The information and statistics set out in this section and other sections of this document were extracted from the report prepared by CIC, which was commissioned by us, and from various official governmental publications and other publicly available publications. We engaged CIC to prepare the CIC report, an independent industry report, in connection with the [**REDACTED**]*. The information from official government sources has not been independently verified by us or any other parties involved in the* [**REDACTED**]*, or any of our or their respective directors, senior management representatives, advisers or any other persons involved in the* [**REDACTED**] *and no representation is given as to its accuracy.*

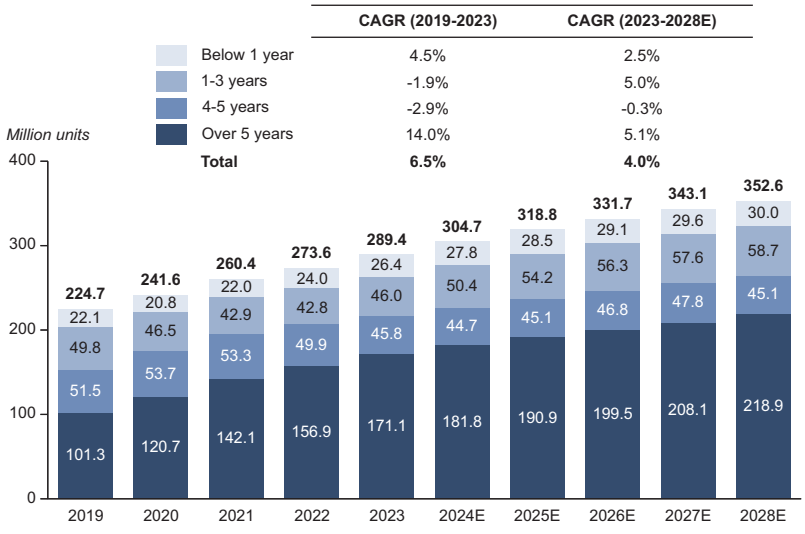
OVERVIEW OF CHINA'S AUTOMOBILE INDUSTRY AND AUTOMOTIVE AFTERMARKET INDUSTRY

Overview of China's Passenger Vehicle Industry

Given the economic growth and rising personal income levels, the car parc of passenger vehicles in China increased from 224.7 million units to 289.4 million units between 2019 and 2023. With the steady growth of the total car parc of passenger vehicles in China, the composition of passenger cars by vehicle age has been gradually changing, and the average age of passenger vehicles in China is also increasing, growing from 5.4 to 6.6 years old between 2019 and 2023.

Driven by the increasing number of passenger vehicles and their average age, the greater volume of passenger vehicles in China are entering after-sales period, leading to the larger growth of the aftermarket services including auto decoration products and services, UBI renewals, and used car sales assistance.

Total parc of passenger vehicles, by vehicle age, China, 2019-2028E



Source: CPCA, CADA, CIC

The Trend of Connectivity in China's Passenger Vehicle Industry

- **An increased penetration rate of ICVs.** Networking development is an integral part of the China's passenger vehicle industry. At present, they are mainly reflected in three major elements: 1) L2 and L3 autonomous driving, 2) advanced interactive features, and 3) enhanced service offerings, which will gradually become important determinants for users to purchase cars. With the continuous commercial development of relevant hardware and software, the new generation of technologies will help deepen the development of autonomous driving and meet the strict requirements of active and passive safety. Therefore, the sales volume of ICVs in China is expected to increase from 8.7 million units in 2023 to 15.9 million units in 2028, which will account for over 50% of new car sales in 2028.

- **Integrated upgrades in ICV value chains towards downstream user end.** With the rapid penetration of ICVs and data accumulation from vehicle usage and manufacturing, China's traditional automobile industry is evolving, giving rise to user-centric business models. This transformation involves the formation of a new industry chain centered around ICVs and the creation of various downstream market segments deriving from new maintenance and usage patterns, including software and services, aftermarket services, and travel services. This continual evolution increases the value contribution to the ICV industry, and also enhances the value and importance of downstream end-users. In China, the total revenue of the ICV industry exceeded RMB1.3 trillion in 2023 and is expected to reach RMB3.2 trillion in 2028, with a CAGR of 19.4%.

- **The increasing importance of software and service.** With the continuous transformation of automobile industry, the extension of applications and functions increases the total consumption for the users during the whole life cycle of automobiles. Besides traditional hardware and vehicle manufacturing, China's ICV industry also includes more continuous software and value-added service consumption, which will grow to be a core part in the future. Related software and services market size accounted for more than 34% of the overall ICV market in 2023. It is expected to exceed RMB1.3 trillion in 2028 with a CAGR of 24.9%, accounting for about 40% of the total market.

- **Comprehensive application of large-scale models in China's passenger vehicle industry.** Large-scale models have previously been applied in the autonomous driving and interaction features of ICVs to enhance driving safety and driving experience. With the increasing availability of data, specialised large-scale model in the automotive industry that could be trained from general large-scale model and applied in various scenarios through API interface are gradually maturing and being widely applied to cover the entire lifecycle of ICVs, especially in areas related to user information including automotive sales, aftermarket services and travel services. For automotive sales, specialised large-scale models can conduct personalised marketing and customer relationship management by

precisely analyzing potential customers' demands, and thereby improving sales efficiency. For aftermarket services, specialised large-scale models could evaluate the usage status of vehicles and provide appropriate solution recommendations based on massive user behavioral data. Additionally, for travel services, specialised large-scale models can assist drivers with route planning or vehicle coordinating to avoid traffic jam and improve travel experience.

