

Car Intelligence: From “Know Me” to “Delight Me”

A.T. Kearney Smart Vehicle Application Index Ranking, Second Edition

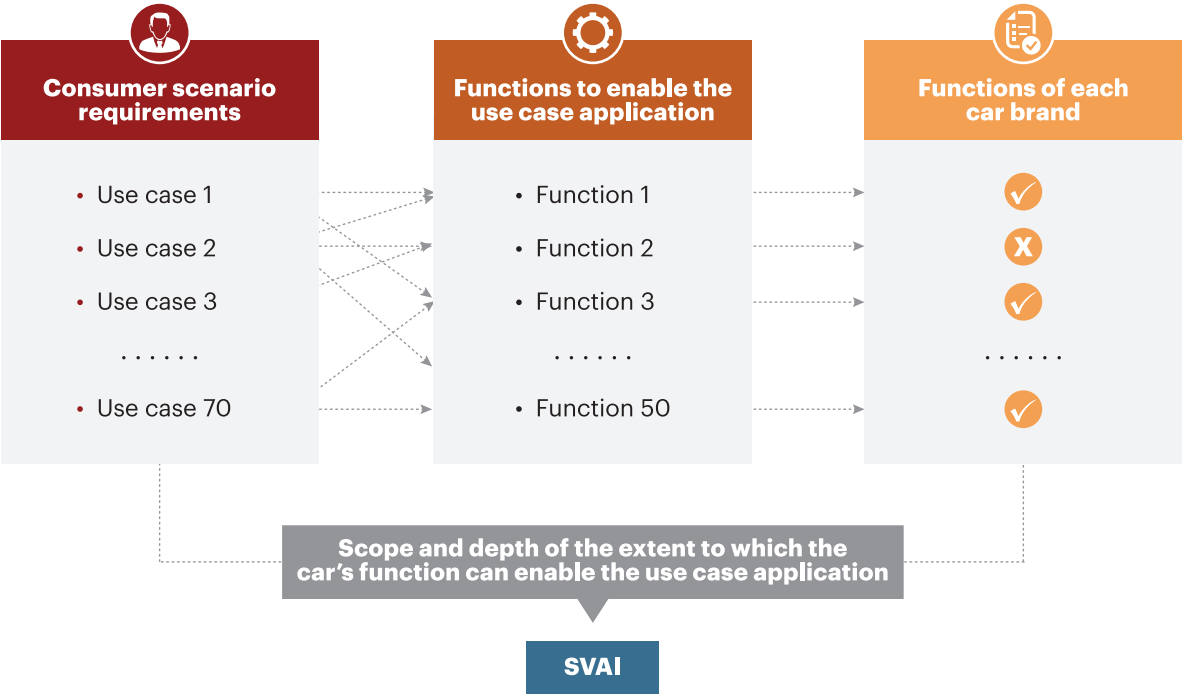
With the development of advanced technology, auto OEMs and investors are rapidly expanding their portfolios to include intelligent vehicles. Last year, major car brands launched many innovative models with intelligent applications. But can these new applications meet consumers' daily needs?



In A.T. Kearney’s first Smart Vehicle Application Index (SVAI) ranking, released last year, we tested the “intelligence” of representative products from each brand—in different scenarios, from a consumer perspective—to determine the overall intelligence of each brand. Given constant innovation in technology, dynamic changes in consumer needs, and the rate at which car manufacturers release new products, we decided to update the data from last year based on our continuous tracking of product intelligence levels. The result is the second annual A.T. Kearney SVAI ranking.

The second edition of the SVAI ranking draws on the same assessment approach as last year but introduces more use cases. We identified and quantified gaps between existing and desired functions in each use case to produce an updated SVAI ranking of car brands (see figure 1).

