The information contained in this section, unless otherwise indicated, has been derived from various official government publications and other publications and the market research report prepared by Frost & Sullivan which we commissioned (the "F&S Report"). We engaged Frost & Sullivan for preparing the F&S Report in respect of the [**REDACTED**]. *We have taken reasonable care in extracting and reproducing such information. We have no reason to believe that such information is false or misleading in any material respect or that any fact has been omitted that would render such information false or misleading in any material respect. We have not, nor have any of the Sole Sponsor,* [**REDACTED**]*, or any of their respective directors, officers or representatives or any other parties involved in the* [**REDACTED**] *(excluding Frost & Sullivan), independently verified the information in the various official government publications nor give any representation as to the accuracy or completeness of such information. As of the Latest Practicable Date, our Directors confirm that, after taking reasonable care, there has been no material adverse change in the market information presented in this section.*

ANALYSIS OF GLOBAL AND CHINA'S AUTOMOBILE MARKET

Market Size of Global and China's Automobile Industry

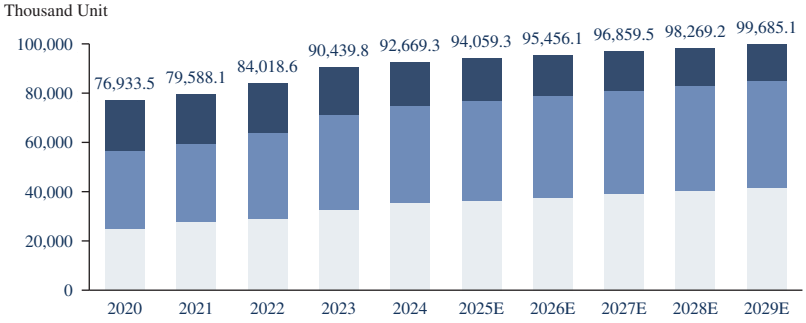
Global automobile production volume has seen an optimal growth over the past years, increasing from 76,933.5 thousand units in 2020 to 92,669.3 thousand units in 2024 with a CAGR of 4.8%. In terms of price segmentation, automotive models priced between RMB100k and 200k are currently the primary segment of the market, achieving 39,452.7 thousand units and accounting for 42.6% of the market in 2024. However, mid-to-high-end models priced above RMB200k has become the fastest-growing one in recent years, with a CAGR of 9.1% from 2020 to 2024, which is mainly driven by the expansion of high-net-worth groups worldwide, the concentration of intelligent technologies, and the high-end orientation of new energy transformation.

During the forecasted period, it is expected that the global production volume of automobiles will increase steadily to 99,685.1 thousand units in 2029 with a CAGR of 1.5% during 2024 and 2029. Driven by the continuous growth of high-net-worth groups in emerging markets, the iterative upgrading of intelligent and electric technologies, and the accelerated electrification transformation of luxury brands, automobiles priced above RMB200k will continue to drive the steady development of the overall market. It is expected that their production will reach 41,563.7 thousand units by 2029, achieving a CAGR of 3.5% from 2024 to 2029.

China is the largest automobile market in the globe with the total automobile production volume of 31,282.0 thousand units in 2024, which achieved CAGR of 5.5% from 2020 to 2024. By price segment, aligning with global market dynamics, automobiles priced between RMB100k and 200k remain the core market segment, accounting for 51.5% of total sales. Notably, the automotive market for vehicles priced above RMB200k has registered the fastest growth momentum over the past years with CAGR of 9.4% from 2020 to 2024. This growth is primarily fueled by three key drivers: the deep integration of intelligent and green technologies, the rise of domestic high-end brands, and the ongoing consumption upgrading trend among residents. Furthermore, domestic brands' breakthroughs in design and core technologies have broken the long-standing monopoly of foreign brands, providing an additional impetus for the expansion of the mid-to-high-end market.

Looking forward, China's production volume of automobile is expected to further increase to 38,702.1 thousand units in 2029 with a CAGR of 4.3% during 2024 and 2029. Driven by the continuous iteration of new energy and intelligent technologies, the expansion of high-income groups and the accelerated internationalization of domestic mid-to-high-end models, the automotive market for vehicles priced above RMB200k will continue to serve as the market growth driver, promoting the overall market expansion. The continuous improvement of charging infrastructure and the implementation of carbon emission policies will further consolidate the growth foundation of this segment.