- **The in-house development and integration of smart hardware by automobile OEMs.** As technology continuously innovates and consumer demands for personalised and customised vehicles increase, many OEMs have begun to develop smart hardware in-house and directly sell vehicles with integrated hardware, potentially bypassing the aftermarket altogether and offering a complete package to consumers. This means that OEMs may not only offer standalone in-vehicle hardware products but also sell vehicles that come pre-equipped with advanced hardware solutions. This strategy allows OEMs to provide consumers with an integrated experience, including both the vehicle and its embedded hardware, without the need for aftermarket installations. As a result, this direct sale approach from OEMs makes the market more competitive, as consumers may opt for these comprehensive solutions directly from the vehicle manufacturer.

Overview of China's Automotive Aftermarket Industry

Definition and Categorisation of Automotive Aftermarket Industry

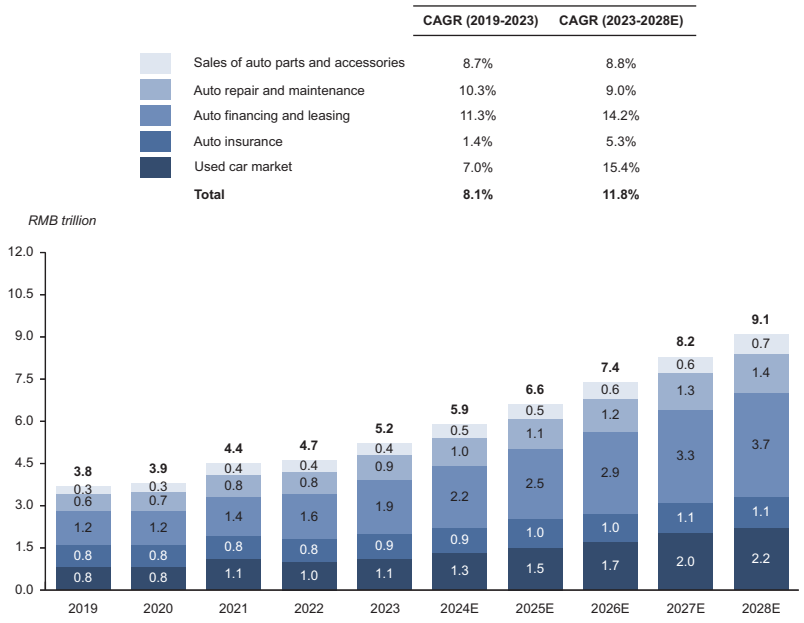
The automotive aftermarket industry refers to the collection of all vehicle-related services performed after a car is sold, which includes sales of auto parts and accessories, auto repair and maintenance, auto financing and leasing, auto insurance, and used car market. The automotive aftermarket industry focuses on services provided to passenger vehicles in operation, and the total market demand of automotive services is directly related to factors such as total passenger car parc and average vehicle age.

In the midstream value chain of automotive aftermarket industry, the main market players refers to 4S stores, auto parts manufacturers, franchised IAMs etc., which connect the car users in the downstream and OEMs in the upstream. Companies who provide in-vehicle hardware and software products can empower the entire value chain of the automotive aftermarket industry.

Market Size of China's Automotive Aftermarket Industry

The market size of the Chinese automotive aftermarket industry grew at a CAGR of 8.1% between 2019 and 2023 and reached RMB5.2 trillion in 2023. Given the positive outlook based on the Chinese economy and increasing car parc of passenger vehicles, the market size of the automotive aftermarket industry is expected to reach RMB9.1 trillion in 2028, representing a CAGR of 11.8% between 2023 and 2028.

Market size of the automotive aftermarket, China, 2019-2028E



Source: CPCA, CADA, CIC

Market Drivers for the Automotive Aftermarket Industry in China

- **Increased car parc of passenger vehicles and average vehicle age**. Along with increasing purchasing power and overall consumption upgrade, China's passenger car parc is expected to reach 352.6 million units by 2028. The increasing passenger car parc leads to increasing vehicle use frequency, as well as total mileage travelled and automotive wear and tear. On the other hand, the average age of passenger vehicles in China is still significantly lower than the level in developed countries, but it is expected to reach 7.2 years old by 2028, leading the average expenditure per vehicle on automotive service to rise. As such, the size of China's automotive aftermarket industry will continue to flourish in the future.

- **Trend of NEV passenger vehicles**. The NEV trend provides a unique opportunity for China's automotive aftermarket industry. The sales volume of the NEV market rose to 8.9 million units in 2023 and is expected to hit 22.8 million units in 2028. Among NEVs, PHEVs require maintenance of both engine and battery as they use both as the power system, and the annualised expenditure on regular maintenance and repair for a PHEV is approximately 13% higher than that for an ICEV. And BEVs are expected to require additional services such as battery inspection, battery balancing, and battery testing, given the high cost of battery packs. Therefore, from the perspective of NEVs' entire lifecycle, there will still be considerably significant expenditures allocated to the automotive aftermarket services, especially in maintenance, repair and battery services.

- **Favourable policies and regulations**. Innovative applications for the automotive aftermarket industry will continue to flourish rapidly amid favourable regulations. For example, the China Banking and Insurance Regulatory Commission issued the Guidance on Implementing the Comprehensive Reform of Auto Insurance in 2020 to encourage the development of innovative products such as UBI on new energy vehicles and qualified traditional vehicles. To achieve the goal of carbon emission peaking and carbon neutralisation, the Chinese government has issued several guidelines and schemes, including the New Energy Vehicle Industry Development Plan (2021-2035), and has facilitated the long-term growth of the NEV market. These policies and regulations stimulated the increase in passenger vehicle sales volume and spurred automotive aftermarket growth.

