Roland Berger Focus

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Bucking the trend

Motorcycle growth prospects in Southeast Asia:
Rise of business use two-wheelers

Roland Berger

The motorcycle market in Southeast Asia has nearly reached saturation point. In the region's largest countries, almost nine out of ten households own a two-wheeler. On top of this, with rising incomes more and more people are stopping replacing their bikes and shifting instead to entry-level passenger cars. These trends combined will lead to a long-term contraction of the motorcycle market. OEMs therefore need to look for new growth segments. The rise of two-wheeler taxi and delivery services creates new demand for business use motorcycles, especially electric scooters. Manufacturers should develop tailored models and set up supply and service networks. To achieve better results it is advisable to engage with the big players in the market such as ride-hailing platforms and with governments.

MARKET EVOLUTION AND OPPORTUNITIES

Southeast Asia boasts of some of the highest two-wheeler penetration rates in the world. According to Pew Research, in 2014, the ASEAN nations of Thailand, Vietnam and Indonesia topped the charts in household ownership of two-wheelers with 87%, 86% and 85%, respectively.

High ownership rates are not always good news for companies because they don't necessarily translate into new sales. In fact, in the last five years, the motorcycle industry in these markets has had a somewhat bumpy ride: on the one hand, Indonesia and Thailand's markets have contracted on average by 3.8% and 3.2% per year, respectively, and on the other, the Vietnamese motorcycle market has grown by a paltry 1% annually. → A

The overall potential for rapid long-term growth is limited by the high household penetration of motorcycles and an increasing shift to car ownership. In Indonesia for example, the largest of the ASEAN markets with sales of 5.9 million units in 2017, this can already be seen. Rising per capita income has shifted the spending from motorcycle upgrades to purchases of entry-level passenger cars. The number of cars sold as a percentage of motorcycles sold almost doubled from 7.5% in 2011 to 13.9% in 2017.

Short-term sales peaks don't change the downward trajectory

Yearly fluctuations in motorcycle sales that go against the negative trend are common due to country-specific macro factors. For example, two-wheeler sales in Vietnam and Thailand have recently started to bounce back to 2012 levels. While Thailand's decline was due to ongoing political turmoil and payment delays to farmers under the government's rice-pledging scheme, sales in Vietnam fell due to an increase in registration costs aimed at curbing motorcycle sales. Both Thailand and Vietnam saw annual sales grow on average by 12% and 7.2%, respectively, in the last two years. But their long-term prospects remain bearish, with a stagnant market outlook. → B

With first-time private buyers becoming a rarity and the replacement game under threat from entry-level cars, motorcycle original equipment manufacturers (OEMs) need to quickly identify new sales growth drivers.

New opportunity: The business use two-wheeler

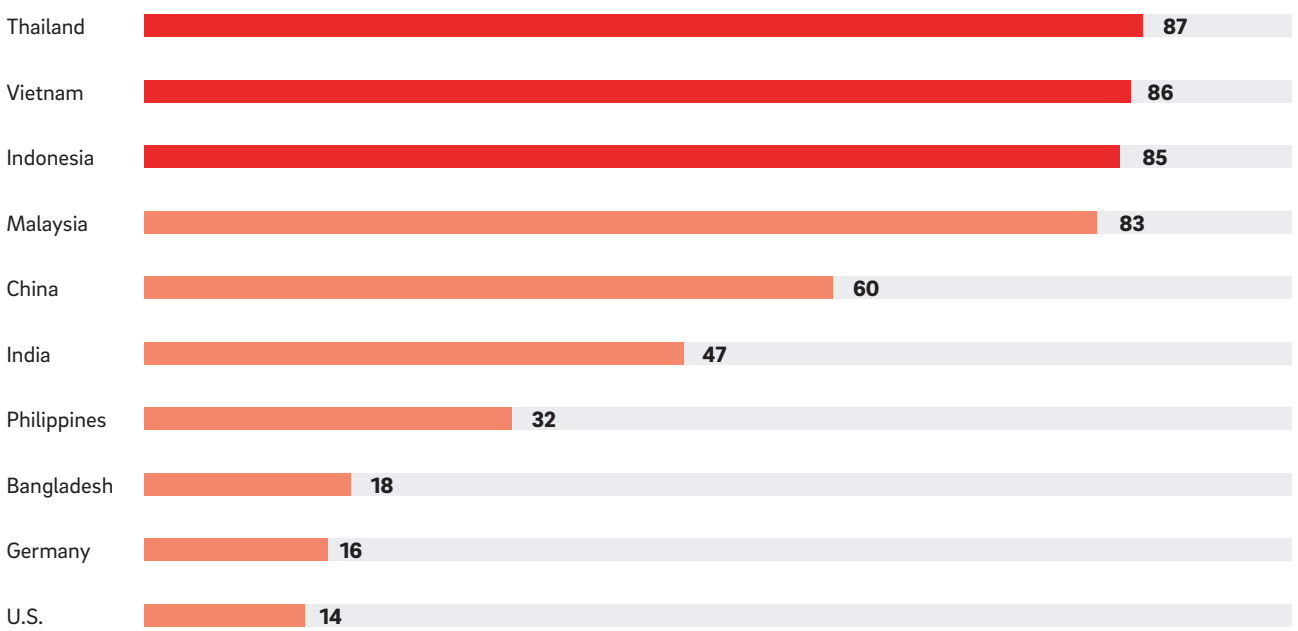
There is a silver lining on the horizon: in all three major ASEAN markets, the rapid rise of ride-hailing and e-commerce services has unlocked a new market segment in the form of business use motorcycles.

