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# Gaining competitive advantage with GenAI in automotive sales: A global view

Pilots have shown the power of GenAI in automotive marketing and sales, but OEMs and dealers need a systematic scale-up strategy now to gain a competitive advantage.

*This article is a collaborative effort by Niels Dau, Philipp Maximilian Lühr, Stephan Mühlhäuser, Matthias Roggendorf, David Sprengel, and Marije Weber, representing views from McKinsey's Automotive & Assembly Practice and Growth, Marketing, and Sales Practice.*



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**For automotive marketing and sales,** the ascent of GenAI comes at an opportune time. The go-to-market model for vehicle sales is transforming as emerging competitors enter the market, especially from China. These attackers have lean go-to-market processes and innovative sales models that emphasize direct interaction with the customer and hyperpersonalized communications that address their individual needs. Beyond customer interaction, GenAI can help automotive organizations ensure that marketing and sales efforts are highly efficient and deliver a strong return on investment—factors that will become even more important as global competition grows.

OEMs and dealers have begun experimenting with GenAI in most functions, but its application within marketing and sales remains nascent. Some companies have started pilots but have not yet deployed it at a larger scale. Part of the challenge is that the companies have difficulty determining which GenAI use cases will generate the most impact when so many are possible and each function seems to have its own GenAI ambitions. Scale-up may also seem daunting because of the investment and resources required, as well as the risks associated with any new technology. But OEMs and dealers now realize that inaction is not an option if they want to remain competitive in the market.

To help automotive organizations chart a path forward, we surveyed ~200 automotive marketing and sales executives in China, Europe, and North America to determine how GenAI is now being used in marketing and sales worldwide, as well as future plans for its use. We also conducted expert interviews to supplement our findings. This research helped identify priority use cases, including those related to increasing efficiency and attaining higher levels of personalization. It also revealed the main challenges that interfere with implementation, as well as potential solutions.

## Generative AI is here—and China is ahead (again)

Across all functions, including strategy and R&D, 45 percent of all survey respondents reported that GenAI is part of their daily operations, although the percentage was much higher in China than in Europe or North America. For marketing and sales alone, regional differences also emerged, with about 90 percent of Chinese respondents stating that their organizations had undertaken generative AI pilots, compared to only about 50 percent in both Europe and North America. About 30 percent of North American and European respondents stated that their organizations should increase use of GenAI, however.

These findings are in line with the views of McKinsey market experts, who believe that OEMs and dealers in China are pursuing GenAI applications most aggressively. This pattern may occur because Chinese organizations are more likely to have a "test and learn" mindset about GenAI, even if there is a risk of failure and the financial benefits are uncertain. Chinese organizations would rather launch an application and iterate quickly than wait for the best solution to become obvious. Particularly in Europe, organizations spend more time investigating which GenAI use cases to pursue and assessing risks before moving to action.

Regional variations also emerged about the impact of GenAI. About 90 percent of Chinese respondents have high expectations for the impact resulting from this technology, compared to only about 80 percent of North Americans and 65 percent of Europeans. In addition, there are important differences in terms of what use cases are perceived as most impactful (Exhibit 1). (See sidebar "Automotive marketing and sales use cases" for short descriptions of major use cases; these are also discussed in more detail in the next section.) For instance, European respondents believe that personalized communication—the ability to tailor the style, content, and timing of

Exhibit 1

## Perceptions of use-case impact varied by region.

**Impact ranking of use cases by region,[1]**
based on respondents answering (very) significant impact

Top 3 use cases

| Use case | | China | EU | North America[2] |
|---|---|---|---|---|
| **Customer experience** | In-car concierge | 9 | 3 | 11 |
| | Personalized communication | 11 | 1 | 5 |
| | Product personalization | 6 | 8 | 2 |
| | Virtual customer assistant | 4 | 5 | 5 |
| | Personalized virtual showroom | 13 | 13 | 1 |
| **Productivity** | Maintenance advisor | 2 | 12 | 9 |
| | Community moderation | 3 | 9 | 13 |
| | Data-entry assistant | 11 | 6 | 5 |
| | Insights creation | 14 | 7 | 14 |
| | Market and competitor monitoring | 7 | 2 | 11 |
| | Marketing content | 9 | 11 | 2 |
| **Revenue growth** | Lead management | 1 | 14 | 4 |
| | Offer generation | 5 | 4 | 5 |
| | Sales/customer-service co-pilots | 7 | 10 | 10 |