OVERVIEW OF CONNECTED SERVICES FOR THE AUTOMOTIVE AFTERMARKET INDUSTRY IN CHINA

Overview of Connected Services for the Automotive Aftermarket Industry

With the continuous advancement and application of technology, people's demands and expectations for transportation are constantly increasing. In addition, the government has also provided strong support for the development of ICVs. Therefore, the trend towards connectivity in automobiles is inevitable in the future.

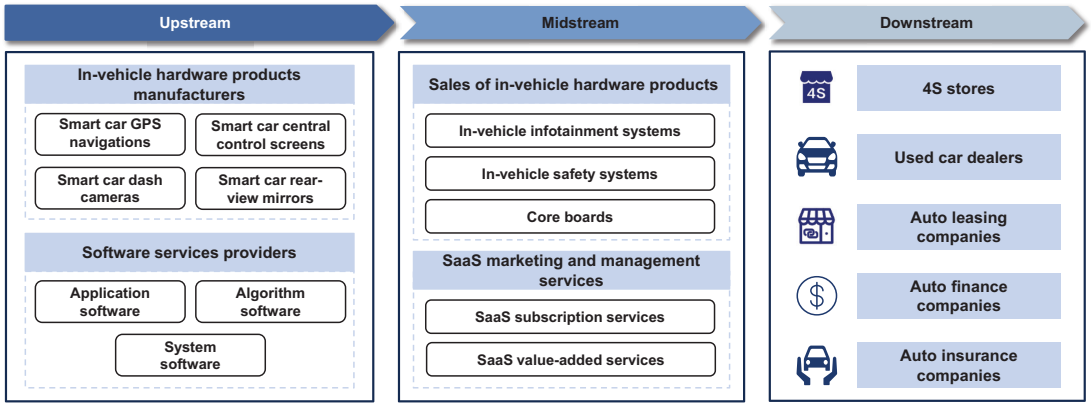
Connected services for the automotive aftermarket industry can connect vehicles to the internet through in-vehicle hardware products, and SaaS marketing and management services, enabling customers with more comprehensive and efficient services.

Definition and Categorisation of Connected Services for the Automotive Aftermarket Industry

Connected services refer to connecting vehicles with the Internet and providing comprehensive hardware products, software services, and value-added services for customers such as 4S stores, auto insurance companies, auto finance and leasing companies, and used car dealers in the automotive aftermarket industry. Specifically, connected services for the automotive aftermarket industry comprise sales of in-vehicle hardware products that can connect vehicles to the internet, and SaaS marketing and management services. These SaaS marketing and management services are designed to connect 4S stores with car users, facilitating direct customer reach, user management and precise marketing. In addition, they can also be applied to scenarios such as vehicle rescue, remote vehicle fault diagnosis, and subscription services for customers.

The value chain of connected services for the automotive aftermarket industry is illustrated below. Connected services providers for the automotive aftermarket industry are positioned in the midstream, playing a crucial role in connecting and coordinating between the upstream and the downstream.

Value chain of the connected services for the automobile aftermarket industry

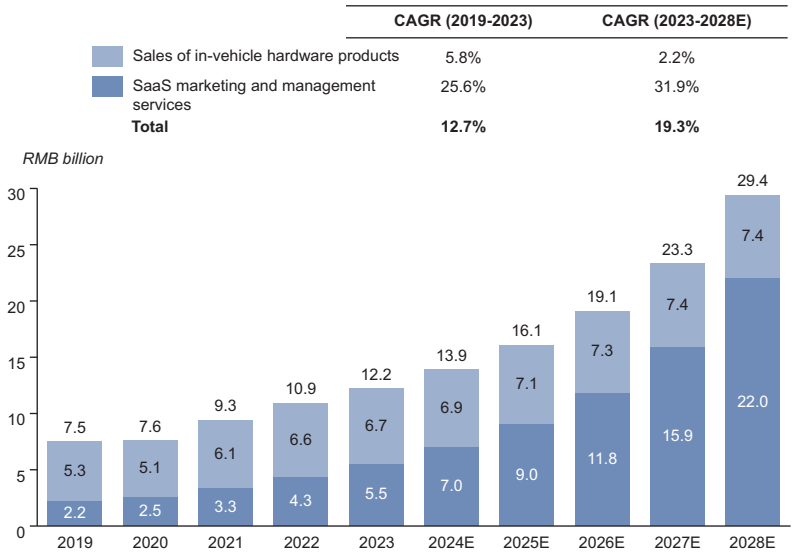


Source: CIC

Market Size of Connected Services for the Automotive Aftermarket Industry

Connected services for the automotive aftermarket industry have experienced rapid development under the promotion of the continuous improvement and development of the ICVs. As a result, the total revenue of China's connected services for the automotive aftermarket industry increased from RMB7.5 billion in 2019 to RMB12.2 billion in 2023 at a CAGR of 12.7%. In the future, connected services for the automotive aftermarket industry will have broader and deeper application scenarios, especially maintenance, used car sales service, and UBI renewal. Therefore, the total revenue of connected services for the automotive aftermarket industry is expected to reach RMB29.4 billion in 2028, with a CAGR of 19.3% from 2023 to 2028.

