

SpaceX's venture into the Marine Shipping Market

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May 2023

Introduction

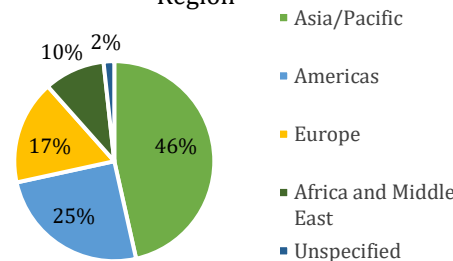
SpaceX, led by Elon Musk, has recently achieved a significant milestone with its very first and successful test flight of the Starship rocket. This groundbreaking spacecraft is not only expected to revolutionize space travel but also the global transportation industry. Building on the company's impressive track record of innovations, including the reusable Falcon 9 and Falcon Heavy rockets, the Starship could set a new standard in efficiency, capacity, and cost-effectiveness.

As of now, the Starship is in its early phase of testing and is probably still a few years away from operational readiness. However, its potential applications extend beyond the boundaries of space exploration and satellite launches. One particularly exciting prospect is the development of point-to-point transport on Earth, enabling passengers and cargo to be transported between any two locations on the planet in record time. This breakthrough could have profound implications for the global economy, reshaping the way we think about travel, trade, and logistics.

Current State of the Marine Shipping Market

The global Marine Shipping Industry plays a crucial role in facilitating international trade and economic growth. As the backbone of globalization, there are various modes of transportation, such as air, sea, rail, and road. Among these, overseas shipment, primarily conducted through ocean freight, is the most widely used method for transporting large volumes of goods and raw materials across long distances. Due to the Starship's immense payload capacity of up to 150 metric tons, SpaceX has the potential to disrupt this market segment by offering a more efficient and cost-effective alternative to ocean freight. Its entry into the market could be particularly noticeable in regions where marine shipping is most dominant. Upon a closer look at revenue exposure by region, the Asia/Pacific Region and the Americas clearly emerge as the front runners. This is likely due to their robust economies, substantial industrial bases, and extensive international trade networks.

Percent of total Revenue by Super-Region

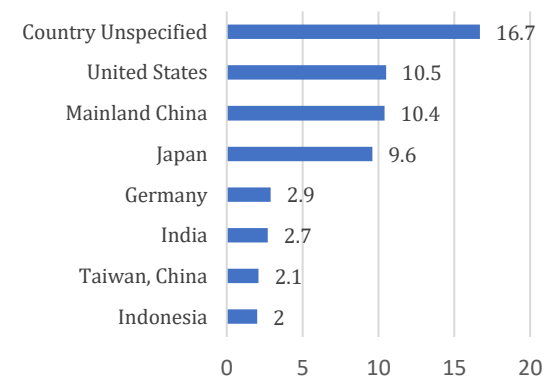


The Asia/Pacific region stands as global manufacturing powerhouse, with China contributing 10.5% and Japan 9.4% of the total revenue in the

Marine Shipping Market. In addition, the rapid growth of other nations in the region, such as India, which has seen a year-over-year growth of 16.5%, only add to the demand for cargo shipment in the Asia/Pacific region. From a geographic perspective, the region benefits from its proximity to major sea lines and growing markets, which further amplify its importance in the Marine Shipping Market.

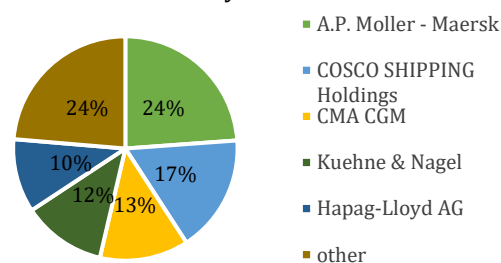
Similarly, the Americas, led by the United States contributing 10.5% of total revenue, have a significant role in the global Marine Shipping Market. The region's vast consumer markets, large-scale industrial activities, and established trade agreements have resulted in high cargo volumes. Ports along the East and West coasts of the United States serve as critical nodes in global supply chains, facilitating the movement of goods across the continent and other regions. Given SpaceX's origin as an American company, shipping lines operating in the United States and the broader American region are likely among the first to experience a disruption.

Percent of total Revenue by Country



Currently, the largest shipping lines in the ocean freight sector include Moller-Maersk, COSCO Shipping Holdings, CMA CGM, and Kuehne & Nagel which collectively command a significant portion of the market share. These industry giants have long been the go-to option for businesses seeking to transport large quantities of goods across international waters.

Percent of total Sales by Key Industry-Players



Upon examining the revenue exposure of the top four shipping lines – with the exception of CMA CGM due to unavailability of data – it is evident that each possesses a diverse geographical footprint. However, the United States and Mainland China emerge as the predominant players once again.

A point of interest is the negative year-over-year change with respect to China for all three companies. This may be largely attributed to the country's stringent zero-tolerance policy towards COVID-19, which has likely caused a shift in trade patterns. The unfolding of this trend in the upcoming years will be intriguing to watch. Will the market rebound to pre-zero-tolerance policy levels, or will it stabilize at the current level as new alternatives are discovered and

embraced? The answers to these questions will have significant implications not just for the shipping lines, but also for the broader dynamics of the global Marine Shipping Market.

Future Implications and Opportunities for SpaceX

The Marine Shipping Industry faces like any other industry environmental concerns. While greenhouse gas emissions pose a significant concern in the context of environmental impact, another issue demanding attention is ocean pollution, through oil spills, waste disposal, and the release of harmful substances. Regulatory bodies like the International Maritime Organization (IMO) have implemented stricter regulations to curb pollution, such as the IMO 2020 low-sulfur fuel mandate. Shipping companies must adapt to these regulations and invest in cleaner technologies, such as alternative fuels, emission reduction systems, and energy-efficient ship designs, to reduce their environmental impact.

For SpaceX to successfully enter the Marine Shipping Market they not only need to correspond to the current environmental regulations but also to geopolitical issues. One of Starship's significant selling points is its reusability, much like its predecessors, Falcon 9 and Falcon Heavy. This implies that for cargo missions to be carried out, there would need to be multiple launchpads strategically located across the major regions worldwide. For instance, having one launchpad in the United States and another in the Asia/Pacific region to conduct cargo deliveries between these two regions. These locations would not only serve as

lift-off and landing points, but also as trans-shipment hubs for further inland transportation.

However, establishing such a globally dispersed network poses a significant challenge, especially considering the current geopolitical climate, with the ongoing Russian-Ukrainian war and the trade conflict between the United States and China. Global tensions and regulatory hurdles could make international cooperation difficult. The issue of national security, airspace rights, and environmental regulations, to name a few, could present barriers to entry for SpaceX. This means that SpaceX's venture into the Marine Shipping Market is not just a technological challenge; it is a diplomatic and regulatory one as well. The company's success will depend on its ability to navigate these multifaceted challenges and establish the necessary international cooperation.

If SpaceX indeed enters the market and break down its technological, environmental, and geopolitical challenges, their innovative approach to cargo transportation could pose a formidable challenge to the established players. The Starship's payload capacity and potentially reduced transportation time and costs could attract businesses looking for more efficient and cost-effective shipping solutions. This competitive pressure may compel traditional shipping lines to invest in new technologies and strategies in order to maintain their market share and stay relevant in the evolving landscape of global cargo shipment. In turn, this could spur further innovation and drive positive change throughout the industry, benefiting businesses, consumers, and the environment alike.