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Strategic Responses to Market Disruptions in the Shipping Industry: A Case Study of Three Leading Companies

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ABSTRACT

The global shipping industry has been significantly affected by the COVID-19 pandemic, which has disrupted supply chains and forced companies to adapt their business and marketing strategies. The aim of this research is to examine the transformation of marketing strategies in the shipping industry in response to these market disruptions. The research analyses three leading companies: Maersk, MSC, and CMA CGM, using a qualitative case study approach. The findings show that all three companies have accelerated digital transformation, integrating it into their marketing strategies to strengthen customer relationships through transparent communication. Maersk expanded digital platforms, MSC introduced blockchain-based electronic bill of lading, while CMA CGM implemented the Business Continuity Pack. These measures mitigated disruption and set long-term standards for resilience, innovation, and responsibility.

1 Introduction

The global business environment is increasingly dynamic and has been characterized in recent years by the frequency and intensity of disruptive events that have a significant impact on companies' operations and business models. The COVID-19 pandemic has been one of the major market disruptions in recent times, and its consequences have destabilized supply chains, accelerated digitalization, and influenced consumer behaviour [1], [2]. The shipping industry is particularly vulnerable to such disruptions, as it is an essential part of global trade flows, since most goods are transported by sea [3]. Consequently, shipping companies have had to quickly adapt their operations to maintain the stability of their business and their market relevance [4]–[6].

Traditional marketing models proved inadequate as mobility was restricted, physical communication channels were closed, international trade fairs were cancelled, and customers' expectations of communication had changed. As a result, marketing strategies had to be

redefined towards a greater reliance on digital tools, a personalized approach, and crisis management [7], [8]. Marketing in the shipping industry was primarily focused on long-term B2B (business-to-business) relationships and standardized corporate communication; however, at the time of the pandemic, it was faced with the need to transform into a more dynamic and technologically sophisticated system [9].

The aim of this research is to examine the transformation of marketing strategies in the shipping industry in response to the market disruptions caused by the COVID-19 pandemic. The focus of the research is to identify the key challenges faced by the companies, the strategies implemented in response to the new conditions, and the success of their implementation. The analysis is based on case studies of three leading shipping companies: Maersk, MSC, and CMA CGM, which have shown a high degree of adaptability and innovation in the application of marketing tools during the period mentioned. Understanding these changes requires an analysis of existing literature on the specifics of mar-

keting in the shipping industry and strategies for adapting to disruptive market circumstances.

The interdependence of global markets and the growing demands on efficient logistics make the shipping industry a mainstay of world trade, with rapid and efficient adaptation to change becoming necessary in this highly globalized sector. Contemporary literature emphasizes the specificities of the marketing approach in the maritime industry, which differs significantly from traditional marketing due to the complexity of the market, technical requirements, and logistical challenges. Sorescu [9] emphasizes the importance of systematic market data collection and the role of professionals in making informed management decisions that form the basis for strategic planning and sustainable development. In the context of shipping services, Plomaritou [10] and Plomaritou et al. [11] emphasize the importance of adapting the marketing mix to the specific requirements of tramp and liner shipping. Empirical findings show that safety, price, and quality influence customer behavior differently depending on the market segment. Understanding customer psychology and building long-term relationships are crucial. A similar focus on customer needs can be found in Barasa et al. [12], who use the Indonesian context to demonstrate the variability of marketing approaches and the importance of personalization, professionalism, and international standards for strengthening competitiveness.