Figure 1
SVAI ranking methodology

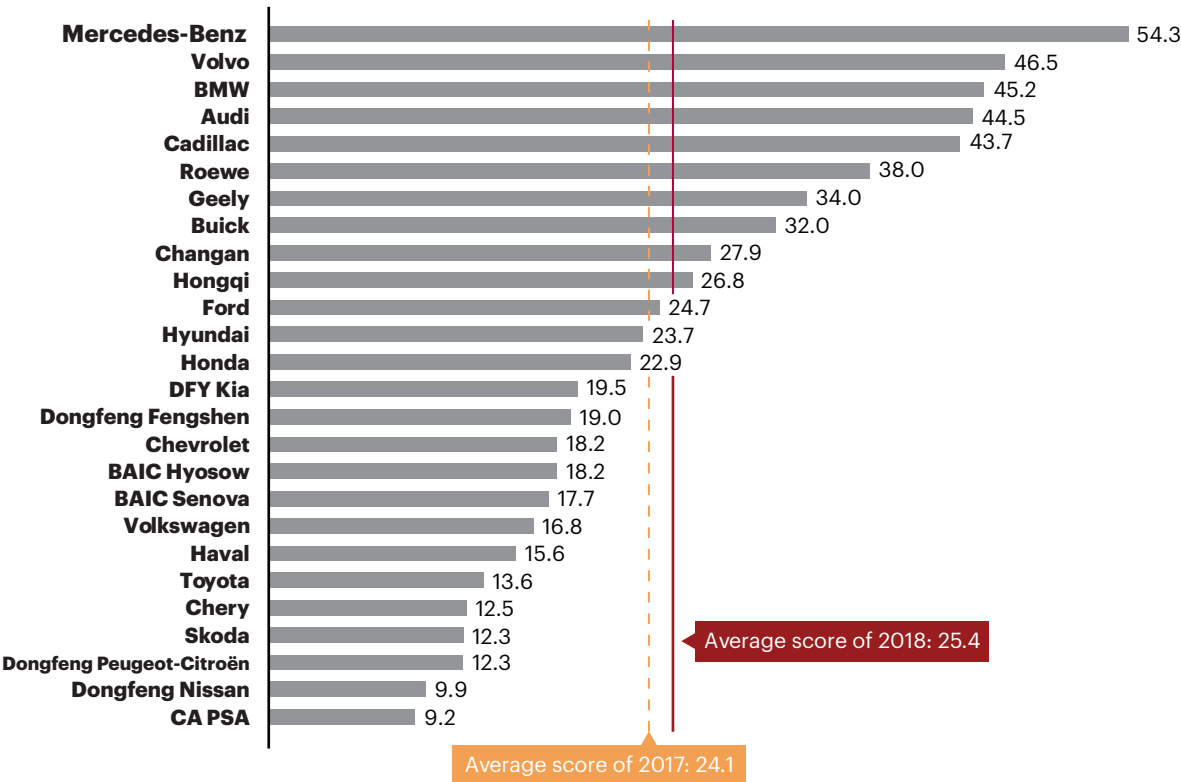


Source: A.T. Kearney analysis

Premium Brands Secure a Wider Lead in Intelligence

Eight manufacturers (Hongqi, DFY Kia, Chevrolet, BAIC Hyosow, Skoda, Dongfeng Peugeot, Dongfeng Nissan, and CA PSA) entered the rankings for the first time this year. Of the returning brands, Mercedes-Benz continues to hold the top spot, followed by traditional luxury car manufacturers Volvo, BMW, Audi, and Cadillac. These five remain, as with last year, in the first tier of the SVAI ranking (see figure 2 on page 2).

Figure 2
A.T. Kearney SVAI ranking, second edition (highest score=100)



Source: A.T. Kearney analysis

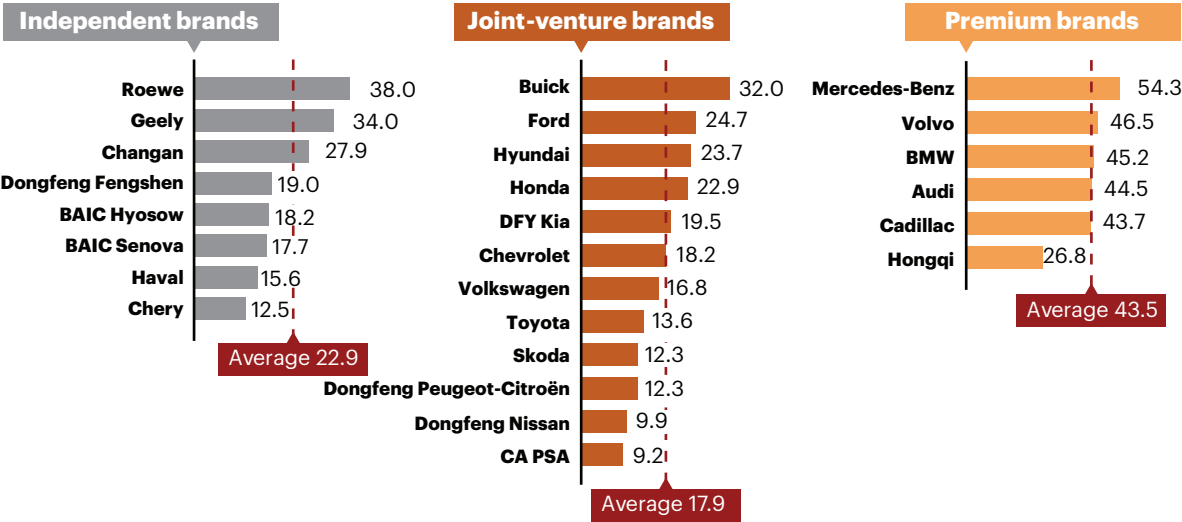
The findings show significant overall improvement in the index, as customers finally feel like cars are starting to “know them.” For the 18 brands that made it onto the list in both years, the average score rose from 24.0 to 29.6, demonstrating OEMs’ achievements in product intelligence over the past year.

