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Leaving the niche: Seven steps for a successful go-to-market model for electric vehicles

To regain momentum after the COVID-19 pandemic ends, the players in this market must reconsider their strategies.

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To date, electric vehicles (EVs) have been niche products, so many OEMs have focused their go-to-market (GTM) strategies on a small, tech-savvy segment of automobile customers. Then, just as electric mobility was about to take off and sales were accelerating in several markets around the world, COVID-19 struck.

There are many questions about how the coronavirus could affect the global EV market. The answer will vary by region. Regulation and consumer incentives drive China's EV market, and the central government extended purchase subsidies by two years in March 2020. In Europe, regulators and industry stakeholders lean toward incentives that would favor clean powertrains. EU member states are also expected to maintain the 95-gram CO_2 fleet-emission target from 2020 through 2021, though it will affect the number of vehicles sold. The US automotive market—probably the hardest hit—will require some time to recover: EV sales may stagnate for one or two years before consumer confidence recovers and people are willing to pay for EVs. One big factor in the delay is record-low oil prices, which have widely eliminated the advantage EVs had for total costs of ownership.

Now more than ever, a radically new GTM approach is required to win consumer support for EVs, since COVID-19 could fundamentally influence the attitudes of consumers toward mobility. If they have recently experienced clean air in cities, will that make them lean toward EVs? What's more, a majority of the population is now getting used to online shopping. Will that make consumers more likely to consider buying cars online? And since people now have to avoid crowded spaces, will individual mobility increase after the pandemic ends? Finally, some consumers are avoiding gas stations. Will the ability to charge at home become a purchase consideration for EVs?

Although such questions are difficult to answer, consumers may be more reluctant than ever before to make big purchases, such as cars. Yet the increased public focus on climate change, shifting environmental regulations, and technological advances are making the case for a green-mobility transition and thus for EVs. First, however, the current GTM approach must change, and that will require both OEMs and their partners in the EV ecosystem to change as well.

The challenges ahead

Many challenges for the growth of the EV market lie ahead, but some stand out. In particular, a scalable GTM model for EVs must address new regulations that may influence competition, the customer base, infrastructure, and the business case for and profitability of these vehicles (Exhibit 1).

The regulatory environment

In reaction to increasingly tight CO_2 regulations and the anticipated sizable penalties for noncompliance, most automotive players have ambitious EV-growth plans: OEMs have announced the launch of more than 600 new EV models by 2025,[1] and competition will probably grow as many new players enter the market. Increasing sales of new EVs will be a complex challenge, and OEMs may find it more difficult to make profits if governments reduce subsidies as EV technology advances.

Customers

Our 2019 EV Consumer Survey shows persistent hesitation among consumers in the largest automotive markets—China, Germany, and the United States. While many people consider purchasing EVs (36 to 80 percent of car buyers, depending on the market), few actually do (2 to 5 percent). This hesitation is also reflected in the OEMs' low levels of "EV sales readiness," documented in McKinsey's 2019 EV Mystery Shopping survey, which revealed the core challenges facing OEMs that sell EVs: their in-store presentation, the accessibility of test drives, and the EV knowledge and processes of sales associates. Sales staff must, for example, understand how to discuss total costs of ownership,

[1] IHS Markit (alternative propulsion forecast as of November 30, 2019).

Exhibit 1

Original equipment manufacturers face four main challenges in the electric-vehicle market.

Electric-vehicle (EV) go-to-market model

Regulatory environment

- Time to market is critical since OEMs will face severe regulatory penalties in many markets for failing to meet CO_2 emissions requirements from 2020 onward
- Gradual decline in government subsidies expected as technology advances

Customers

- Customers not yet requesting EVs; consideration is up 50% or more but purchase conversion still low
- Top concerns and purchase barriers involve batteries, driving range, and charging
- EV buyers have different preferences than internal combustion engine buyers, such as a preference for digital channels, app interaction, pay-as-you-go options, and personalization; they rely heavily on sales staff for advice

EV infrastructure

- Charging network rollout has been accelerated, but availability is still limited, especially for fast-charging stations
- Seamless and compelling charging experience is not yet widely available due to high market fragmentation
- Critical enablers still absent for scaling up EV aftersales and parts operations, such as battery recycling and re-usage capabilities

EV business case and profitability

- EV business case at risk, since consumers are not yet willing to pay extra cost of EV powertrain
- EVs have up to 60% lower aftersales revenues compared to vehicles with internal combustion engines

batteries, and charging. If OEMs do not address these issues proactively, the growing supply of EVs might outpace demand. OEMs would then be stuck between high penalty payments and rising incentive-spending levels.