Goulielmos and Plomaritou [13] introduce complexity theory as a framework for understanding market dynamics and emphasize the importance of strategic leadership, innovation, and sustainability. Accordingly, Voronina [14] proposes the integration of technology, marketing, and infrastructure planning as key to competitiveness, especially on challenging routes such as the northern routes. Tepe and Arabelen [15], on the other hand, examine relationship marketing in container shipping and emphasize the importance of loyalty, flexible terms, and personalized communication as the basis for long-term relationships with shippers. The technological and organizational capabilities of the companies proved to be crucial for the successful implementation of these strategies. In an industrial environment dominated by large companies such as Maersk and CMA-CGM, Haddad [16] examines the practical aspects of segmentation and market positioning and identifies opportunities for improvement through modern tools such as digital marketing and customer engagement. In this context, Arsova and Zaninović [17] confirm that a strategic digital presence and the use of social networks significantly strengthen the visibility and growth of companies.

The outbreak of the COVID-19 pandemic has caused massive disruptions to supply chains, trade, and logistics, forcing the shipping industry to quickly and thoroughly adapt its marketing and business strategies. In

the short term, trade flows have declined, shipping traffic has decreased, and port closures have occurred, posing major challenges to the maritime supply chain and disrupting established business models [1], [2], [18], [19]. Overall, ship calls fell by 26.5% in the second quarter of 2020, and international seaborne trade volumes decreased by 3.8% in 2020 before recovering the following year [2], [19]. As Kammoun and Abdennadher [20] show, preventive measures and strict government surveillance combined with the increasing number of infected people had a significant negative impact on import and export goods flows, with exports particularly affected. The unavailability of containers, delays, and rising prices have further complicated the planning and marketing of shipping services [21]–[23].

The effects of the crisis were diverse and severe, as several studies dealing with the operational, market-related, and strategic aspects of the sector's activities show. Several authors point to severe disruptions to global supply chains, port congestion, container shortages, and rising freight rates, particularly on key international routes [24]–[26]. The shipping markets initially reacted very negatively, but stabilized relatively quickly in most cases, except for the dry cargo segment, which recorded a prolonged decline. The tanker market, on the other hand, proved to be more resistant [27].

At the same time, the pandemic opened up space for strategic change, and shipping companies gradually shifted from operational solutions to long-term approaches based on digitalization, sustainability, and protection of human resources [28]. As Tijan et al. [29] point out, digital technologies have a positive impact on economic performance in the maritime transport sector, especially by reducing costs and optimizing operational processes. The role of institutional support has also been recognized as crucial, for example, in Malaysia and India, where government incentives, digital solutions, and safety protocols have helped to mitigate the impact. The so-called "crew change crisis" pointed to the need for better protection of seafarers and more flexible management of human resources under crisis conditions [30], [31]. As a common conclusion of most papers, there is a need to strengthen the resilience of the sector through innovation in management, proactive risk management, digital transformation, and stronger international cooperation to better prepare for future shocks. Therefore, systematic planning of innovations emerges as a prerequisite for ensuring long-term sustainability, competitiveness, and adaptability of maritime transport to dynamic market conditions [32].

Although the existing literature highlights the specificities of maritime marketing, digitalization, and relationship marketing, most works focus on national contexts or individual aspects of the business, while global crises are mostly analyzed in terms of operational and logistical dimensions. Despite numerous studies on

the impact of the COVID-19 pandemic on supply chains, far less attention has been paid to the marketing strategies of leading shipping companies and their communication of key values such as digitalization, reliability, and sustainability. In particular, there is a lack of comparative analyses that deal with the adaptation of the marketing messages and instruments of the largest global shipping companies to the conditions of the pandemic crisis. This paper tries to fill this research gap and provide an insight into the transformation of shipping companies' marketing strategies in response to disruptive market circumstances. The remainder of the paper is organized as follows: Section 2 describes the methodology, Section 3 provides research results, Section 4 contains a discussion, and Section 5 provides concluding remarks.

