TATA CONSULTANCY SERVICES

Building on belief

Revving the Asian automotive market

A purpose-driven exploration of trends and business models

Abstract

Driven by rapid urbanization, economic prosperity, and a rising population, mobility needs in Asian countries have increased for people and goods. While passenger transport is expected to rise, vehicle ownership remains low. This imbalance has created an enormous opportunity for mobility service providers to capture the Asia-Pacific (APAC) market, primarily dominated by a young population. With their high spending power and interest in value for money, they want to better utilize the time spent on the wheel and monetize their assets such as the vehicle they own. This paper highlights the specific characteristics of APAC automotive trends and how automakers can benefit by building purpose-driven business models.

Challenges and opportunities in the APAC automotive market

The automotive industry is witnessing disruption, as car owners increasingly question the value of money spent on purchasing an automobile. For a small population in Asia, owning a car may be a matter of pride, but a large proportion looks for a car's utility. This trend has resulted in reduced car sales and profitability, overcapacity, consolidation, layoffs, and more. It has also affected the supplier ecosystem. To tackle the challenge head-on, car manufacturers in the APAC region are experimenting with a series of new product launches, smart features, connected services, immersive car buying experiences, and new market expansion programs. However, as the results are not too impressive, there is a need to revisit the fundamentals of the current business model with a focus on mobility.

Going back to basics requires automotive firms to answer some fundamental questions:

- What needs to be moved – people or goods – from point A to B?
- How will the asset be designed and what is the end purpose?
- If there is movement today, what problem needs to be solved?
- Is vehicle ownership necessary?

Let us look at how the automotive industry in Asia is addressing these questions.

Driven by purpose

There are three kinds of players in the APAC automotive market:

a. Traditional car companies continue to focus on a product selling-based business model. They either sell cars for individual ownership (B2C) or to fleet owners (B2B). Few have tried participating in the service-led business model by launching shared mobility platforms but with limited success. For example, in China, automotive manufacturer SAIC Motor has launched EvCard, an electric self-service rental platform, while Geely-owned Cao Cao Mobility now offers new energy cars[1].

b. New-generation electric vehicle (EV) companies like Nio, Xpeng Motors, and Byton have shown initial success due to their smart tech-savvy products and connected services. The environment-friendly products have been better accepted among younger buyers and a conscious consumer base. But mostly, these firms have followed a product-based business model.

c. The third category of car companies is technology firms like Apple, Huawei, and Sony that want to engage their customers for extended periods[2, 3]. Their primary objective is to retain users on their platforms and ecosystems for as long as possible. More customer retention means more consumption of services. These companies focus on aggregating demands for mobility and are trying to make full use of the time spent on the wheel by selling more services.

Although the service economy gradually gains popularity, the individual ownership model continues to thrive with pandemic-induced social distancing norms in recent times. However, as big money lies in the service economy, we see two major business models emerging in the APAC region:

1. Make car ownership and shared mobility complementary

The way to drive exponential growth in the automotive sector in Asia is to make cars more affordable over their lifetime so that private vehicles also generate revenue for owners. This will be possible if owners have access to a platform that enables them to lease, share, subscribe, and maintain their vehicles at ease. The idea is to make private ownership and shared mobility complementary and not exclusive. There are other possible ways to monetize, such as by trading the energy generated by the car. Car owners must have the freedom to utilize their assets as much as they want. Original equipment manufacturers (OEMs) for vehicles are in a better position to offer complementary services that are a combination of ownership and shared mobility, as they can benefit from the two existing models. However, they need to switch from a product-centric business model to a user-centric one. One recent example in the Asian market is that of a shared mobility firm acquiring an automotive OEM to offer these complementary capabilities.