GO-JEK, an Indonesian motorcycle-hailing startup, which began its journey in 2010 with 20 ojek (motorcycle taxi) drivers in Jakarta, has grown into a USD 3 billion tech behemoth with over 400,000 drivers in 50 cities. Two-wheeler taxi services have dominated the taxi market in Indonesia, Thailand and Vietnam due to their speed, affordability and ability to weave through

Cover photo: LeoPatrizi / iStock

A: Close to market saturation
Penetration of two-wheelers in private households in ASEAN

Percentage of households owning two-wheelers, 2014 [%]



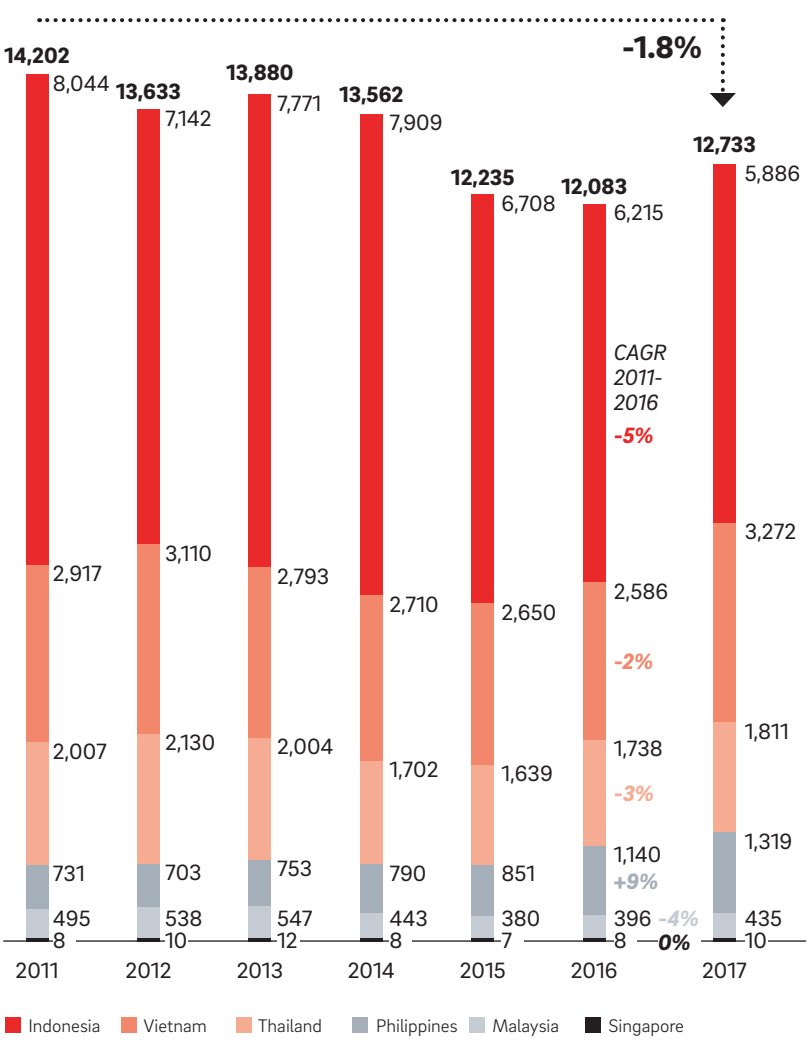
- Household penetration of two-wheelers has already reached maximum level
- New sales could come from business use motorcycles
- Other possible new sales driver: more frequent upgrades to more expensive bikes due to increased purchasing power and lower down payments

