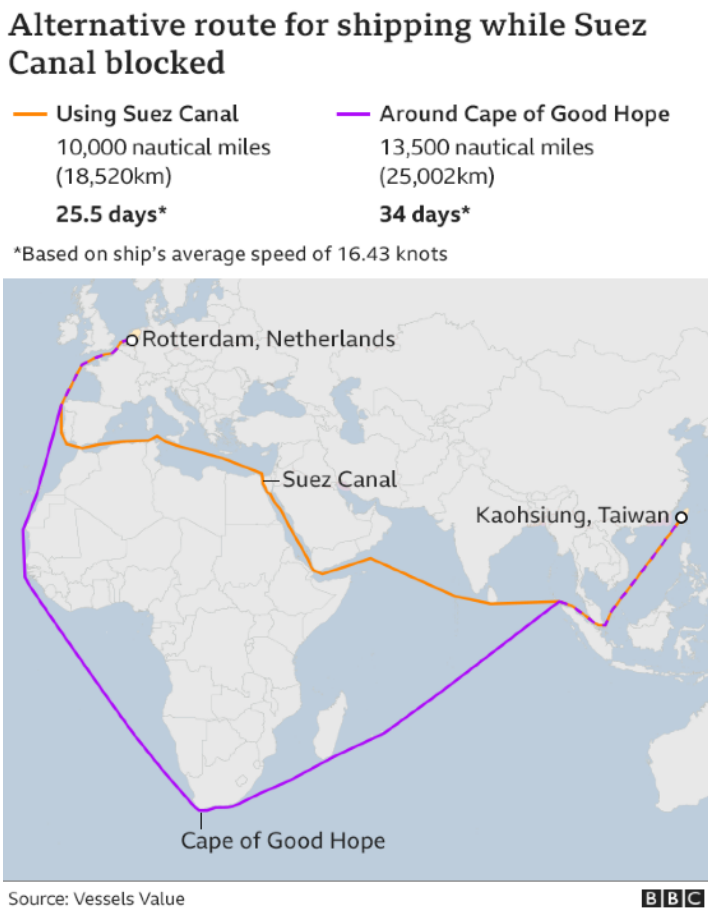
The ship Ever Given has been stuck, blocking the Suez Canal for nearly a week now. This single event has done more to highlight the vulnerability of shipping routes in one week, than risk analysis has done in more than a decade.

Long taken for granted, as an industry we all accept that the Suez Canal and for that matter of fact, the equally important Panama Canal are both narrow and have significant limitations but the grounding of Even Given has brought home just how reliant we are on these passages to support global trade. With the Even Given, and more than 350 ships backed up as this article goes to press, we are faced with two obvious but not exactly infrastructure changing options:

1. Wait for the Ever Given to re-float which could take weeks
2. Add 15 days to shipment journeys by traveling an additional approximately 7,000 kilometers (4,300 miles) around the southern tip of Africa

Neither option is ideal for the oil, consumer goods such as perishable food, clothing, furniture and auto parts currently sitting in Suez Canal traffic. According to Richard Meade from Lloyd's List westbound traffic is estimated to be worth about $5.1 billion (€4.3 billion) a day and Eastbound traffic is worth some $4.5 billion. **This means that about $10 billion worth of goods are now blocked.**

According to Statista, if the situation is not resolved swiftly, the impact on oil prices could be significant given that around 10 percent of seaborne oil transits the Suez Canal. By some estimates, around 10 million barrels of oil are now backed up at both ends of it. This is a major disruption to global oil supply, but it sheds light on a an even bigger issue – our supply chains are vulnerable to chokepoints globally.