2 Methodology

A qualitative method based on a case study was used in this research. A case study is a suitable method because it provides insight into the complex dynamic changes in the business environment. It enables the analysis and comparison of several shipping companies with the aim of better understanding the process of transforming marketing strategies in times of disruptive circumstances. According to Yin [33], a case study considers the complex circumstances present in an organization's environment and enables the understanding of real processes. Therefore, this method is suitable for researching the transformation of marketing strategies in the shipping industry, given its highly dynamic nature. Greenhalgh [34] builds on this approach and notes that a case study is not only an analytical tool but also provides the context of a real phenomenon, connecting different data sources through a narrative structure to present a complete picture. Annamalah [35] further emphasizes the flexibility of the case study, as this method allows researchers to capture complex phenomena that quantitative methods often cannot fully address. By applying triangulation, that is, combining different data sources, the credibility of the research increases.

The research sample consists of three of the world's leading shipping companies: A.P. Møller – Mærsk A/S (Maersk), Mediterranean Shipping Company (MSC), and Compagnie Maritime d'Affrètement – Compagnie Générale Maritime (CMA CGM). The companies were selected based on their significant market share, global presence, and size, as they represent the three leading global container shipping companies according to the UNCTAD Maritime Transport Review [3] and Alphaliner's Top 100 ranking [36]. Analyzing these market leaders provides insight into how global shipping companies adapt their marketing and business strategies in response to market disruptions, contributing to a better understanding of trends in the shipping industry. Each

company took a different approach to the transition of its business, allowing for comparative analysis.

Data for the case study analysis were collected from secondary sources, including company communication materials, official financial reports, sustainability reports, and websites from 2019 to 2021. To increase data reliability, only publicly available and verified documents confirmed by the selected shipping companies were used. The sources were selected based on relevance, credibility, and timeliness. A qualitative content analysis was conducted, focusing on topics related to the transformation of marketing strategies and digitalization resulting from the COVID-19 pandemic. To ensure greater reliability and validity of the results, data triangulation was employed by comparing information from different sources. This approach provides a broader and more objective view of how marketing strategies in the shipping industry have transformed in response to market disruptions.

Although this methodological approach provides a comprehensive and reliable overview of practices in the shipping industry, certain limitations must be considered to ensure a balanced interpretation of the results. Since the analysis relies exclusively on secondary sources, the findings are influenced by the availability and transparency of information provided by companies and other relevant institutions. The absence of primary data collected through direct methods (such as interviews with employees or customers) limits the possibility of gaining deeper insights into stakeholder perceptions and internal decision-making processes. Furthermore, as the study is focused on the three largest shipping companies, the conclusions cannot be fully generalized to the entire industry, particularly to small and medium-sized enterprises that operate under different resource conditions. However, combining multiple data sources ensures the credibility and reliability of the results.

3 Results: Marketing and business adjustments of leading shipping companies in times of crisis

The shipping industry has been significantly affected by the global economic crisis triggered by the COVID-19 pandemic. The closure of ports, the disruption of the supply chain, the shortage of containers, and the sharp increase in demand for certain categories of goods have created circumstances to which shipping companies have had to respond quickly and efficiently. In such a context, marketing and business adjustments were not limited to maintaining market presence but also played an important role in maintaining business continuity, strengthening customer confidence, and redefining the relationship between traditional and digital communication channels.

Table 1 Comparison of marketing and operational adjustments of shipping companies during the COVID-19 pandemic

Element	Maersk	MSC	CMA CGM
Marketing strategies	Focus on digital marketing, transparency, and user experience through applications	Strengthening digital communication, combining traditional and digital marketing channels	Promoting social responsibility and resilience through digital channels
Digital transformation	Introduction of Maersk Spot, Maersk Flow, web application, and digital shipment tracking	Introduction of the electronic bill of lading (eBL)	Development of the My CMA CGM platform with tools for digital shipment management
Crisis management	Early transition to remote work, investment in IT infrastructure, and continuous delivery	Adapted business continuity, flexible sailing schedule (blank sailing), and employee health protection	Business Continuity Pack – solutions for remote work, flexible logistics (Delay in Transit)
Key innovations	Introduction of digital solutions for freight tracking and payment, and optimization of logistics	eBL, increased digital customer education, and security protocols	Flexible delivery models, expanding digital capabilities
Employee protection	Work from home, full IT support, continuous business operations without interruption	Regular health checks, training, and safety protocols	Psychological support, solidarity fund, and bonuses for seafarers
Financial results	2019: loss of USD 84 million 2020: profit of USD 2.85 million 2021: profit of USD 17.94 million	N/A	2019: loss of USD 218 million 2020: profit of USD 1.78 million 2021: profit of USD 17.94 million