[1]Professionals in automotive marketing and sales organizations were asked: *Please share your estimated ROI (return on investment)/impact these use cases would have if implemented in your organization. There were 36 respondents for North America. The sample size is too small to determine if the results are statistically significant for this group; but they can illustrate some indicative trends.*
[2]There were 36 respondents for North America. The sample size is too small to determine if the results are statistically significant for this group, but they can illustrate some indicative trends.

messaging to individual customers—will have the greatest impact. This comes as no surprise because GenAI allows companies to overcome the historical challenges inherent in developing materials tailored to individuals at scale. In China, by contrast, respondents most value use cases related to growth and productivity, with lead management—identifying, qualifying, and nurturing—viewed as most important. This preference may occur because many OEMs in China are new entrants that tend to place more emphasis on costs and efficiency. It is also easier to measure the impact of growth and productivity use cases, compared to those related to customer experience, and there are fewer regulatory constraints about data privacy.

If Europeans and North Americans do not embrace the potential from GenAI and adopt a "test and learn" mindset now, when GenAI is still relatively nascent, they run the risk of falling behind their Chinese counterparts.

## Automotive marketing and sales use cases

Our 14 priority use cases included the following:

**Customer experience**

— In-car concierge in the form of upgraded infotainment systems that make personalized suggestions and book reservations based on a customer's standard routes, destination, and activities for certain dates

— Personalized communications from functions such as sales, customer service, and aftersales in response to customer inquiries; the content, style, and channel is specifically targeted at individuals based on available data from multiple sources, including information from customer-relationship-management systems and past customer behaviors

— Personalized products, such as accessories, created with GenAI-powered design tools

— Virtual customer assistants in the form of "personal" chatbots that help customers with self-service and answer questions that arise during the process

— Virtual, personalized showrooms or interactive experiences in which customers can explore different vehicle models, customize features, and take virtual test drives in their preferred environment (for instance, local neighborhoods)

**Productivity**

— Repair and maintenance advice through voice assistants that instruct mechanics and answer questions on technical issues while they work

— Community moderation for building and maintaining digital communities; the virtual assistant can generate content, analyze behavior (for instance, posting frequency), review messages, and flag posts that appear inappropriate

— Data-entry assistants that can fill in or suggest missing data based on customer preferences and other information for orders, customer complaints, repair memos, and other documents

— Insights creation, which involves automatically reviewing, extracting, and synthesizing large amounts of information from different sources and formats, including text, speech, and images

— Market and competitor monitoring, including the automatic review and synthesis of information on trends, technology advances, volumes, and company activitie

— Marketing content with hooks, format, language, tone, and length tailored to individual customers

**Revenue growth**

— Lead management, which involves generating, nurturing, and converting leads into sales in the new, augmented customer segments that GenAI can create; automated follow-ups include personalized messaging

— Offers that are personalized and emotionally appealing, specifically targeted to individual consumers based on data, such as purchase history

— Co-pilots for sales and customer service in which GenAI provides suggestions for interacting with customers based on available data, including past interactions and the customer's perceived mood; suggestions may relate to the content of conversations, optimal interaction strategies, and next steps

## Picking the right GenAI application is critical

Across industries, McKinsey research suggests that many of the most promising GenAI use cases within marketing and sales relate to three areas:

— *Customer experience.* Generic advertisements no longer suffice for today's consumers, who increasingly want personalized communications and experiences.