Production Volume of Automobiles (by Vehicle Sales Price), Global, 2020-2029E

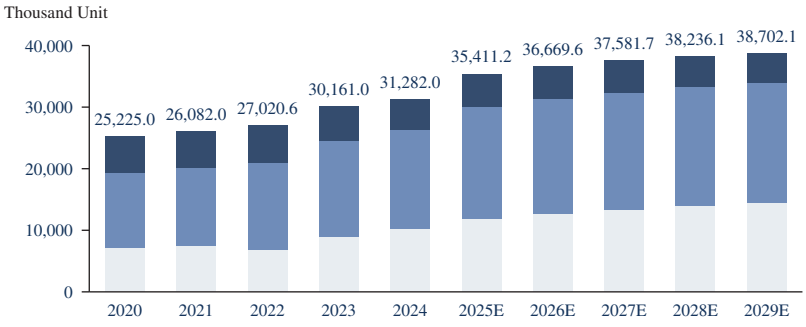


	2020	2021	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	CAGR (20-24)	CAGR (24-29E)
Below RMB100k	20,721.0	20,145.0	20,402.5	19,486.2	18,145.2	17,490.7	16,820.5	16,134.7	15,433.6	14,717.5	-3.3%	-4.1%
RMB100k-200k	31,475.5	31,957.3	35,020.0	38,350.7	39,452.7	40,326.5	41,160.8	41,953.3	42,701.8	43,403.9	5.8%	1.9%
Above RMB200k	24,737.1	27,485.8	28,596.1	32,602.9	35,071.4	36,242.1	37,474.9	38,771.5	40,133.8	41,563.7	9.1%	3.5%
Total	**76,933.5**	**79,588.1**	**84,018.6**	**90,439.8**	**92,669.3**	**94,059.3**	**95,456.1**	**96,859.5**	**98,269.2**	**99,685.1**	**4.8%**	**1.5%**

Note: Vehicle sales price refer to manufacturer suggested retail price pre subsidies.

Source: Frost & Sullivan

Production Volume of Automobiles (by Vehicle Sales Price), China, 2020-2029E



	2020	2021	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	CAGR (20-24)	CAGR (24-29E)
Below RMB100k	5,932.8	6,054.1	6,205.1	5,704.1	5,071.4	5,465.3	5,379.0	5,230.2	5,038.8	4,819.4	-3.8%	-1.0%
RMB100k-200k	12,230.4	12,701.7	14,005.8	15,608.0	16,104.8	18,168.9	18,739.7	19,118.2	19,350.6	19,473.4	7.1%	3.9%
Above RMB200k	7,061.8	7,326.2	6,809.8	8,848.9	10,105.8	11,777.1	12,550.9	13,233.3	13,846.7	14,409.3	9.4%	7.4%
Total	**25,225.0**	**26,082.0**	**27,020.6**	**30,161.0**	**31,282.0**	**35,411.2**	**36,669.6**	**37,581.7**	**38,236.1**	**38,702.1**	**5.5%**	**4.3%**

Note: Vehicle sales price refer to manufacturer suggested retail price pre subsidies.

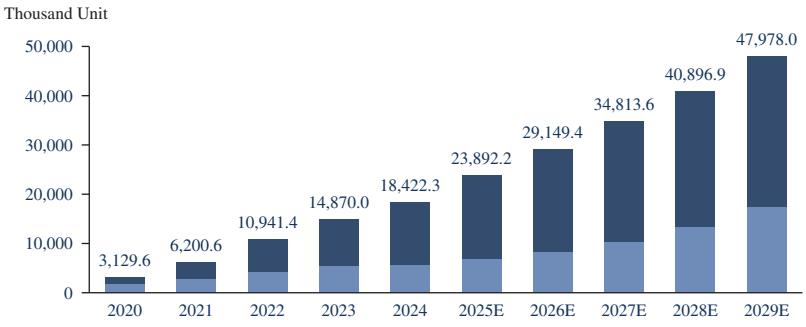
Source: China Association of Automobile Manufacturers, China Automobile Dealer Association, Frost & Sullivan

Electric vehicle (EV) market wise, the global EV market is experiencing remarkably rapid growth. Production reached 18,422.3 thousand units in 2024 and is projected to grow continuously to 47,978.0 thousand units by 2029, representing a CAGR of 21.1%. Concurrently, the EV penetration rate is forecasted to surge from 19.9% to 48.1%.