The EV infrastructure

On the charging side, the EV infrastructure is insufficient. The network of charging stations, particularly fast-charging ones, is sparse. Battery quality, the time needed to charge, and limited access to chargers are the biggest concerns for potential EV buyers, accounting for 38 percent of all concerns raised.[2] The rollout of charging infrastructure is accelerating, but no integrated, seamless, and compelling solution is available, because the market is very fragmented. OEMs should take the lead in this area.

On the EV-parts side, challenges arise from long delivery times—especially for EV batteries—and the failure to prepare adequately for EV aftersales services.

The EV business case and profitability

EVs will become more crucial to the OEMs' overall success as they begin to represent a growing share of the portfolio. Profitability of the EV business case is at risk for many OEMs for several reasons, including the high investment required, initially low sales volumes, the high cost share of the battery, and lower aftersales revenues. This gap

[2] Thomas Gersdorf, Russell Hensley, Patrick Hertzke, Patrick Schaufuss, and Andreas Tschiesner, "The road ahead for e-mobility," January 2020, McKinsey.com.

could present challenges for both OEMs and their dealers. As we mentioned earlier, other issues—including falling government subsidies, increasing competition, and persistent customer concerns—also limit EV sales and put additional pressure on profitability. Without proactive countermeasures, it could fall enough to endanger the current business models of leading OEMs and dealers.

Seven innovations for GTM success

As we explained in our recent article on EV profitability, OEMs have previously attempted to tackle the businesses challenges primarily by making changes on the production and technology sides (for instance, improvements to battery sourcing, platform strategies, and alliances and ecosystems). Now, however, OEMs must also develop innovative GTM models to sell the required number of EVs and to find a sustainable business model. Our research and discussions with leading practitioners in the field have led us to believe that seven radical innovations in four areas—offerings, sales, after-sales services, and business models—will shape the OEMs' EV future (Exhibit 2).

1. Reinvent brand positioning

OEMs ought to create a compelling value proposition for their EVs, focusing on differentiating themes. The value proposition should align with the overall brand but also be specific to EVs. An OEM might, for instance, emphasize that it has a large charging network. Volkswagen, which emphasizes "E-mobility for all," provides a good example of effective positioning.

OEMs should also develop attractive new offerings: integrated EV-mobility bundles that include products and services, with a focus on the overall experience. In addition to the vehicle itself, for example, a successful bundle might include charging, on-demand features and services, revenues from data, financing options (such as battery leasing), mobility services, and after-sales packages (for instance, Care by Volvo). Combined, these elements could create a compelling offer that enhances the customer experience and may resolve concerns that could hinder the adoption of EVs.

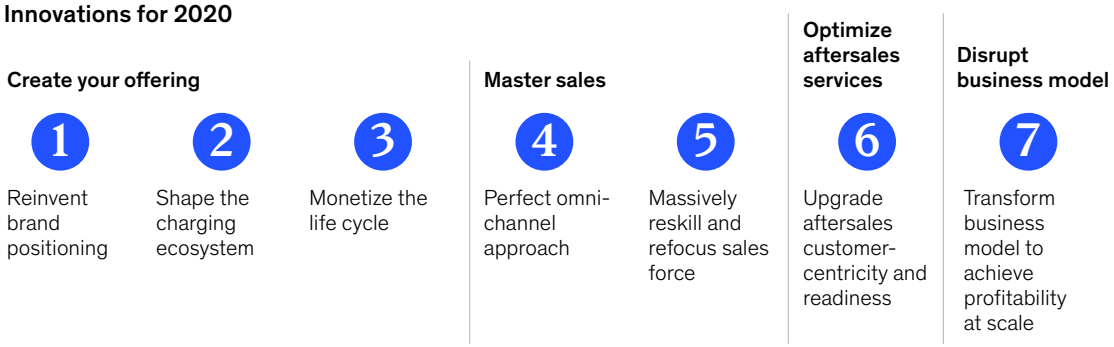
Communication will be the key: OEMs should use innovative and personalized approaches, such as digital campaigns, to reach and educate prospective EV customers. Focusing on areas and customer segments that are actively considering EVs will be critical to reach scale quickly and to create a network of EV advocates for each OEM brand.

2. Shape the charging ecosystem

Be early to provide a seamless charging experience. OEMs ought to develop and manage networks

Exhibit 2

Seven innovations will shape the electric-vehicle go-to-market model.



