Automobiles, as a form of transportation, are indispensable in today's world and will remain a crucial part of our lives for a long time to come. At the start of this decade, there have been many discussions centred on how electric vehicles (EVs) will help decarbonise the planet and transform the automotive industry. Apart from rapid technological advances and automakers succumbing to the EV competition by 2023, paying attention to the current market shifts is vital for navigating one of the most interesting and challenging environments of the last century. Let's take a look at today's vehicle production and distribution market and how companies are overcoming these challenges.

Major Trends: Volatile Production, Capacity Crisis & The Need for EV

Automotive manufacturing is experiencing a huge global transformation compared to the past. There have been numerous challenges in this industry in recent years including materials scarcity, inflation, labour and transportation shortages and supply chain bottlenecks. The rise in consumer demand has come head-to-head with an industry struggling to overcome these inevitable disruptions. Automotive production as it is today requires a much higher level of flexibility and nimbleness than in the past to keep up with consumer demand. Automotive manufacturers continue to look for ways to improve operational efficiencies and create stability to be able to deliver to their customers, including leaning on the experts to implement new technologies and operational efficiencies.

Will automotive production recover to pre-pandemic levels in the near future?

Comparing the pre-pandemic 2018 Production Statistics to the 2021 Production Statistics published by the International Organization of Motor Vehicle Manufacturers (OICA), although car production has reduced over recent years, China remained the highest car producing country, followed by the United States, Japan and India. The subsequent rankings in the 2021 Production Statistics revealed that South Korea had overtaken Germany and Mexico, and Southeast Asian countries such as Thailand, Indonesia and Malaysia have moved up the world ranking for car production.

According to the IHS Markit 2022 Automotive Market Outlook, the European car production forecast for 2022 decreased by 2 million in comparison with the forecast predicted only eleven months prior. In mainland China, however, automotive production volume is on the rise. In 2022, mainland China's vehicle production was approximately 26.1 million cars and by 2023, it has almost reached 26.4 million cars.

In October 2022, the Association of European Vehicle Logistics (ECG) predicted an unbalanced supply versus demand in the Finished Vehicle Logistics (FVL) sector that is expected to continue for the unforeseeable future. Alongside this unbalanced supply and demand, the industry is experiencing an ongoing transportation capacity crisis that spans across all modes of transportation—ground, rail and sea—making it difficult to move vehicles to their destination.

Despite these challenging circumstances, the need and desire to decarbonise remains an important priority to both the consumer and producer. According to IHS, electric vehicle production is expected to climb exponentially in this decade from 7.7 million in 2022 to 39 million by 2030.

EV markets are driven in large part by governmental policies with highly ambitious and non-negotiable zero-emission targets and goals. For this reason, Original Equipment Manufacturers (OEMs) must carefully manage their positioning for

the EV revolution as the transition costs to EV are significant which should not be ignored. Many OEMs are choosing to partner with logistics experts who share similar interests and values in sustainability and decarbonisation to streamline their operations.

2023 Outlook for Vehicle Exports and Global Ocean Freight

With COVID-19 regulations relaxing worldwide, both car production and the consumer demand for new vehicles is surging. According to the China Association of Automobiles (CAAM), finished vehicle exports from China have increased by 150% between 2021 and 2022. This resulted in more than 3 million vehicles exported in 2022, of which 22% of them were EVs. The main destinations of vehicle exports were Europe, Middle East and Africa and South America. It is predicted that 2023 will follow the same trend, making China an international automotive hub.

As post-pandemic maritime export volumes soar, global ocean freight transportation is in a critical position. At present, there is very limited roll-on/roll-off (RORO) availability, heavy port congestion, labour constraints and inflated costs. To add to the complexities of moving finished vehicles, Pure Car and Truck Carrier (PCTC) charter rates have increased by 5x since 2019. Simply put, managing finished vehicle import and export have increasingly become logistically and financially more challenging in an industry where speed to market is of the utmost importance.

Transforming Your Operating Model with Modern Times

OEMs and car distributors have been put in a position where they must alter their current operations to meet current market and industry conditions. This is a time of much change in the automotive industry and OEMs have faced production disruptions, transportation capacity issues, and major transformations in retail models and consumer demand.

2022 was characterized by scarce transportation capacity and exceptionally high shipping container rates in first half of the year. In the latter half of the year, we are now seeing a reverse trend of RORO pricing increasing and shipping container rates decreasing. Containerized vehicle transport is getting renewed interest despite the majority of the industry focusing heavily on conventional transport methods. The solution of Cars in Containers (CIC) is emerging as an efficient solution to tackle these challenges. It can reduce time to market and allow more flexibility in production pace for both B2C and B2B delivery channels.

How is CIC performing in today's fluctuating market?

There are three main factors of success when talking about CIC.

First, the CIC solution provides a high departure frequency with a high level of flexibility, and a wide choice of ports to avoid port congestion upon arrival. This can both secure flows and time to market.
Second, is the ability to operate door-to-door. Many OEMs and car distributors struggle to connect the dots as finding another FVL provider on the other side of the world is another challenge on its own! Working with a door-to-door CIC solution simplifies this process and ensures smooth and transparent operations from order to B2B/B2C delivery. For seamless ocean freight car transportation, an integrated, agile and collaborative supply chain and logistics must be integrated. Partnering with the right company to optimise and build a more resilient and sustainable supply chain is critical for business success and to mitigate risks due to market instability.

Finally, the third factor of success for CIC is visibility by Vehicle Identification Number (VIN). Leveraging innovative solutions and technology such as augmented traceability with smart containers also enhances security and transparency. There has never been a more pressing time for the automotive industry to relook the structure of their supply chain and operational models. Successfully navigating today's market challenges and increased consumer demand has become a requirement to maintain competitiveness. Many OEMs and car distributors are leaning on the experts in supply chain and transportation logistics to be ahead of trends, gain security, and deliver exceptional customer experience amidst the hostile market conditions. Thus goes the saying, "to improve is to change; to be perfect is to change often.

About the Author

Laurent Sik is the Head of Operations for CEVA FVL business in APAC and boasts two decades of experience in the FVL industry in Europe and China. At CEVA, the saying goes the 'never normal' is to the 'new normal.' This has led us to invent flexible solutions that maintain operational excellence, competitiveness and increase speed to market.
Backed by a strong FVL network in China, Europe, America and the Middle East, CEVA's CIC solutions successfully exported nearly 5,000 vehicles from China in 2022.