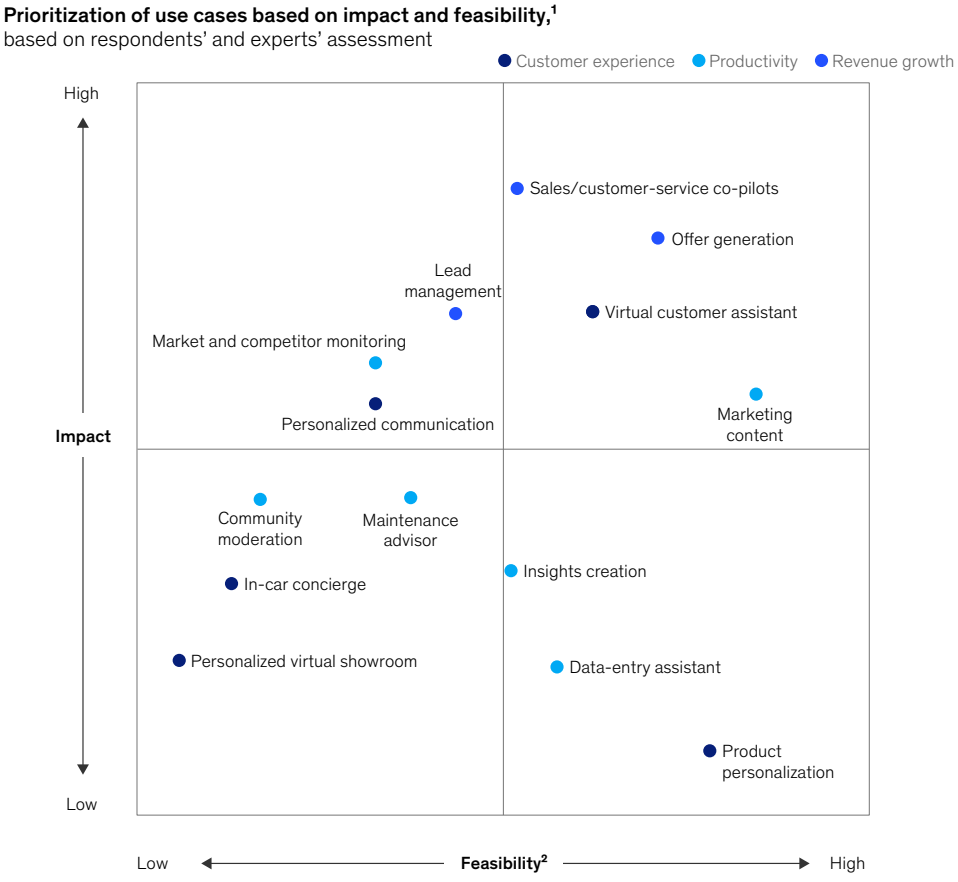
— *Growth.* With better insights and recommendations from GenAI, OEMs and dealers can improve lead identification/qualification, and the offering.

— *Productivity.* Generative AI can accelerate or improve many processes, including the creation of marketing content, competitive analyses, and customer interactions.

Our research, including interviews with industry leaders who have at least progressed to the pilot stage, allowed us to assess 14 use cases regarding their impact potential. In addition to impact, we assessed the feasibility of implementing each use case and the associated risks. When considering ease of implementation, we looked at various factors, such as the availability of data and the technological skills required. For risks, we focused on legal issues, such as IP infringement, and security concerns because respondents ranked these as most important. Of the 14 use cases, four emerged as a potential starting point for automotive organizations because they could deliver high impact with reasonable effort within marketing and sales (Exhibit 2):

Exhibit 2

## Use cases can be ranked based on impact and feasibility.




[1]Professionals and experts in automotive marketing and sales organizations were asked: *Please share your estimated ROI (return on investment)/impact these use cases would have if implemented in your organization / Please share your estimated ease of implementation of these use cases in your organization.*
[2]Feasibility score considering ease of implementation and risk.

— *Co-pilots that improve sales and customer service.* GenAI could provide sales and customer-service employees with real-time assistance and suggestions during customer interactions. While GenAI would consider data, such as information on past interactions and churn modeling, it could also examine more unconventional inputs. For instance, GenAI could assess a customer's mood, based on language in their written communications, or even by interpreting the tone of a customer's voice, and then make recommendations based on the perceived emotions. Automotive OEMs and dealers, like many others, might underestimate the potential impact of this use case because it is difficult to believe that algorithms may trump human judgment about sales or customer-service interactions, but GenAI pilots have shown that these tools are associated with more successful outcomes, such as higher efficiency and customer satisfaction. GenAI co-pilots may also help organizations that tend to have high attrition among sales or customer-service teams, because they facilitate onboarding.

— *Offer generation.* Automotive OEMs and dealers already use advanced analytics to create tailored offers for specific customer segments. GenAI takes personalization to another level by creating offers designed to appeal to individual customers based on their profile, preferences, driving habits, and previous interactions with the company. Beyond increasing the closing rate for sales, these offers could improve cross- and upselling opportunities. What's more, GenAI can help OEMs and dealers enhance sales steering (for example, vehicle allocation, specification, and pricing). For instance, GenAI applications could focus promotions on models that are in overstock, rather than suggesting all vehicles that would meet a customer's needs, if the tool is connected to inventory data.

— *Virtual customer assistants.* Chatbots and virtual assistants are already common, but their replies often result in exasperation or a request to be transferred to a customer-service representative. Rather than simply responding to common questions or providing reminders about essential maintenance, GenAI virtual assistants can "remember" information given by customers during the "conversation," including past inquiries. By providing better, more personalized service both before and after purchase, GenAI can help significantly reduce the number of customer service requests and boost revenues.