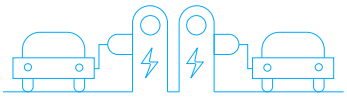
of leading ecosystem players to create end-to-end charging systems with single access points as quickly as possible—and at a reasonable cost to the consumer (Exhibit 3). To create such an infrastructure at scale, the OEMs should also integrate the different charging options (home, public, and dealer) into the existing system and app landscape, working closely with leading ecosystem partners.

First, OEMs should help enable home charging by bundling a cobranded wallbox with the EV, including a dealer margin to boost sales. In partnership with Centrica, for example, Ford offers home-charging installations and electrified-vehicle tariffs from British Gas. To address one of the most prevalent customer concerns, OEMs could also establish international partnerships to create a public charging solution with a sufficient network of both standard and fast chargers. These partnerships, including mobility service providers (MSPs) and governments, would enable retailers, offices, and residential buildings to install charging stations. A variety of payment models (for example, pay-as-you go or subscription) would have to be developed. Another possibility would be to accelerate the adoption of EVs, and to provide additional customer benefits that would increase loyalty, by using dealer networks to raise the number of charging points, especially in underdeveloped rural areas.

Exhibit 3

Original equipment manufacturers should provide convenient solutions for public and private charging.

Public charging infrastructure

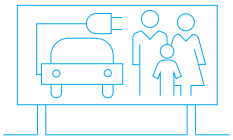


- Offer dense charging network directly or via mobility- or charging-service providers
- Engage in local partnerships with municipalities and infrastructure provider
- Help retailers, offices, and landlords install charging stations easily at low investment

43%

of battery-electric vehicles (BEVs) are charged on public charging stations

Proactively advertise new charging lifestyle

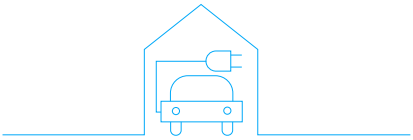


Team up with businesses or tourist stops on typical travel routes to make charging breaks appealing; in such locations, the 30-minute charging window could become an opportunity to enjoy the surroundings

40%

of public charging locations worldwide are in 25 cities

Provide easy plug-and-play solutions for charging at home



- Provide intuitive Wallbox installation service
- Educate electricians in charging-system installation and customer support
- Demonstrate charging systems live in-store and online
- Provide smart charging solutions through collaborations with utility companies
- Provide a seamless charging experience, regardless of location

64%

of BEV owners would like to or already participate in smart charging services

Finally, OEMs should secure access to the acquired data from charging and use them to generate income in the future and to develop smart charging solutions, such as those provided by Renault's Z.E. Smart Charge app. These solutions base charging recommendations on the available level of energy in the grid.

3. Generate income from the life cycle
Don't just sell cars; be there the whole way. In the OEMs' current EV GTM approach, they gain about €100 a year in profit (around 1 cent per kilometer driven) over a car's life cycle after selling a new vehicle.[3] (This profit does not include aftersales revenue.) Despite efforts to reduce the cost of producing EVs, this profit will increase only slightly in the next five to ten years. OEMs and dealers must therefore pursue other revenue opportunities throughout the product life cycle to achieve sustainable margins.

After the purchase, OEMs can, for example, offer on-demand services and features to consumers, as Tesla does through its AutoPilot. Such features might include performance- and battery-boosting software, advanced driver-assistance systems, and services like BMW ConnectedDrive, which includes remote services, concierge service, and on-street parking information, among other benefits. BMW, for example, offers ConnectedDrive in four packages that cost from €69 to €279 a year.[4] Given the attractive profit margins on those services, BMW is able to bolster the overall profitability of its EVs.

Either alone or with the support of third-party data aggregators, OEMs also have an opportunity to generate revenues from the data of customers and vehicles. These data could be used to address a number of use cases involving connected vehicles, to offer personalized services, or to provide third-party marketing. Our research indicates that revenues from data could generate approximately €50 a year per vehicle.

4. Massively reskill and refocus the sales force
Convert your dealers into true EV advocates. Only half of the sales reps in our mystery-shopping efforts at selected dealerships in China, Germany, and the United States conducted balanced discussions about the merits of EV and ICE vehicles when advising test customers who were generally open to both. From our perspective, there were several reasons for the problem: a lack of knowledge among salespeople about some of the potential benefits of EV, the human tendency to avoid criticism, and lower EV dealer margins and after-sales revenues. To change all this, OEMs must not only support their dealers as they build the required infrastructure and capabilities but also, at the same time, provide incentives that make EV sales more economically attractive over the long term. Without such efforts, dealers may wonder if it is worthwhile to sell EVs.