Total revenue of connected services for the automotive aftermarket industry, China, 2019-2028E

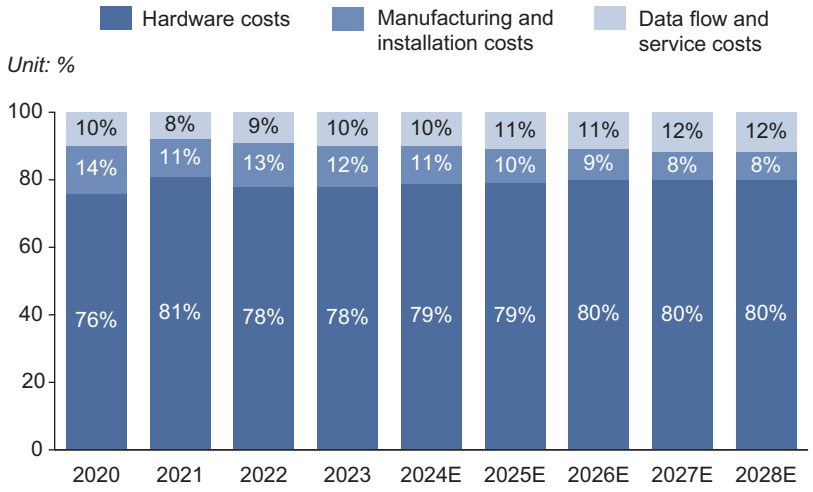


Source: CPCA, CADA, NBSC, MIIT, CBIRC, CIC

Connected services for the automotive aftermarket industry are facing prosperous development opportunities. The continuous improvement and application of advanced technology have not only improved the automotive industry's service level and user experience but also provided strong support for developing connected services including sales of in-vehicle hardware products, and SaaS marketing and management services, for the automotive aftermarket industry.

The cost structure of connected services providers in the automotive aftermarket industry in China mainly primarily consists of costs of hardware, installation costs, as well as data traffic and cost of services, accounting for approximately 78%, 12%, and 10% of the total cost in 2023, respectively. Due to the impact of the global chip shortage, the cost of hardware manufacturing has increased, resulting in a sustained rise in the selling prices of hardware. In this trend, it is expected that the proportion of costs of hardware for the connected services providers in the automotive aftermarket industry will continue to increase.

The cost structure of connected services providers in the automotive aftermarket industry, 2020-2028E



Source: CIC

Market Drivers of Connected Services for the Automotive Aftermarket Industry in China

- **Increased demand for online transformation of marketing and management**. Stores in the automotive aftermarket industry are facing ever-increasing costs of customer acquisition from public domain. As a result of that, stores in the automotive aftermarket industry have focused on private domain operations to enhance customer loyalty and improve customer retention rates by leveraging SaaS marketing and management services, such as incorporating live streaming promotions into their marketing strategy, investing in digital customer relationship management systems, and employing private domain data collection to achieve precision marketing.

- **Expanding the business scope of connected services**. Stores in the automotive aftermarket industry have expanded their business scope via sales of in-vehicle hardware products and SaaS marketing and management services, to satisfy customer demand for evolving aftermarket services, including auto decoration products and UBI insurance services. These reformations from both the business (car & store) side and consumer (driver) side significantly improve the after-sales ability of stores in the automotive aftermarket industry. As a result, these evolving businesses have brought a new model of SaaS value-added services to enhance the efficiency and profitability of the stores in the automotive aftermarket industry.

- **Favourable policies and regulations**. The application of connected services for the automotive aftermarket industry will continue to enhance rapidly amid favourable regulations. For example, in October 2023, the Ministry of Commerce, along with eight other departments, jointly issued *the Guidelines on Promoting High-Quality Development of the Automotive Aftermarket*, aimed at optimising the distribution environment for auto parts and accessories and enhancing digital service capabilities in automotive repair. Furthermore, in January 2024, the Ministry of Industry and Information Technology, together with four other departments, issued *the Notice on Carrying Out the Pilot Work on ICVs "Vehicle-Road-Cloud Integration" Applications*, which seeks to improve the connectivity rate of vehicles and support enhanced communication between vehicle terminals and city-level platforms.

Entry Barriers and Challenges of Connected Services for the Automotive Aftermarket Industry in China

Despite tremendous market opportunities, connected services providers face specific entry barriers primarily related to technological capabilities, abilities of client acquisition and management, and development of skilled talents. Firstly, these connected services providers require robust technological capabilities and data accumulation to improve connectivity for 4S stores. Besides, to expand their business presence, newcomers must overcome relatively high marketing costs associated with attracting clients away from other companies. Additionally, connected services providers must employ experienced technical professionals and train an effective offline sales force to address the evolving demands in technical services and sales channels.

Connected services providers may face several challenges when serving connected services for 4S stores. First of all, data security vulnerabilities may impact the implementation of remote control functions in the automotive aftermarket industry. Furthermore, car drivers generally concern personal privacy issues when choosing connected services and are usually unwilling to have their personal data recorded, collected, and transmitted by smart in-vehicle devices and auto apps. This necessitates connected service providers to establish proper limits on the collection of user data by platforms. On the other hand, connected services providers also need to resolve the challenge that decentralised APP platforms are unable to integrate information from other APP platforms to create comprehensive user profiles.