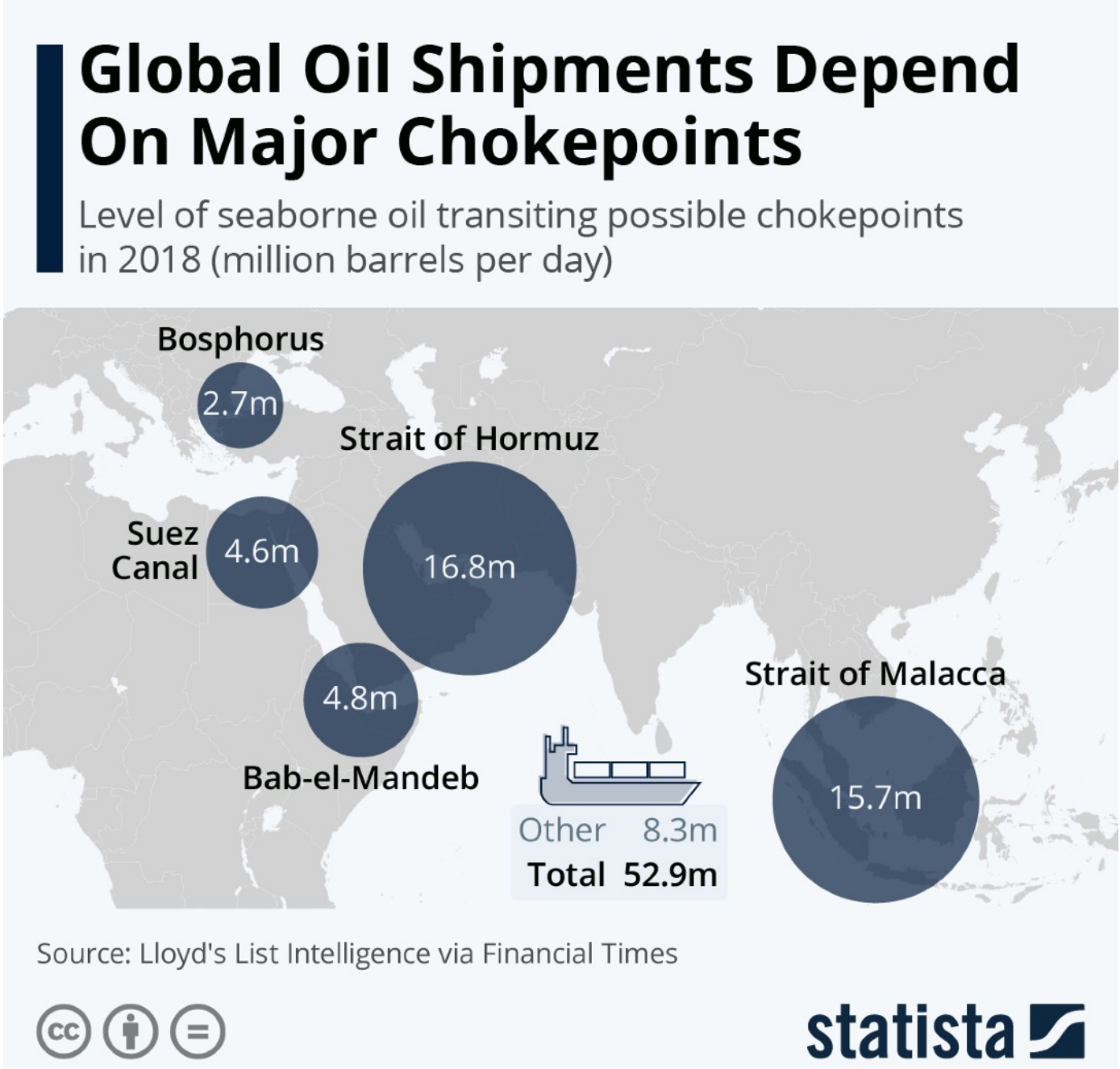


Source: BBC

Oil Chokepoints

According to the U.S. Energy Administration, “The inability of oil tankers to transit a major chokepoint, even temporarily, can lead to substantial supply delays and higher shipping costs, resulting in higher world energy prices. While most chokepoints can be circumvented by using other routes that add significantly to transit time, no practical alternatives are available in some cases. Chokepoints may also expose oil tankers to theft from pirates, terrorist attacks, political unrest, and shipping accidents.”

Though focus is currently on the Suez Canal, it must be noted that it’s transit of 4.6million barrels of oil daily (2018) is substantially less than other oil chokepoints leaving everyday consumers vulnerable to major price hikes.