OEMs should monitor performance—both their own and that of third-party dealers—to ensure the consistent delivery of an optimal EV sales pitch. They should also invest in digitally savvy product "geniuses" to serve as trusted advisers for customers. To build the deep EV expertise that makes it possible to address all relevant customer concerns, OEMs should train the geniuses through online and in-person classes that explain integrated EV-mobility bundles.

OEMs should also give dealers incentives to increase the number of test drives, which would expose more customers to the new technology. OEMs could, for instance, encourage dealers to reach out to target groups, such as taxi companies and mobility providers, to get additional prospective customers behind the EV wheel. Finally, OEMs should ensure that all showrooms prominently display the entire EV portfolio (including wallbox and charging solutions) and that customers can explore them with digital tools.

5. Perfect the omnichannel approach
Make your online channel an information "El Dorado" for EV prospects, who want to know

[3] Assuming €1,000 margin on 100,000 km driven in a ten-year life cycle.
[4] Reference price in Germany as of May 2020.

about these vehicles and are upward of 50 percent more interested in purchasing cars online than traditional buyers are. OEMs should therefore invest significantly in their digital presence to provide easy access to information about important customer concerns; for example, OEMs could feature discussions about customers' key EV pain points on their websites. They could also reduce the complexity and uncertainty of a purchase by providing simple, care-free configuration and ownership options, such as subscription models that permit further personalization through on-demand features.

Ensuring seamless online–offline integration between digital touchpoints and dealers is important too. First, it helps dealers identify likely customers for EVs. Given the central role of online channels during the information phase, they will also have a growing importance in generating leads. Several OEMs have proved that innovative online–offline integration (for example, Polestar) and hyperlocal marketing can significantly increase walk-in rates. NIO has gone a step further and established a second floor in its flagship stores that is dedicated to its customers and their friends, with the goal of improving brand loyalty. The company also has an application that allows users to book services at one-click, share content with other NIO customers, and earn rewards by actively participating in the community.

Since more than 50 percent of prospective EV customers would be willing to purchase a car online, OEMs should also begin to pilot online sales approaches, as Tesla does, to provide a lean, cost-effective retail channel with direct access to customers.

6. Upgrade after-sales customer-centricity and readiness

Learn how to make your after-sales operations leap into the new age. EVs require less after-sales service than ICE vehicles do and have significantly different maintenance needs. They also require highly skilled technicians who understand battery and high-voltage technology. OEMs should therefore develop EV-specific training programs—in battery diagnostics, for example—to train the technicians in their dealer networks. It will also be important to ensure that EV-related parts and tools, such as battery-leak detectors, are easily available. Volkswagen, for instance, is planning to establish a new battery warehouse to pool its stock and provide fast deliveries to its dealers. While demand is still low, several dealerships could share these facilities.

OEMs and dealers should also create EV-specific service offerings and maintenance plans. EVs will have complex proprietary software. For after-sales service, many consumers will rely on the dealer networks affiliated with their cars, and that could partially compensate for lower profits in the overall EV after-sales and parts market (Exhibit 4). OEMs could also create EV-specific offerings to reassure customers by providing additional battery-related support (such as recharging services) via service partners. Such offerings might include long-distance replacement cars or distinctive warranty offers—for example, a battery-care package (similar to AppleCare), which Volkswagen already intends to offer.[5]

Finally, OEMs could provide state-of-the-art after-sales services (such as parts-exchange reminders and software updates) that are always available and can be sent, in part, remotely over the air. Such services could significantly improve the customer experience. Tesla, for example, already offers them.

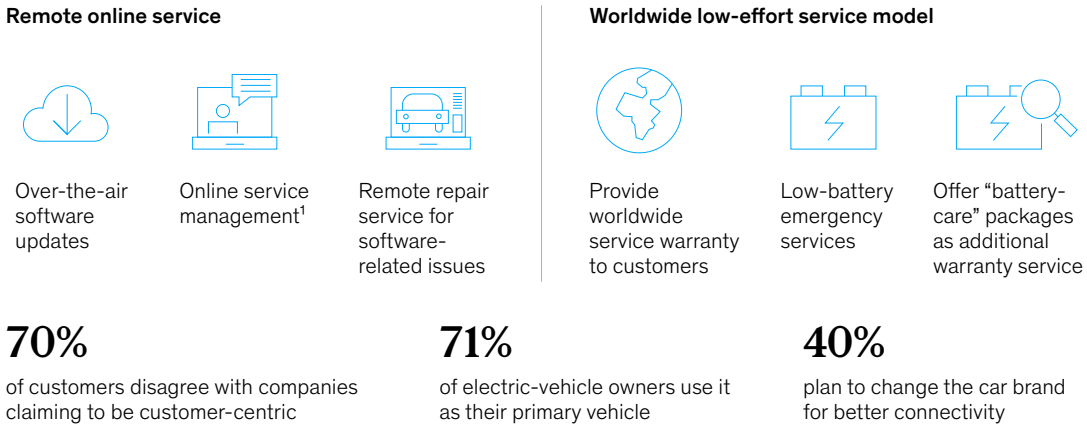
Battery-reusage concepts are becoming more important as a result of increasing regulation in markets such as China and the European Union. OEMs and their ecosystem partners should start to develop their own ideas now, before a standard solution is established. Their efforts could lay the foundation for a possible future revenue stream and mitigate future risks from battery-handling and -recycling regulations.[6]