Source: Authors' elaboration based on [5], [6], [37]–[49]

The analysis focuses on how Maersk, MSC, and CMA CGM adapted their operations and marketing strategies to disruptive circumstances. Particular attention is paid to their marketing strategies, digital transformation, crisis management, innovation, employee protection, and financial effects. A comparative approach enables the observation of common patterns and specific solutions that have shaped new standards in the shipping industry during and after the pandemic. The most important marketing and operational adjustments that the companies have made to maintain business continuity and strengthen competitiveness during the pandemic are shown in Table 1.

3.1 Maersk

Maersk accelerated digitization in response to the COVID-19 pandemic, which was also reflected in its marketing approach. The Maersk Spot project was launched in 2019 and became an important solution in 2020. It reduces the uncertainty of supply chain disruptions by providing users with predefined prices and guaranteed loading [42]. Maersk has also developed a tool for small and medium-sized companies called Maersk Flow, which provides greater transparency and control over supply chains [43]. The Maersk shipment and MyFinance Mobile apps enabled users to pay digitally and track freight in real time [44]. All of the above solutions offered functional benefits and, at the same time, were an important marketing element as they emphasized security, reliability, and the company's ability to adapt quickly to disruptive circumstances.

The Maersk website, together with Maersk Spot and Twill, enabled customers to make online offers, reservations, and have a complete insight into the freight transportation process, increasing the transparency and efficiency of the entire supply chain. The marketing communication of the aforementioned platforms emphasized transparency, accessibility, and user-friendliness as the core values of the brand. In the area of crisis management, the company enabled remote working early on and invested in an IT infrastructure that ensured business continuity [44]. Maersk thus linked digital transformation with customer trust and positioned itself through marketing as a leader in providing innovative and reliable solutions in times of disruptive circumstances. Marketing communications emphasized both employee protection and financial recovery, underscoring the company's concern for people and stability. The results of such an approach are also visible in the financial indicators: transitioning from a loss of USD 84 million in 2019 to a profit of USD 2.85 million in 2020, and reaching USD 17.94 million in 2021 [40], [45], [46].

3.2 MSC

Digitalization was a key element of MSC's business and marketing strategy during the pandemic. The most important project implemented was the introduction of the electronic bill of lading (eBL), a blockchain solution that enables the secure and fast exchange of documents without physical contact. The innovation was promoted through digital channels and trade media, and served as

an important marketing element, emphasizing safety, reliability, and innovation under crisis conditions [47].

Crisis management was based on business continuity, including the “blank sailing” strategy to reduce costs and adjust capacity in times of lower demand. The company integrated employee protection measures into marketing communications, emphasizing safety protocols and regular health check-ups as part of social responsibility [5]. Marketing activities combined traditional and digital channels and played an important role in maintaining customer trust. The messages emphasized safety, efficiency, and continuity of supply, reinforcing MSC’s image as a reliable partner in times of uncertainty.

3.3 CMA CGM

During the COVID-19 pandemic, CMA CGM launched the Business Continuity Pack, offering a set of solutions designed to safeguard and adapt supply chains while minimizing the risk of disruptions. As part of the package, the Delay-in-Transit service was highlighted, which enabled the temporary storage of containers in dedicated hubs [6]. Another innovative digital solution was the My CMA CGM platform, which was used to strengthen the company’s market perception. The platform enabled users to organize, track, and manage shipments from anywhere in the world [48]. These services were not only operational solutions but also an important marketing tool, as they emphasized the company’s flexibility and adaptability in times of uncertainty and positioned the brand as a technologically advanced and reliable partner.