Premium brands further enhanced their advantages in the intelligence stakes. All six top-tier brands made great progress, scoring an average of 43.5—up 20 percent from last year. By contrast, Chinese and joint-venture brands didn’t see a significant improvement overall, so the gap between them and the premium brands widened. Furthermore, to the extent these brands rose in the rankings, it was mainly driven by minority brands, demonstrating a trend of polarization: minority improved but majority worsened.

We believe that the improvement among premium brands is closely tied to their advanced planning of intelligence strategies, consistent understanding of consumer needs, extensive technological development, and research experience. As first movers, they have begun to see the rewards from their investment in more intelligent vehicles and are getting a head start on the shift from meeting customers’ rational need to “know them” to the emotional desire to “delight them.”

There is no big change in the ranking of premium brands compared to last year’s ranking (see figure 3 on page 3). Brands such as Changan and Honda rose rapidly and are key forces in driving up the SVAI rankings of Chinese and joint-venture brands. However, other brands such as Chery and Volkswagen progressed more slowly, recording little or negative SVAI improvement (see figure 4 on page 3).

Figure 3
SVAI ranking by brand positioning¹ (highest score=100)



¹ Based on products sold in the Chinese market before April 1, 2018.
Source: A.T. Kearney analysis

Figure 4
SVAI ranking changes¹

Brand	2018 ranking	2017 ranking	Change
Mercedes-Benz	1	1	—
Volvo	2	2	—
BMW	3	3	—
Audi	4	5	1 ↑
Cadillac	5	4	1 ↓
Roewe	6	6	—
Geely	7	7	—
Buick	8	9	1 ↑
Changan	9	14	5 ↑
Hongqi	10	—	—
Ford	11	11	—
Hyundai	12	15	3 ↑
Honda	13	18	5 ↑
DFY Kia	14	—	—
Dongfeng Fengshen	15	13	2 ↓
Chevrolet	16	—	—
BAIC Hyosow	17	—	—
BAIC Senova	18	10	8 ↓
Volkswagen	19	16	3 ↓
Haval	20	20	—
Toyota	21	19	2 ↓
Chery	22	17	5 ↓
Skoda	23	—	—
Dongfeng Peugeot-Citroën	24	—	—
Dongfeng Nissan	25	—	—
CA PSA	26	—	—

¹ The number of brands in the list increased from 20 to 26, affecting the absolute value of the ranking.
Source: A.T. Kearney analysis

Sales Booster: Intelligence as a New Engine for Sales Growth

Driven by industry trends and consumer demands, major brands are promoting embedded intelligent applications as the most important selling point in new vehicles, with the expectation that this will lead to a breakthrough in sales. The findings show remarkable returns on these efforts: vehicles that consumers consider as “knowing them” achieve better sales figures than traditional “non-smart” alternatives.

Mercedes-Benz, the champion of our SVAI, launched new C-Class, E-Class, and GLC-Class models last year. The abundant smart technologies in these products, which consumers are willing to pay for, drove up the brand’s index by 22 percent. As the brand’s flagship intelligent executive car, the E-Class saw year-on-year sales growth of 96 percent in 2017. Changan, which lagged behind last year, saw its SVAI score rise sharply to 27.9 this year. Its new models, including the CS75, are expected to include new technological breakthroughs in 2018.

As the only Chinese brand in the premium segment of the index ranking, Hongqi (Red Flag) also defines intelligence as one of its core strategies for brand revitalization. Hongqi’s new H7, which the brand launched last year as its first strategic product, received an above-average intelligence score in our calculations. We can expect better performance from Hongqi as it releases new iterations and new technologies.