Overview of Sales of In-Vehicle Hardware Products for the Automotive Aftermarket Industry

Definition and Categorisation of Sales of In-Vehicle Hardware Products for the Automotive Aftermarket Industry

Sales of in-vehicle hardware products refer to smart in-vehicle hardware products and related car modules connected via the Internet. Smart in-vehicle hardware products can be categorised as 1) in-vehicle infotainment systems, such as smart car GPS navigations and smart car central control screens, 2) in-vehicle safety systems, such as smart car dash cameras and smart car rear-view mirrors, and related car modules refer to 3) core boards.

Market Size of Sales of In-Vehicle Hardware Products for the Automotive Aftermarket Industry

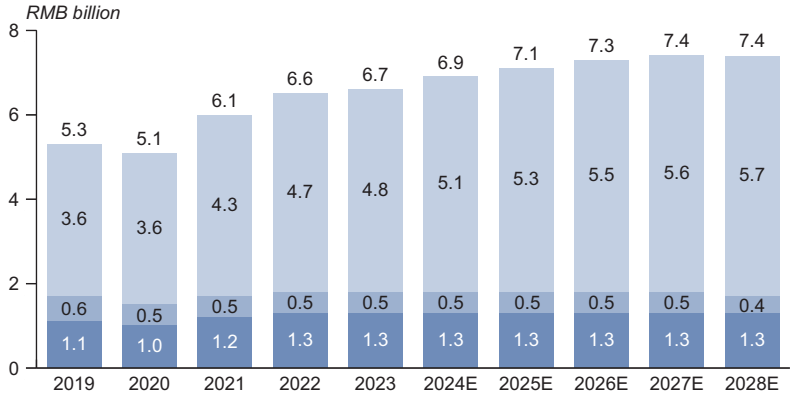
Given the continuous increase of car parc in China, sales of in-vehicle hardware products for the automotive aftermarket industry experienced synchronous growth between 2019 and 2023. The total revenue of sales of in-vehicle hardware products for the automotive aftermarket industry increased from RMB5.3 billion in 2019 to RMB6.7 billion in 2023 at a CAGR of 5.8%.

Since the pandemic in 2020, car owners have emphasised the convenience and safety-related benefits of smart in-vehicle hardware products and become inclined to embrace in-vehicle hardware products, increasing the penetration rate of in-vehicle hardware products for the automotive aftermarket industry. Furthermore, the smart car central control screen has shown a trend of integration, launching all-in-one products with GPS navigation and driving record functions. As a result, the total revenue of sales of in-vehicle hardware products for the automotive aftermarket industry is expected to increase from RMB6.7 billion in 2023 to RMB7.4 billion in 2028 at a CAGR of 2.2%.

The in-vehicle infotainment systems and in-vehicle safety systems are primarily installed in ICEVs and are sold to car users through 4S stores or other aftermarket channels. These systems are mainly supplied to joint-venture OEMs between multinational brands and domestic brands and domestic brand OEMs, and can be customised according to the specific needs of different vehicle brands and models, allowing for installation across various brands and models. In 2023, joint-venture and domestic brands collectively accounted for 87.0% of the overall automotive market share in China in terms of new vehicle sales volume, and are expected to reach 91.7% in 2028. Additionally, while most vehicle manufacturers pre-install hardware products, the majority of vehicle models, especially mid-range and low-end vehicle models, are installed with basic hardware products, which are different from the more advanced in-vehicle hardware products sold in the automotive aftermarket. On these bases, the market for sales of in-vehicle hardware products is expected to continue its growth in the following five years.

Total revenue of sales of in-vehicle hardware products for the automotive aftermarket industry, China, 2019-2028E

	CAGR (2019-2023)	CAGR (2023-2028E)
In-vehicle infotainment systems	7.7%	3.3%
In-vehicle safety systems	-4.7%	-3.8%
Core boards	6.5%	0.2%
Total	**5.8%**	**2.2%**



Source: CPCA, CADA, NBSC, MIIT, CIC

Notes:

(1) In-vehicle infotainment systems include smart car GPS navigations and smart car central control screens.

(2) In-vehicle safety systems include smart car dash cameras and smart car rear-view mirrors.

Market Drivers of Sales of In-Vehicle Hardware Products for the Automotive Aftermarket Industry in China

The growth of sales of in-vehicle hardware products for the automotive aftermarket industry is driven by factors such as the innovation of vehicle, expansion of connection service scenarios, along with protection and advocacy from policies and regulations. These dynamic factors are primarily driving the widespread adoption and development of sales of in-vehicle hardware products for the automotive aftermarket industry, meanwhile ensuring the security and privacy of personal user information.

Entry Barriers and Challenges of Sales of In-Vehicle Hardware Products for the Automotive Aftermarket Industry in China

The entry barriers of sales of in-vehicle hardware products are relatively high for new market players in the automotive aftermarket industry. Firstly, the implementation of sales of in-vehicle hardware products involves intricate technologies such as data analytics and software integration. However, new entrants may lack of technical accumulation and talent. Furthermore, developing such technologies would require significant investments and funding, which could be a barrier for new entrants. Meanwhile, growing customer base and increasing customer engagement can be difficult for new entrants because of their relatively weak market influence.

Additionally, the market challenges and threats confronting sales of in-vehicle hardware products for the automotive aftermarket industry involve personal user data security, technological evolution and competitiveness, resource allocation and user experience. Thus, market players seeking to provide sales of in-vehicle hardware products for the automotive aftermarket industry need to overcome these obstacles to achieve more sustainable development.