— *Marketing content generation.* Every new vehicle or special offer has associated marketing content directed at specific segments and channels. GenAI could automatically generate and optimize copy and images, thereby improving both efficiency and costs. It could also help OEMs and dealers achieve an even higher level of personalization, which would increase engagement and improve the customer experience. For instance, some financial-services companies now use GenAI when crafting emails to determine the right headlines, images, tone, and content for individual customers, rather than tailoring them to large customer segments.

For the second wave of use cases, organizations have two options. They can continue to experiment with applications that are relatively easy to implement, such as those for data entry and insight creation, even if the impact is lower. Alternatively, organizations can focus on use cases that deliver greater impact, such as those for lead management, if they are willing to implement a more complex use case. These may require access to external databases via APIs, for instance, or necessitate creating a combined analysis of data in different formats, such as text, images, and voice. Consider the process for obtaining competitive insights. First, the GenAI tool must access news feeds and public data sources, such as annual reports. It must then extract the information, rank its relevance, and then create a report that weaves disparate information into a cohesive whole.

## GenAI implementation involves some familiar challenges—and a few new ones

As with the introduction of any new technology, GenAI requires both significant funding and a dedicated team with the right technical skills. Over 60 percent of our survey respondents reported that a lack of resources is one of the greatest obstacles to GenAI use.

For talent, companies should understand the skills needed for GenAI before beginning recruitment or upskilling efforts. Companies will need similar types of profiles in the development and maintenance of GenAI use cases as for "traditional" analytical AI/ML, such as data scientists, data engineers, software engineers, and translators (those who understand business priorities and can determine what use cases will help a company achieve its goals). But GenAI requires new skillsets and ways of working. For instance, teams must know how to embed their company's proprietary data into large language models and how to create effective prompts—the specific language inputs used to generate answers to questions and other outputs. Overall, employees in GenAI roles must combine the skills of traditional data scientists—though their programming knowledge can be less extensive—and translators. Upskilling may alleviate some talent deficiencies, but companies may also need to hire new staff.

Other elements of GenAI implementation can also be challenging, as discussed in the sidebar "Putting GenAI to work."

## Putting GenAI to work

GenAI implementation may be easier if the following enablers are in place:

— *Creation of cross-functional teams.* Many GenAI applications require the same groundwork, such as embedding or fine-tuning proprietary data, and a cross-functional team is well positioned to coordinate different groups and ensure that they are not duplicating prep work. These teams would also have a better view of all proposed projects, making it easier to set priorities and allocate resources.

— *An initial focus on non-customer-facing applications.* Companies can test and refine these use cases quickly without the fear of disrupting the customer experience. Such efforts also help create excitement internally for the application of GenAI. Once companies have experience, they can extend their GenAI efforts to adjacent, customer-facing use cases, and the work may proceed more easily because of their prior efforts.

— *Revision of existing processes to include GenAI.* As one example, companies could integrate GenAI tools into the current systems that support customer-service representatives, allowing employees to get suggestions about appropriate answers to customer inquiries. If the tools are not integrated into systems, employees might regard them as a burden or cling to old habits.

— *Risk reduction as a top priority.* Organizations should establish guidelines—for instance, specifying when and how employees will review GenAI outputs—during development. Without these checks, they may run afoul of regulations, such as those on IP and consumer privacy.

— *High data quality.* Before doing any prep work for GenAI, companies must ensure that all necessary data is available. They should also assess the quality of their tech stack, including computing resources and data systems, as well as access to large language models. They must also determine if they can incorporate proprietary data into large language models.

GenAI—though still at an early stage—could be the most critical tool for addressing some of the key challenges in automotive marketing and sales. As emerging competitors, especially those from China, enter the automotive market, GenAI's ability to optimize growth and productivity will become even more important. In addition, customers increasingly expect more personalized interactions, and organizations will struggle to meet their expectations without the tailored content that GenAI delivers. As Chinese OEMs now have more GenAI experience, automotive organizations in other regions must accelerate their efforts now to catch up. For all companies, the key to success involves adopting a "test fast" mindset. Companies must also identify the use cases with the right combination of feasibility and impact for their organization and then move quickly to test and refine them. Easy-to-implement, productivity-related use cases, such as marketing-content generation, are particularly well suited to show proof of methodology and measurable impact fast. Since each organization has different areas for improvement and resources, their GenAI priorities may differ. But they all share an imperative to increase their GenAI efforts to avoid being left behind.



**Niels Dau** and **David Sprengel** are partners in McKinsey's Munich office, where **Marije Weber** is a consultant; **Philipp Maximilian Lühr** is a partner in the Hamburg office; and **Stephan Mühlhäuser** and **Matthias Roggendorf** are partners in the Berlin office.