Within the global landscape, China commands a dominant position in the industry. Chinese EV production totaled 12,888.0 thousand units in 2024, accounting for approximately 70.0% of the global market. Projections indicate Chinese EV production will rise to 30,621.6 thousand units by 2029, translating to a CAGR of 18.9%. China's EV penetration rate is expected to leap from 41.2 % in 2024 to 79.1% by 2029, highlighting the substantial potential and dynamic growth trajectory of the Chinese market.

This robust expansion is underpinned by supportive government incentive policies across various regions including purchase subsidies and tax incentives, which have effectively accelerated EV adoption. Advancements in battery technology have significantly improved vehicle range and reduced charging times. Furthermore, declining costs driven by technological progress and economies of scale, coupled with the continuous enhancement of charging infrastructure, have further increased consumer acceptance and enhanced user convenience.

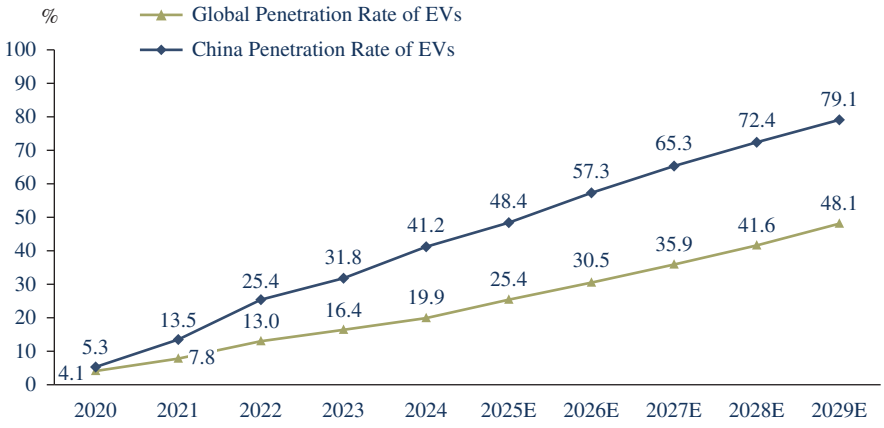
Production Volume of EVs (by Region), Global, 2020-2029E



	2020	2021	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	CAGR (20-24)	CAGR (24-29E)
China	1,325.9	3,533.8	6,868.0	9,587.0	12,888.0	17,153.9	21,012.7	24,546.3	27,684.1	30,621.6	76.6%	18.9%
ROW	1,803.7	2,666.8	4,073.3	5,283.0	5,534.3	6,738.3	8,136.7	10,267.3	13,212.8	17,356.4	32.4%	25.7%
Total	**3,129.6**	**6,200.6**	**10,941.4**	**14,870.0**	**18,422.3**	**23,892.2**	**29,149.4**	**34,813.6**	**40,896.9**	**47,978.0**	**55.8%**	**21.1%**

Source: China Association of Automobile Manufacturers, Frost & Sullivan

Penetration Rate of EVs, Global and China, 2020-2029E



Source: Frost & Sullivan

ANALYSIS OF CHINA'S AUTOMOTIVE INTERIOR TRIM SYSTEM SOLUTIONS MARKET

Definition and Classification of Automotive Interior Trim System Solutions Market

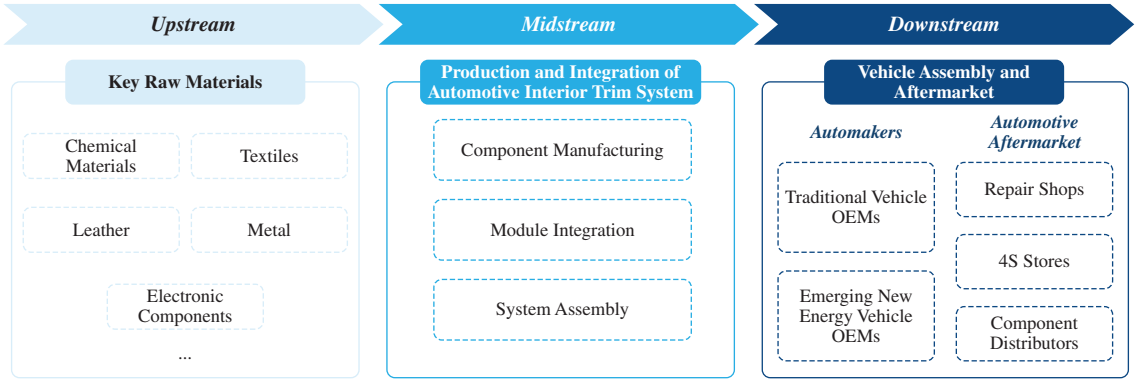
Automotive interior trim system refers to the collective term for vehicle interior components that possess certain decorative and functional qualities, safety features, and engineering attributes. The automotive interior system is a vital part of the vehicle body, operating under complex conditions. Beyond aesthetics, it also fulfils functions such as flame retardancy, light resistance, vibration damping, heat insulation, and sound absorption.