Source: Statista, Roland Berger

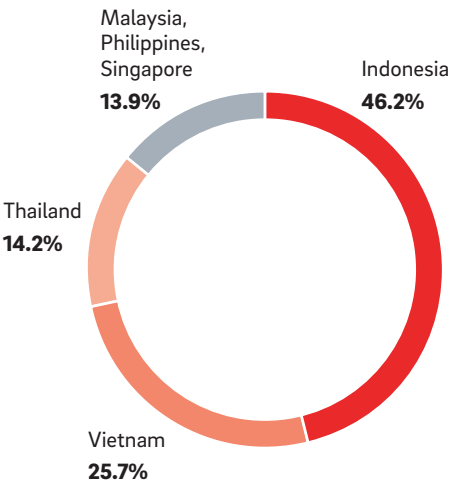
B: Long-term stagnation

A bearish outlook for the two-wheeler market in all large ASEAN countries

Number of two-wheelers (motorcycles and scooters) sold in the ASEAN 6 from 2011 to 2017 [units '000]



ASEAN two-wheeler sales by country, 2017 [%]



Source: Statista, Pew Research Center, TNS, CORAM

traffic jams. This is evidenced by the rapid growth and success of services and apps such as Go-Jek, GrabBike, and PinBike. Uber, while it was still operating in Southeast Asia, also took pains to focus on this segment via a localized service offering called UberMOTO.

The other major technology disruption driving business use cases for motorcycles is e-commerce. The market value of e-commerce in Southeast Asia's largest economy, Indonesia, is projected to hit USD 45.7 billion by 2025, buoyed by 119 million online shoppers. The last mile delivery architecture for these services is dominated by motorcycle delivery boys – narrow streets and never-ending traffic jams make motorcycles ideal for e-commerce companies to reach the final consumer. Capitalizing on this opportunity, even ride-hailing platforms such as GO-JEK have started offering delivery services for food and e-commerce. The addition of multiple service options augments the business case for owner-drivers to get on these platforms. With owner-drivers making up to three times more income than people in industries such as construction or retail, more ride-hailing and delivery drivers are expected to be onboarded onto platforms such as GO-JEK Grab, aCommerce, Deliveree and Skootar.

IMPACT ON OEMS

Motorcycles deployed in business use cases, such as taxis and delivery services, are expected to accumulate about six times the mileage of private use motorcycles. Under similar maintenance schedules and ridership ratios, business use bikes will be replaced much more frequently than private bikes. Our analysis estimates that business use motorcycle purchases will account for 16% of the new purchases by 2024 with annual sales of over 1 million units in Indonesia alone.

However, targeting this segment also poses significant challenges to OEMs across the product lifecycle and value chain that they cannot afford to overlook.

Rise of the scooter

In the last 10 years, the popularity of scooters has dramatically increased with their share in Indonesian motorcycle sales rising from 20% in 2007 to 84% in 2017. In Vietnam too scooters are expected to account for 60% of total two-wheeler sales in 2018. They are versatile with space for carrying groceries, shopping bags, etc., and are easier to drive due to the automatic transmissions. These qualities make scooters the go-to product for business use cases like ride-sharing and delivery services. But there is a lot of room for improvement in tailoring scooters for business use: comfortable seating for pillion riders, bigger storage space, storage spaces with environmental control, cell phone charging capabilities, and built-in connected vehicle solutions are some of the features that OEMs need to explore. → C

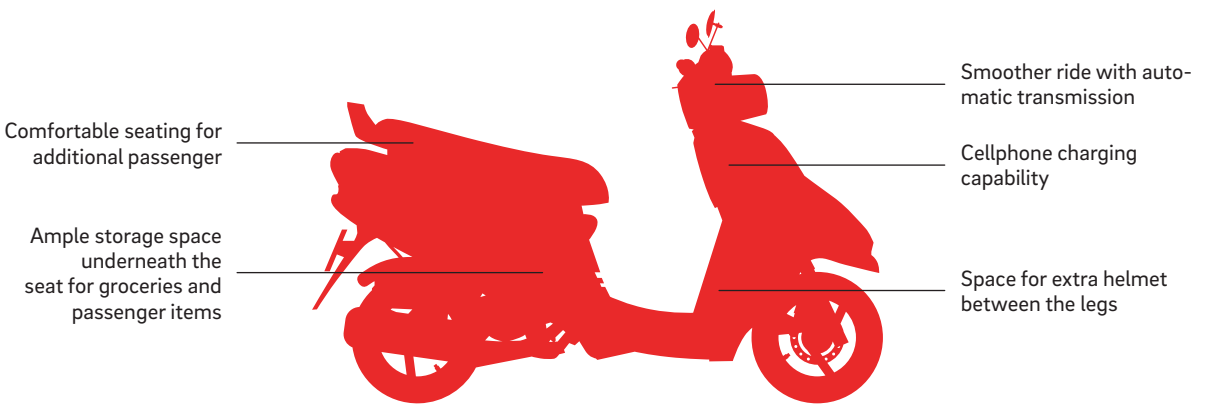
The business use case segment, such as ride-hailing and e-commerce delivery, is currently highly subsidized by the app platforms as they're focused on increasing market adoption. But once the market reaches maturity and as these platforms start focusing on profitability, economics will become critical for the owner-drivers to stay in business. Apart from design modifications aimed at increasing the take-up rate for drivers, OEMs also need to help lower the cost of operations for the drivers through electric motorcycles.