Source: Statista 2021

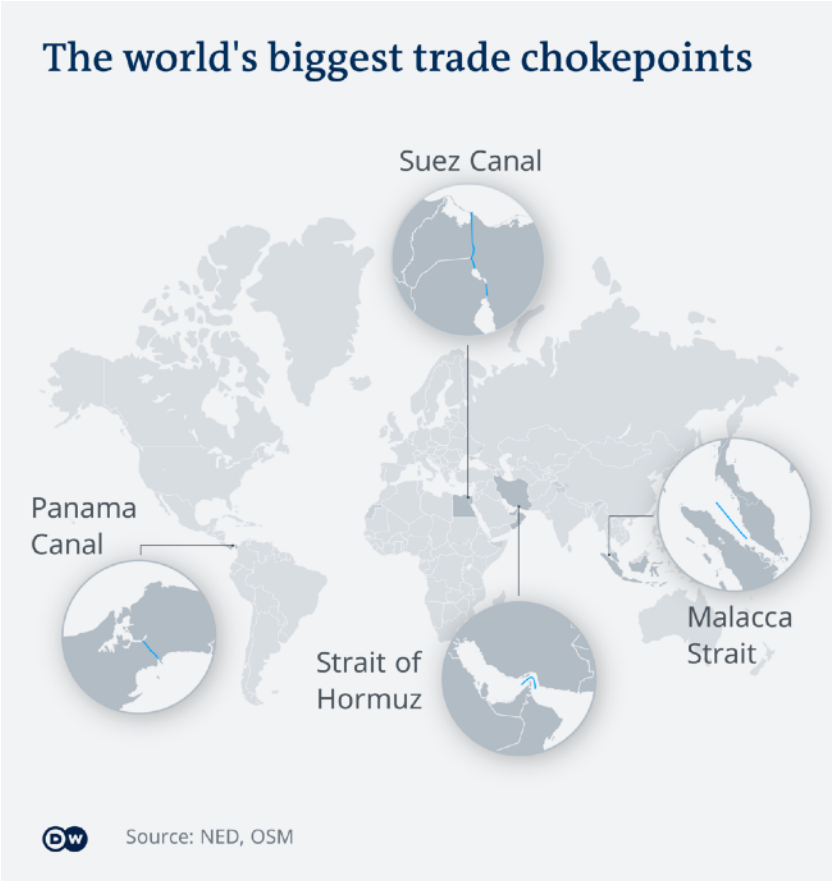
Strait of Hormuz

The strategically important waterway links crude producers in the Middle East with key markets across the world. The route is particularly vulnerable due to Middle East geopolitics as it is used by Saudi Arabia, Iran, the United Arab Emirates, Kuwait and Iraq.

Iran has officially started building a 1,000-km (620-mile) pipeline to avoid the disputed Strait of Hormuz for its future oil exports. Abu Dhabi in 2012 launched their Habshan-Fujairah pipeline to secure supply of crude oil whilst avoiding the Straits of Hormuz.

Strait of Malacca

According to Deutsche Welle, at its narrowest point off Singapore, the strait is only 2.7 kilometers wide, creating a natural bottleneck, as well as potential for collisions, grounding or oil spills. UC Berkleye's Political Review states that China faced with a "Malacca Dilema" has taken a number of steps to reduce the country's over-reliance on the Strait of Malacca. These include the Kazakhstan-China Pipeline which connects the country to the oil-rich Caspian region and the Myanmar-Yunnan Pipelines which siphons oil and gas from the Bay of Bengal to the Kunming region of China, avoiding the Malacca Strait for Burmese oil imports.



Source: Deutsche Welle

An Old Solution Could Help Prevent a Replay of the Ever Green Crisis

It turns out that in 1963, the USA had a plan to create an alternative route to the Suez Canal. According to the 1963 memorandum, which was declassified in 1996 and historian Alex Wellerstein, the US had plans to use 520 nuclear bombs to carve out an alternative to the Suez Canal though Israel across the Negev desert connecting the Mediterranean to the Gulf of Aqaba, opening an access to the Red Sea and the Indian Ocean.

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While that plan never came to fruition, an alternative route would be useful to the current $10 billion problem. This might have been a geopolitically sensitive alternative solution, but it was a viable one.

Concluding Thoughts

Suez Canal may be the focus of Q2-2021, however it is one of several vulnerable bottlenecks in global trade and our leaders in supply chain need to be prepared for the effects of their dependence on major chokepoints.

Our supply chain leaders, governments and private sector heavy weights need to develop a customer centric engineering mindset to create solutions long before they become major problems. Maybe we need alternative routes, perhaps we need smaller container vessels for bottlenecked areas or even to utilise more land based options such as rail; whichever it is, we need to re-engineer our supply chains to be less vulnerable and dependent on the status quo routes of yesterday.

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Aindrea is a Business Intelligence and Talent Management Specialist at Logistics Executive Group in the Middle East. With a degree in Economics from S P Jain School of Global Management in Australia she is experienced in project management related to feasibility studies, M&A business intelligence, supply chain restructuring, initial project viability reports working across reputed government investment organisations, private enterprises, international MNC and major global logistics providers. She is a highly-qualified professional with experience and solid market knowledge in corporate advisory related projects pertaining to the Middle East having been based in Dubai for 5 years.

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