Automotive interior trim system can broadly be categorized into hard interiors and soft interiors. Hard interior products mainly include the instrument panel, door panels, pillar trim panels, etc., primarily using plastic pellets as the core raw material and injection molding as the core process, supplemented by techniques such as foaming, slush molding, wrapping, edging, and assembly. Soft interior products mainly consist of components with relatively soft contact surfaces inside the vehicle that serve decorative and comfort functions, such as the vehicle headliner, carpet, acoustic insulation foam, thermal insulation foam etc.

Industry Value Chain of Automotive Interior Trim System Solutions Market

The automotive interior trim industry chain primarily consists of three key segments. The upstream segment mainly involves the supply of raw materials, including chemical materials, textiles, leather, and electronic components, which serve as substrate materials and fillers for manufacturing interior parts. The midstream segment represents the core of interior production, where interior trim manufacturers are responsible for component manufacturing (e.g. seat frames, panel injection molding, fabric cutting), module integration (e.g. cockpit modules, door panel modules), and system assembly. The downstream segment targets vehicle manufacturing enterprises (OEMs), providing synchronized development, customized production, and timely supply, with the parts ultimately assembled into finished vehicles. Additionally, the after-sales service market (including modifications and replacement parts) serves as a crucial extension of the industry chain.

Industry Value Chain of Automotive Interior Trim System Solutions Market



Source: Frost & Sullivan

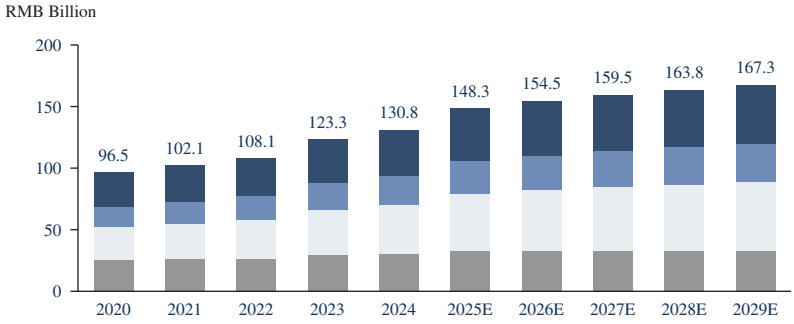
Market Size of China's Automotive Interior Trim System Solutions Industry

China's automotive interior trim system market has experienced a rapid growth over the past few years, rising from RMB96.5 billion in 2020 to RMB130.8 billion in 2024, representing a CAGR of 7.9% from 2020 to 2024. The optimal market growth is mainly driven by increased single-vehicle value due to consumer upgrades, the trend towards intelligent cockpits, and the

acceleration of domestic substitution. Among all product type, instrument panel assemblies and door panel assemblies are the primary segment in automotive interior trim system solutions, collectively accounting for the 59.2% of the total market value in 2024.

During the forecast period, thanks to the continued penetration of vehicle intelligence, the rise of personalized customization, and the application of green and lightweight materials, automotive interior trim system solutions market is expected to further expand in the following year, reaching to RMB167.3 billion by 2029 with CAGR of 5.1% from 2024 to 2029.

Market Size of Automotive Interior Trim System Solutions (by Revenue, by Production Type), China, 2020-2029E