Convenience, real-time, safety, and pleasure—all enabled by intelligent technologies—can increase brand awareness among younger generations, who care more about experience and personalization than older buyers. These, in turn, will become key considerations for consumers when they are choosing and buying a car.

At the other end of the scale, some brands that scored as less intelligent have already seen signs of a sales slump. At this pivotal time for evolving to smart vehicles, manufacturers will pay a great price unless they improve their consumer insights, technological capabilities, and product planning. Even joint-venture brands that still sell well in China—such as Volkswagen and Toyota—should focus on improving their level of intelligence if they wish to remain competitive in the long term.

Mobile Becomes a Focal Point

China has built a lead in Internet-based product development and innovation. After all, it has the world’s largest customer base—a nation of consumers who are accustomed to acquiring goods, services, and content online. Accordingly, Chinese consumers have higher expectations for innovative car applications. To meet this particular demand in the Chinese automotive market, OEMs are developing smart applications that work beyond the vehicle itself, to include mobile devices such as smartphones and car keys. This extension is also reflected in their efforts to build strategic ecological partnerships, such as the Tencent–Changan and SAIC–Alibaba joint ventures.

Mobile applications greatly influenced this year’s SVAI rankings, where our assessment model factors in functions such as remote car search and in-car device control via a mobile phone. Further development of Mercedes me, Volvo on Call, and other mobile applications will also help to push up these brands’ SVAI scores.

However, this type of mobile application development is still in its infancy. There is still a large gap between automotive OEMs and top Internet companies in terms of realizing functions and optimal user interface design. Different brands have also reached very different stages of development in introducing mobile applications. Software development is expensive, but once developed the marginal cost in production is close to zero (in contrast to hardware). So the marginal cost of software is also quite low, which upsets the previous valuation model to some extent. However, the improved user experience enabled by mobile applications is extremely effective when it comes to enhanced branding and building word of mouth. In the era of the smart car, mobile- and software-driven innovation will be a vital tool for weaker brands to overtake their more traditional competitors. With the deployment of 5G technologies, vehicle intelligence will race beyond the current boundaries to include urban infrastructure, smart home systems, wearable devices, and other non-automotive elements.

Although cost and technology constraints mean premium brands will continue to be the first movers in adopting innovative new features, mid-level and economy brands could potentially pick up speed by launching low-cost functions and applications. They can also seek to establish strategic partnerships with leading Internet companies, focusing on improved user experience and consumer insights to drive up their product intelligence scores.

From “Know Me” to “Delight Me”: Intelligence Is Shifting from Sense to Sensibility

OEMs are still focusing on rational needs when they develop intelligent vehicles. Current designs focus more on improvements in convenience, safety, economy, and connectivity, which only realizes the “know me” element. At this stage, the car is still just a more advanced and more convenient means of transport.

As artificial intelligence (AI) and other new technologies mature—and OEMs translate deeper consumer insights into more comprehensive smart vehicle designs—smart cars will be able to piece together a complete understanding of the real needs of car owners, capturing their emotional wishes as well as their practical needs. They will use AI to make real-time decisions, react, and self-control, building deeper emotional interactions and connections with consumers.

Differentiated Competition: Will Emerging Power Win the Future?

Driven by the trends of electrification, intelligence, e-commerce, and the sharing economy, many new car producers are emerging in the market. Although our SVAI only assesses mass-produced vehicles, after reviewing the models and configuration settings announced by several emerging Internet-originated car start-ups, we feel all could enter the first tier of the rankings if their vehicles went into mass production. We can estimate this based on factors such as differentiated product design concepts and Internet capability advantages, especially from OEMs such as Nio, Byton, and Weltmeister. The attention and support these manufacturers are able to secure even as nascent OEMs demonstrates consumers’ great expectation for innovative smart cars.

How can traditional OEMs address the challenge from these emerging powers that use intelligence as their core selling points? In a market where technology is rapidly evolving and the landscape is constantly changing, all brands should redefine their value proposition from the perspective of a seamless consumer experience. It is increasingly essential—not optional—to develop smart vehicles that customers can say really “know me” and “delight me,” and the way to do this requires technological innovation, application testing, and an improved user experience. Whether emerging manufacturers or traditional brands come out on top, the consumer will be the ultimate winner.

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