Overview of SaaS Marketing and Management Services for the Automotive Aftermarket Industry

Definition and Categorisation of SaaS Marketing and Management Services for the Automotive Aftermarket Industry

SaaS marketing and management services refer to SaaS subscription services and SaaS value-added services related to marketing activities such as acquiring, activating, converting, managing, and retaining customers, and management activities such as financial, personnel, process, risk management and data management via online measures. SaaS subscription services refer to regular software services on marketing and management business module for the automotive aftermarket industry. Specifically, SaaS marketing software services generally include CRM/SCRM, Customer Data Platform (CDP), and DMS, and SaaS management software services generally include ERP, OA, and DMP. SaaS value-added services refer to online traffic referral and offline third-party store operation for 4S stores' service lines, including auto decoration products and services, UBI renewals, etc.

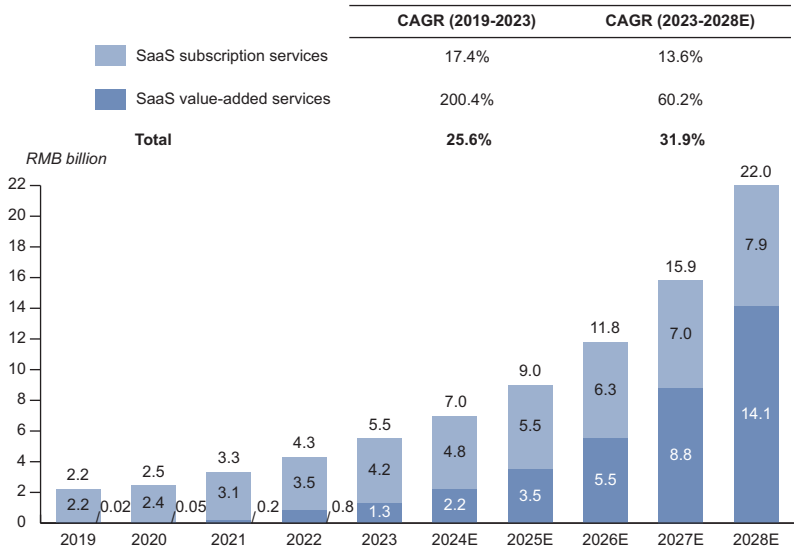
The importance of software and services is increasing with the rapid development of China's ICV industry. 4S stores, auto insurance companies, auto finance and leasing companies, and used car dealers also need to continuously invest in SaaS marketing and management services to grow their business. Through online appointment, regular maintenance reminders and vehicle management, they can provide more comprehensive and efficient services, improve customer satisfaction and loyalty, and achieve long-term business development goals.

Market size of SaaS Marketing and Management Services for the Automotive Aftermarket Industry

Since the outbreak of COVID-19, growing numbers of stores in the automotive aftermarket industry have begun embracing SaaS marketing and management services, increasing from approximately 0.1 million in 2019 to 0.3 million in 2023. As a result, the total revenue of China's SaaS marketing and management services for the automotive aftermarket industry increased from RMB2.2 billion in 2019 to RMB5.5 billion in 2023 at a CAGR of 25.6%. Driven by the constantly growing market size of the automotive aftermarket service market and their stores' increasing budgets for SaaS marketing and management services, the total revenue of SaaS marketing and management services for the automotive aftermarket industry is projected to grow from RMB5.5 billion in 2023 to RMB22.0 billion in 2028 at a CAGR of 31.9%.

With the increasing varieties of 4S stores' value-added service lines and complexity of SaaS marketing and management software services for stores in the automotive aftermarket industry, 4S stores have shown the growing demand for the SaaS value-added services since the outbreak of COVID-19. Therefore, as an innovative business model for the automotive aftermarket industry, the SaaS value-added services' total revenue reached RMB1.3 billion in 2023 and is projected to reach RMB14.1 billion in 2028 at a CAGR of 60.2% from 2023 to 2028.

Total revenue of SaaS marketing and management services for the automotive aftermarket industry, 2019-2028E



Source: CPCA, CADA, CBIRC, CIC

Notes:

(1) SaaS subscription services refer to regular software services on marketing and management business module for the automotive aftermarket industry.

(2) SaaS value-added services refer to online traffic referral and offline third-party store operation for 4S stores' service lines, including auto decoration products and services, UBI renewals, etc.

Along with the transformation and upgrading of SaaS marketing services, more 4S stores are establishing their own private domain platforms, where the 4S stores manage their relationships with customers via their own online channels by themselves. However, they are still facing the pain points of low effectiveness of their private domain operation such as ineffective marketing activities, high customer acquisition costs, and low customer conversion rate and customer loyalty, which can be tackled by more innovative value-added services including online traffic referral and offline third-party store operation. Furthermore, these value-added services are expected to further expand to more business scenarios such as NEV purchase/upgrade, used car sales service, and auto finance service referrals in response to the product selection preferences of car users in different life cycles. These can attract more customers,

efficiently generating more revenue and increasing gross profit margins for 4S stores, auto insurance companies, auto finance and leasing companies, and used car dealers in the automotive aftermarket industry.

The various value-added services offerings in the automotive aftermarket industry are playing an increasingly important role in facilitating the transaction processes with automotive aftermarket products and services and enhancing consumer loyalty. Thus these value-added services are increasingly adopted by more connected services providers to construct the digital customer operation capabilities to further improve the efficiency of digital marketing services. As the market evolves, it is anticipated that more connected services providers for the automotive aftermarket industry will further expand their business to offer a greater variety of value-added services to satisfy consumers' needs throughout the different stages of automotive aftermarket service cycles.