CMA CGM’s marketing strategies aimed to emphasize reliability, innovation, and social responsibility,

especially in communications related to the supply of medical equipment and essential products. CMA CGM and CEVA Logistics established a logistical bridge between China and France to ensure the fastest and safest delivery of medical equipment, including respirators, protective masks, and other vital products, contributing significantly to strengthening the French healthcare system during the pandemic [49]. The protection of employees included a solidarity fund, a medical hotline, and psychological support. CMA CGM thus emphasized that its employees are the foundation of the company’s success [37]. In this way, the company highlighted its social responsibility through marketing messages and consequently strengthened the trust of customers and the public. Finally, the financial results confirm the success of this approach. From a loss of USD 218 million in 2019, the company moved to a profit of USD 1.78 million in 2020, rising further to USD 17.94 million in 2021 [38], [39], [41], which was used in public communication as proof of resilience and adaptability.

To illustrate the speed and extent of adaptation of the leading shipping companies, Figure 1 shows a digital transformation diagram that chronologically illustrates the key innovations introduced during the pandemic. These innovations not only had an operational function, but also became key elements of marketing strategies as companies built an image of a reliable and innovative partner in times of crisis through new digital solutions. In this way, digital transformation has also become a marketing tool that emphasizes transparency, security and flexibility, enabling companies to strengthen relationships with existing customers and attract new ones.

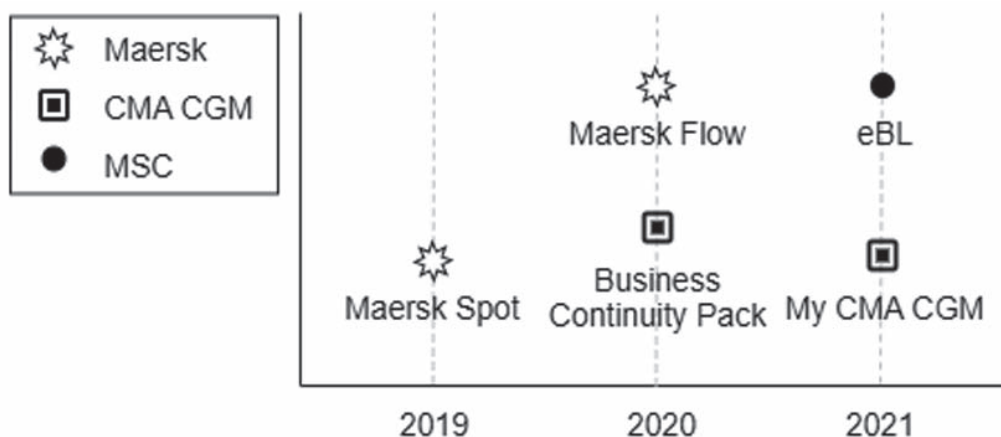


Figure 1 Digital transformation in shipping companies during the COVID-19 pandemic

4 Discussion

An analysis of the three leading shipping companies in the world, Maersk, MSC, and CMA CGM, shows that the COVID-19 pandemic was not only a crisis but also a strong incentive to redesign business and marketing strategies. All three companies demonstrated a high degree of resilience and adaptability, but their approaches had different emphases, allowing for comparison and the derivation of broader theoretical implications.

A cross-comparison of the companies reveals some differences in their business and marketing strategies. Maersk has focused on digital transformation and the development of online platforms to ensure reliability, transparency, and ease of use for its customers. MSC introduced an electronic bill of lading, focusing on security and business continuity. At the same time, it used digital communication channels to build trust and maintain relationships with customers. CMA CGM emphasized social responsibility and flexibility by introducing the Business Continuity Pack and the Delay in Transit Service, as well as by supporting employees and implementing social solidarity activities.