Make electric bikes suitable for business use

While the initial upfront cost of an electric bike is expected to be higher, the total cost of ownership will be significantly lower by 2025. Maturing battery technologies, falling manufacturing costs and rising fuel prices will make e-bikes over 30% cheaper than comparable internal combustion engine bikes on a total cost of ownership basis. This difference is critical in making the business case sustainable for individual owner-drivers. To mitigate the impact of high initial costs, OEMs could potentially explore procurement support through leasing schemes in

C: Product of choice

Why the scooter is better configured for ride-hailing and deliveries than other two-wheelers



- Scooters have bigger storage space underneath the seat – enough for a helmet and groceries
- The leg guard also protects against rain and wind
- One drawback of the scooter against the motorcycle is a smaller fuel tank, which leads to a smaller range

Source: Roland Berger

partnership with the ride-hailing platforms. However, unresolved technical challenges regarding power, range and charging time stand in the way of widespread e-bike adoption for business use. Current e-bikes have an average range of 70 km, while the average distance traveled by ojek drivers is around 100 km a day. Charging mid-day is not feasible as charging times range from 2.5 to 8 hours. OEMs can therefore seize a huge opportunity by developing e-bikes with sufficient range and power to sustain all-day use or rapid charging to make mid-day charging feasible. Another major factor impacting the cost of operations is service and maintenance. With business use case motorcycles often purchased through financing, revenue loss from breakdowns is costlier for these drivers. Compounding this factor is the higher mileage accumulation rate, which increases the frequency of service and repair needs. The service network at present largely consists of independent small roadside repair shops, often with questionable quality and limited availability of spare parts. As the business use market segment matures, OEMs will need a dedicated high-quality service network to differentiate their offerings.

THE WAY FORWARD

Based on our analysis of market developments and the insights gathered from the industry representatives and experts we interviewed, we can make several recommendations for what motorcycle OEMs should do. The starting point is identifying customer preferences through market research targeting both riders and drivers. This will enable OEMs to identify design modifications which are low hanging fruits that can be easily implemented in the short term. In the long term, dedicated designs catering to different business use segments need to be launched. This includes ramping up efforts to bring high range, fast charging, built-in cold chain storage and smart maintenance capabilities for e-bikes into the market.

Apart from the research and development activities related to electrification, OEMs need to start developing the e-bike supply chain too. This entails developing new capability in OEMs and the existing supply chain, besides from finding new suppliers for critical elements such as batteries and motors. On the service side, a maintenance offering leveraging IoT technology for predictive maintenance coupled with a network of high-quality service centers for the professional use bike market needs to be designed to increase the longevity of the bike and build an additional revenue stream for repair and parts. Acquisition of startups in this space providing onboard diagnostics and predictive maintenance capabilities will give OEMs a head start in building a smart maintenance infrastructure setup.

Engage with digital platforms and governments

As digital platforms such as GO-JEK and Grab have entrenched themselves as gatekeepers to this new market, OEMs need to partner with them across the design, sales and service cycles. These platforms have an ever-growing treasure trove of data on driver behavior and bike usage patterns that are essential for optimized product designs. They also have the access to owner-drivers and will function as the primary sales channel for the OEMs. Their access to the drivers is also essential in providing predictive maintenance services. Hence, structuring mutually beneficial partnerships with these platforms to create a sustainable business case for owner-drivers will be the key to winning in this market.

Lastly, e-commerce delivery and ride-hailing are young markets and are largely unregulated currently. E-commerce in Southeast Asia is expected to grow at 30% annually, reaching USD 88 billion in 2025, and will account for 6% of all retail sales. The ride-hailing market is also set for explosive growth of 19% p.a., reaching a size of USD 20.1 billion. As their scale and significance grow, regulatory intervention is both necessary and inevitable. OEMs have a key role to play in shaping the policy and need to start actively engaging with the governments.

The golden era of two-wheelers in Southeast Asia may be over. But there are new opportunities. Now it is up to the manufacturers to seize them.

Recommendations for manufacturers

1. Create designs tailored to professional/business use cases
2. Develop an e-bike supply chain and acquire capabilities in core components such as motors & batteries
3. Establish a high-quality service network for professional/business use bikes
4. Partner with digital ride-hailing & delivery platforms to get access to customers and their data
5. Proactively engage with governments and regulatory authorities to shape policy

WE WELCOME YOUR QUESTIONS, COMMENTS AND SUGGESTIONS

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