Market Drivers of SaaS Marketing and Management Services for the Automotive Aftermarket Industry in China

The factors such as increasing demands for digital consumption, tendency of cloud services and iteration of digital technology are driving the growth of SaaS marketing and management services for the automotive aftermarket industry. In addition, Chinese government agencies have introduced a series of favorable policies and regulations, such as *Migrating to Cloud, Using Digital Tools, and Empowering through Technology' and Fostering the Development of the New Economy*, and the E-Commerce Development Plan for the "14th Five-Year Plan" Period. These policies and regulations are aimed at building a digital industry chain, and encouraging businesses to engage in precision marketing in compliance with the law, thereby comprehensively enhancing production and sales efficiency. Overall, these market drivers can motivate market players to elevate customer relationship management and align with the industry dynamics and standards.

Entry Barriers and Challenges of SaaS Marketing and Management Services for the Automotive Aftermarket Industry in China

The entry barriers faced by SaaS marketing and management services for the automotive aftermarket industry encompass technological limitations and data coverage, high initial investment, and customer adoption acquisition. These combined obstacles can present formidable challenges for newcomers attempting to enter the market.

Furthermore, many challenges still exist in the SaaS marketing and management services for the automotive aftermarket industry. For example, due to the evolving digital technology, market players must prioritise continuously learning and adaptation to ensure the effectiveness of their solutions. Meanwhile, concerns on user data privacy and security, and cybersecurity vulnerabilities are important challenges for the SaaS marketing and management services for the automotive aftermarket industry.

COMPETITIVE LANDSCAPE OF CONNECTED SERVICES FOR THE AUTOMOTIVE AFTERMARKET INDUSTRY IN CHINA

In 2023, the connected services for the automotive aftermarket industry represented an insignificant portion of the overall automotive aftermarket sector, constituting approximately 0.9% of the total market share in terms of revenue. The market of connected services for the automotive aftermarket industry in China is relatively fragmented, with the top five connected services providers for the automotive aftermarket industry representing approximately 14.9% of the market in 2023. The connected services for the automotive aftermarket require advanced hardware and software technologies, as well as extensive data processing and cloud computing capabilities, which demand for professional technical teams and substantial financial support. This results in a high market entry barrier. However, due to the enormous potential of the market, numerous innovative companies and start-ups have emerged, leading to a relatively fragmented nature in the connected services for the automotive aftermarket industry. Several types of players are currently operating in the market, and specialist connected services providers have distinct competitive advantages in terms of strong technical capability and industry insights in the automotive aftermarket industry.

The Company covers SaaS marketing and management services and sales of in-vehicle hardware products, with expertise in serving clients in the automotive aftermarket industry such as 4S stores, auto finance and leasing companies, and other aftermarket services providers. In 2023, the Company ranked first among connected services providers for the automotive aftermarket industry in China in terms of total revenue generated from connected services for the automotive aftermarket industry.

The following table sets forth the ranking of connected services providers in terms of revenue generated from connected services for the automotive aftermarket industry in 2023.

Ranking of the top five connected services providers for the automotive aftermarket industry by revenue, China, 2023

Ranking	Company	Revenue generated from connected services for the automotive aftermarket industry, 2023	Market share[5]
		(RMB billion)	(%)
1	**The Company**	**0.56**	**4.6%**
2	Company A[1]	0.33	2.7%
3	Company B[2]	0.32	2.6%
4	Company C[3]	0.30	2.5%
5	Company D[4]	0.30	2.5%
	Top five sub-total	**1.81**	**14.9%**
	Total	**12.16**	**100.0%**

Source: Annual reports, CIC

Notes:

(1) Company A is a public company founded in 2003. It focuses on customers in the automotive industry, such as OEMs and dealers, to provide digital solutions, cloud services, software and professional services in the field of marketing and automotive aftermarket, and to build a digital ecosystem platform for upstream, downstream and cross-industry integration of the automotive industry chain.

(2) Company B is a public company founded in 2002. It primarily focuses on providing digital map services and other customised connected vehicle solutions for passenger and commercial vehicles. Its connected services products can meet the differentiated needs of vehicles in various application scenarios, including vehicle positioning and safety management-related requirements such as vehicle condition monitoring and driver behavior monitoring.

(3) Company C is a public company founded in 2000. It delivers information technology solutions to the automotive industry and is engaged in the research, development, and production of various auto parts products. It offers comprehensive connected services for aftermarket automotive companies to enhance their efficiency, and provides personalised and valuable car services to users, achieving precise outreach through digital means.

(4) Company D is a proposed listed company founded in 2009 and has been approved by China Securities Regulatory Commission. It provides intelligent terminal products and supporting solutions for many application scenarios of Internet of thing. Its products are mainly applied in three major fields, namely automotive aftermarket, travelling and payment hardware.

(5) Certain amounts and percentage figures included in this document have been subject to rounding. Accordingly, figures shown as totals in certain tables may not be an arithmetic aggregation of the figures preceding them. Any discrepancies in any table or chart between the total shown and the sum of the amounts listed are due to rounding.

The following table sets forth the ranking of sales of in-vehicle hardware products providers in terms of revenue generated from sales of in-vehicle hardware products for the automotive aftermarket industry in 2023.