Several theoretical implications emerge from the research results. First, the importance of the concept of integrating marketing and business operations in times of crisis was demonstrated, as marketing messages were closely linked to operational innovations and changes in business processes. This aligns with the findings of Sorescu [9], who states that effective marketing in the shipping industry requires the systematic collection of market information and its integration into management decisions, ensuring strategic planning and long-term business sustainability. Second, the findings contribute to the theory of organizational resilience, which states that under conditions of extreme instability and uncertainty, organizations need to build resilience that enables them to deal effectively with unforeseen situations and recover from crises while building a foundation for future success [50]. The analysed shipping companies underlined their flexibility by emphasizing different values and introducing specific innovations, showing that resilience can be demonstrated in different forms. The findings correspond to Goulielmos and Plomaritou [13], who, within the framework of complexity theory, emphasize that sustainable success in shipping stems from adaptability, flexible leadership, and an innovative strategic approach, as demonstrated by the analysed companies during the crisis.

Third, the analysis of shipping companies under disruptive market conditions adds to the knowledge of digital transformation in the shipping industry, as the crisis accelerated the adoption of digital tools that would normally have taken longer to implement. The innovations introduced by all three shipping companies have become an important element of marketing positioning. These findings are consistent with the conclusions of

Arsova and Zaninović [17] regarding the importance of digital presence and the use of modern communication channels to enhance company visibility and growth, as well as with Tijan et al. [29], who emphasize the positive impact of digitization on economic performance. This underlines the importance of digitalization not only as an operational tool, but also as a marketing tool that provides a competitive advantage and influences a positive brand perception. Finally, the analysis highlights the importance of reputational capital, which can be understood as the totality of the public's and stakeholders' perceptions, attitudes, and knowledge about the company [51]. Maersk and MSC emphasized the stability and continuity of the business in their marketing messages, while CMA CGM emphasized concern for employees and society. The results correspond with previous studies by Plomaritou et al. [11], which emphasize that trust, security, and long-term customer relationships form the foundation of successful marketing in the shipping industry. Similarly, Tepe and Arabelen [15] point out that long-term relationships, trust, and loyalty programs are key to achieving a sustainable competitive advantage in container shipping, as clearly reflected in the strategies of the analysed companies.

The case study analysis shows that the COVID-19 pandemic has driven a transformation of marketing strategies in the shipping industry. The main link between the three companies observed is the accelerated digitalization, the promotion of sustainability, and the strengthening of customer relationships through tailored marketing messages. Furthermore, the pandemic has acted as a catalyst for change that has shaped new standards in the shipping industry in the long term.

5 Conclusion

Global disruptions such as the COVID-19 pandemic have caused upheaval in the shipping industry, but have also shown that the largest shipping companies can adapt quickly to challenging circumstances. The analysis of three leading shipping companies, Maersk, MSC, and CMA CGM, showed that marketing strategies were closely linked to digital transformation processes and were important for maintaining business and strengthening customer trust. Innovation and digital tools were important to maintain operational efficiency, but at the same time, they became important for communicating corporate values such as safety, reliability, and social responsibility.

Trends such as digitalization and integrated logistics solutions were already present in the shipping industry, but it was only with the outbreak of the pandemic that their final development and implementation accelerated. At the same time, they have become a central part of marketing messages that emphasize the willingness of shipping companies to adapt. Therefore, marketing in

the shipping industry can be perceived as a strategic tool that combines operational capabilities, digital innovation, and market communication.

While this research has provided insight into the transformation of marketing strategies of leading shipping companies during the COVID-19 pandemic, it also opens up numerous opportunities for further research. Future work could use quantitative methods to investigate how the marketing changes were implemented, how they were perceived by customers and business partners, and what impact they had on their loyalty. In addition, it would be useful to include medium and smaller shipping companies to determine differences in their adaptive capabilities compared to the global leaders. Future research could also focus on the impact of new disruptors such as geopolitical tensions, energy transition, and climate change to see how these affect marketing strategies in the shipping industry.

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