2. Aggregate demands and crowdsource mobility

Platform aggregators have gained prominence with the growing demand for mobility in Asia. These car firms serve their customers by selling other services during and beyond the period of engagement on the wheel. Successful mobility demand aggregators in Asia such as China's Didi Chuxing, India's Ola, and Singapore's Grab have capitalized on the mobility demand in the region and expanded their business to other parts of the world. Such companies are at an advantage because the platform aggregation business model already exists and is growing in Asia. However, there is an

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[1] Automotive World; Cao Cao leads Chinese growth in ride-hailing active users; November 7, 2019; https://www.automotiveworld.com/news-releases/cao-cao-leads-chinese-growth-in-ride-hailing-active-users/

[2] Electrek; Tech companies venturing into electric vehicles: Sony, Apple, and more; February 12, 2021; https://electrek.co/2021/02/12/tech-companies-venturing-into-electric-vehicles-sony-apple-and-more/

[3] Hindustan Times Auto; From smartphones to cars: Rush to build EVs catch up with tech companies; May 5, 2021; https://auto.hindustantimes.com/auto/news/from-smartphones-to-cars-rush-to-build-evs-catch-up-with-tech-companies-41620198912729.html

opportunity for scaling up and optimization. The demand fulfillment process can be crowdsourced, and people can participate by picking up requests available on the platform. This will also give them an opportunity to maximize the utilization of personal assets. Although there is an established crowdsourced mobility model for people, the goods mobility business model is yet to mature. Freight uberization is gaining popularity. For instance, Didi Chuxing launched a subsidiary Didi Freight, which matches China's vast pool of self-employed truck drivers with jobs such as goods deliveries and home removals. The subsidiary is yet to reach scale to cover all demand segments. Additionally, there is sub-optimal usage of data and insights on the platform to cross sell and up sell services.

Besides platform aggregation and freight mobility, what will also make the entire mobility process efficient and effective is the vehicle's design. Automotive firms have invested heavily into design, as it ties into their purpose-drive business models. Firms like China's Yanfeng Technology, which leads in automotive interior design, has developed a smart cabin design for shared mobility, where passengers with different comfort preferences can pool together[4]. OEMs need to align their strategies with design to ensure that vehicles can be maintained over their lifetime.

Commercialized innovation ecosystem

Partnership ecosystems play a critical role in these emerging business models. Leveraging partners with complementary core strengths in the target business model will make this transition easier. There are some early attempts of these business models in the Asian market. For example, Chinese ride-hailing company UCAR bought a stake in German car manufacturer Borgward to create a new auto retail model that separates research and development (R&D) and production from sales, thereby reshaping sales channels[5].

The automotive industry has seen enormous investment, both captive and venture capital, flow into the startup ecosystem to create disruption. Consequently, substantial numbers of innovation have mushroomed, which are yet to be successful. This is due to a lack of scale and consumer base that is ready to experiment. The Asian market offers both scale and a large consumer base, as evident from the rapid EV adoption in China, which contributed 41% to global EV sales in 2020[6]. Therefore, automakers and other players in the Asian ecosystem should come forward and use these markets to commercialize their innovations, make the intended impact, and deliver profitability.

Purpose-driven business models to power future growth

The automotive industry has been the primary driver of economic prosperity globally. Personal mobility, which has made automotive firms mature, is disrupting the industry today. Carmakers no longer enjoy exclusivity, and there is no more a high entry barrier for new entrants. This is eating into the profitability of industry players. While the demand for mobility is increasing, it cannot be capitalized with the old ways of demand fulfillment. Innovation in product and enterprise processes is not good enough to meet the ever-increasing untapped demands. The companies that operate with a purpose-driven business model built around an innovative partner ecosystem will emerge as winners.

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[4] Yanfeng; Yanfeng pioneers Hygiene Technologies for Shared Mobility in Smart Cabins; September 4, 2019; https://www.yfai.com/en/yanfeng-pioneers-hygiene-technologies-shared-mobility-smart-cabins

[5] Xinhua Net; UCAR, Borgward partner in auto retail-platform; January 8, 2019; http://www.xinhuanet.com/english/2019-01/08/c_137729017.htm

[6] Canalys; China electric vehicle sales 2021; February 22, 2021; https://canalys.com/newsroom/china-electric-vehicles-2021

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