[5] Volkswagen plans to guarantee more than 70 percent battery capacity after eight years.

[6] For a deeper perspective on this topic, see Hauke Engel, Patrick Hertzke, and Giulia Siccardo, "Second-life EV batteries: The newest value pool in energy storage," April 2019, McKinsey.com.

Exhibit 4

Original equipment manufacturers can win customers over with superior services online and offline.



[1]For example, upcoming checks, usage statistics, and other information are accessible online.

7. Transform the business model to achieve profitability at scale

Make the unprofitable profitable. For the foreseeable future, though, EVs will probably remain significantly less profitable than traditional cars as a result of higher production costs, lower after-sales revenues, continuing uncertainty about battery reusage and remarketing, and the significant investment required for the charging infrastructure. Additional revenue streams from on-demand services and features, and from sources such as data and charging, probably won't offset these cost pressures, so the current GTM model must further evolve. A new one will require greater online–offline integration, which will reduce costs across the physical retail network, since consumers will increasingly research and buy cars online. Such a model will also help OEMs shift toward more direct asset-light electric-mobility offerings.

In the short term, OEMs should focus on optimizing their existing dealer networks by easing standards, such as stock requirements. They should also continue to consolidate the number of dealers to achieve synergies through joint back-office operations and larger economies of scale. If necessary, OEMs could restructure their networks to rebalance profits across all stakeholders—for example, by reducing the number of outlets and moving to direct sales. An ICDP study expects that the number of outlets in dealer networks across Europe must fall substantially if they wish to remain viable.[7] Newer players, such as Byton, Polestar, and Tesla, already use that model by building their sales operations around a common digital backbone that seamlessly connects online sales.

In addition to supporting full-service dealers, OEMs should adopt leaner, more customer-centric retail formats, such as urban flagship stores and experience centers, depending on the needs of

[7] *ICDP European Car Distribution Handbook 2019.*

specific geographies. They can ensure quality of service by offering new after-sales concepts; for instance, Audi's digital service stations, providing automated check-in and check-out, are open 24 hours a day. To pool demand across dealerships, OEMs could also create large service centers in the outskirts of cities.

OEMs should partially transform their sales model from wholesale to retail by increasing their ability and efforts to generate high-quality leads. They should also partially shift to direct-to-consumer sales models (such as subscriptions) for selected geographies or offerings. A direct model implies reduced margins for dealers and more direct access to customers for OEMs.

Before scaling up any changes, OEMs should start pilots to explore and assess a variety of business models. Several OEMs (for example, Mercedes in Sweden and Toyota in New Zealand) have already conducted such experiments. The knowledge gained from them will help the entire industry to mitigate implementation problems, such as insufficient pricing, failed stock management, and unclear marketing responsibilities.

New mobility concepts can also be part of that business-model innovation. OEMs, for example, may gain new revenue streams by creating regional shared-EV pools for major European cities or EV fleets for urban taxi providers. If such mobility services use a subscription-based pricing model, they can help hedge against falling EV prices. The same holds true for other offerings (such as battery-leasing services) related to new mobility concepts.

The time has come to revise the GTM model for EVs. OEMs can start by taking the following steps:

First, they should use EVs as an accelerator to modernize the GTM. By piloting and quickly scaling up the required short-term measures for online channels, the offline experience, after-sales services, network restructuring, and the like, OEMs can ensure a high level of readiness when new EVs are ready to launch.

Second, OEMs should prepare for novel sources of revenue. They ought to launch and support their markets while dealers tap into new revenue streams, such as charging, bundles for EV mobility, on-demand features, and data from vehicles.

Finally, to stay ahead of the curve, OEMs should be ready to leap by exploring new business models, including alternative sales models, mobility solutions, and battery-reusage concepts.

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