Ranking of the top five sales of in-vehicle hardware products providers for the automotive aftermarket industry by revenue, China, 2023

Ranking	Company	Revenue generated from sales of in-vehicle hardware products for the automotive aftermarket industry, 2023	Market share[3]
		(RMB billion)	(%)
1	Company B	0.32	4.8%
2	Company D	0.30	4.6%
3	**The Company**	**0.23**	**3.4%**
4	Company E[1]	0.22	3.3%
5	Company F[2]	0.11	1.6%
	Top five sub-total	**1.18**	**17.7%**
	Total	**6.66**	**100.0%**

Source: Annual reports, CIC

Notes:

(1) Company E is a public company founded in 1997. It primarily provides hardware and software services for connected vehicles, and is committed to providing convenient driving solutions for global customers. It owns the automotive connected cloud platform, providing data processing and business management services for aftermarket vehicles.

(2) Company F is a public company founded in 2006. It focuses on intelligent driving and world-leading automotive electronic solutions, and its business covers automotive intelligent cockpit, intelligent assisted driving, intelligent internet connection, and provides smart car dash camera, smart car rear-view mirror and other products for the automotive aftermarket.

(3) Certain amounts and percentage figures included in this document have been subject to rounding. Accordingly, figures shown as totals in certain tables may not be an arithmetic aggregation of the figures preceding them. Any discrepancies in any table or chart between the total shown and the sum of the amounts listed are due to rounding.

The following table sets forth the ranking of SaaS marketing and management services providers in terms of revenue generated from SaaS marketing and management services for the automotive aftermarket industry in 2023.

Ranking of the top five SaaS marketing and management services providers for the automotive aftermarket industry by revenue, China, 2023

Ranking	Company	Revenue generated from SaaS marketing and management services for the automotive aftermarket industry, 2023	Market share[(3)]
		(RMB billion)	(%)
1	**The Company**	**0.33**	**6.1%**
2	Company A	0.31	5.6%
3	Company C	0.26	4.8%
4	Company G[(1)]	0.16	3.0%
5	Company H[(2)]	0.10	1.8%
	Top five sub-total	**1.17**	**21.3%**
	Total	**5.49**	**100.0%**

Source: Annual reports, CIC

Notes:

(1) Company G is a private company founded in 2002. It provides digitalisation service for the automotive industry, including auto parts products, connected vehicle software, and related services. Its full scenario SaaS marketing and management services provides services such as platform operation and operation capacity building around the whole life cycle of users.

(2) Company H is a public company founded in 2015. It provides software and related services for the automotive industry and operates primarily through ERP business, cloud services, etc. It has provided comprehensive services to automotive dealer groups to assist them in achieving precision management and innovation in their profit models.

(3) Certain amounts and percentage figures included in this document have been subject to rounding. Accordingly, figures shown as totals in certain tables may not be an arithmetic aggregation of the figures preceding them. Any discrepancies in any table or chart between the total shown and the sum of the amounts listed are due to rounding.

Entry Barriers for Connected Services in the Automotive Aftermarket Industry

- **Technology capability and data accumulation.** As increasingly vast amounts of data are generated from various machines and devices, while the research and development of data models and machine learning can take significant time, which represents a major barrier to new market entrants.

- **Marketing channels and client resources.** Establishing effective sales and marketing channels is crucial for connected services providers to reach, serve, and retain clients in the automotive aftermarket industry. To expand business scale, new entrants must also overcome high costs to attract clients from other companies.

- **Professional talent acquisition.** Market players must have both experienced technical employees and effective offline sales force to meet evolving needs in technical services and sales channels. This requisite weakens the competitiveness of new entrants in the connected services market for the automotive aftermarket industry.

SOURCES OF INFORMATION

This section contains information extracted from the CIC Report, independently prepared by CIC, which we have commissioned for this document. We expect to pay CIC a total of RMB1,047,000 for the CIC Report and our use thereof. CIC is a consulting company established in Hong Kong that provides industry consulting services, commercial due diligence, and strategic consulting services for various industries.

CIC undertook primary and secondary research using various resources to construct this report. Primary research involved interviewing key industry experts and leading industry participants. Secondary research involved analysing data from various publicly available sources, including the National Bureau of Statistics of China, China Automobile Dealers Association, China Passenger Car Association, etc. The information and data collected by CIC have been analysed, assessed, and validated using CIC's in-house analysis models and techniques. The methodology used by CIC is based on information gathered from multiple levels, which allows for such information to be cross-referenced for reliability and accuracy.

CIC prepared its report on the following basis and assumptions for historical data and projections:

(i) The overall social, economic, and political environment is expected to maintain a stable trend over the next decade; (i) according to the National Bureau of Statistics and the International Monetary Fund (IMF), China's and the global nominal GDP is expected to maintain a CAGR of 5.8% and 4.7% from 2023 to 2033, respectively; (ii) the PRC's social, economic, and political environment is likely to remain stable in the forecast period with a series of policies by Chinese government to maintain the stability of social, economic and political environment, such as the "14th Five-Year Plan (十四五規劃)" approved in March 2021 which proposed that the main objectives of economic and social development during the 14th Five-Year Plan period include obtaining new achievements in economic development and improving effectiveness of national governance, and the report made in the 20th National Congress of the Communist Party of China in October 2022 which proposed that Chinese government is dedicated to promoting high-quality economic development and safeguarding national security and social stability;

(ii) Related key industry drivers are likely to continue driving growth in the automobile market during the forecast period, including favourable policies, increasing demand from consumers for digital channels and solutions, and continuous technology upgrades; and

(iii) There is no extreme force majeure or industry regulations by which the market situation may be affected dramatically or fundamentally.