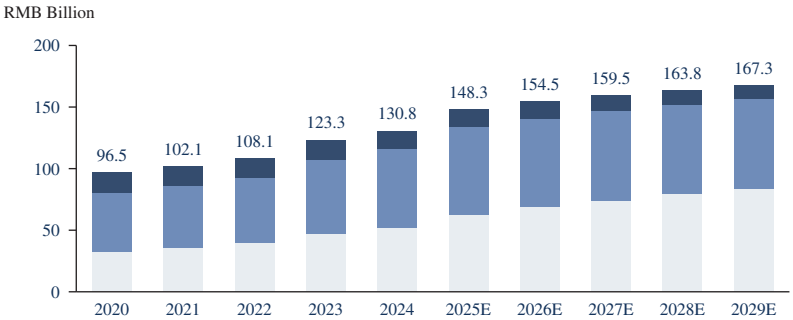
	2020	2021	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	CAGR (20-24)	CAGR (24-29E)
Instrument Panel Assemblies	28.0	29.5	31.2	35.5	37.6	42.6	44.4	45.8	47.0	48.0	7.6%	5.0%
Headliner Assemblies	16.4	17.6	18.9	21.8	23.5	26.9	28.3	29.4	30.4	31.2	9.4%	5.8%
Door Panel Assemblies	27.0	29.2	31.6	36.8	39.9	46.4	49.3	51.7	53.8	55.7	10.2%	6.9%
Interior Assemblies	25.1	25.7	26.4	29.1	29.9	32.4	32.5	32.5	32.5	32.5	4.4%	1.7%
Total	**96.5**	**102.1**	**108.1**	**123.3**	**130.8**	**148.3**	**154.5**	**159.5**	**163.8**	**167.3**	**7.9%**	**5.1%**

Source: Frost & Sullivan

Segmented by vehicle price, the interior trim market for vehicle models above RMB200k has experienced the fastest market growth over the past years, with CAGR of 12.8% from 2020 to 2024. The key driving factors include: Firstly, the trend of consumption upgrading and brand premiumization has increased consumers' willingness to pay for interior quality, technology and design. Secondly, core smart cockpit configurations have been adopted first in mid-to-high-end models, significantly raising the per-vehicle value of interiors. Thirdly, interiors have become a critical competitive area for automakers to achieve product differentiation and brand elevation, particularly emphasized by domestic brands targeting the premium segment.

Looking ahead, the interior trim market for vehicle models above RMB200k will remain the primary engine for overall growth, with a projected CAGR of 10.1% from 2024 to 2029, consistently outpacing the market average. Meanwhile, the markets for economy models (vehicle priced below RMB100k) and mid-to-high-end models (vehicle priced not less than RMB100k) will further polarize: economy models will continue to optimize costs through platform-based and standardized strategies, while the interior unit price of mid-to-high-end and new energy vehicles will continue to rise, driven by trends such as the iteration of smart cockpit technologies and personalized, scenario-based customization services. This will, in turn, propel the overall market forward.

Market Size of Automotive Interior Trim System Solutions (by Revenue, by Vehicle Sales Price), China, 2020-2029E



	2020	2021	2022	2023	2024	2025E	2026E	2027E	2028E	2029E	CAGR (20-24)	CAGR (24-29E)
Below RMB100k	16.4	16.0	15.5	16.0	15.2	15.3	14.3	13.3	12.3	11.4	-1.8%	-5.6%
RMB100k-200k	48.3	50.8	53.4	60.6	64.0	70.8	71.9	72.4	72.6	72.5	7.3%	2.5%
Above RMB200k	31.9	35.3	39.1	46.6	51.6	62.3	68.3	73.8	78.8	83.4	12.8%	10.1%
Total	**96.5**	**102.1**	**108.1**	**123.3**	**130.8**	**148.3**	**154.5**	**159.5**	**163.8**	**167.3**	**7.9%**	**5.1%**

Note: Vehicle sales price refer to manufacturer suggested retail price pre subsidies.

Source: Frost & Sullivan

Drivers of China's Automotive Interior Trim System Solutions Market

Growth in Vehicle Production and Sales

Stable domestic automotive demand, driven by the replacement needs for fuel vehicles and the rising penetration of NEVs, has boosted vehicle production and sales. Expansion plans by vehicle manufacturers have directly increased procurement demand for interior components. Both traditional fuel vehicle components and core NEV parts now enjoy vast market opportunities, propelling the expansion of the auto parts industry. Additionally, mid-to-high-end models have witnessed accelerated production growth, becoming a key growth engine for the overall market. These models typically demand premium materials, advanced intelligent features, and refined craftsmanship for interiors, directly driving up the per-vehicle value of auto interior components.

Consumption Upgrade

As household income levels rise and automotive ownership shifts from "functional tools" to "lifestyle companions," consumer demands for interior experiences have escalated significantly. Beyond basic functionality, buyers now prioritize tactile comfort, sensory quality, personalization, and intelligent integration. This shift has prompted automakers to allocate higher budgets to interior configurations: mid-range models now commonly adopt premium materials once limited to luxury vehicles, while luxury models are competing to launch "smart cockpit" systems with advanced interior tech, directly expanding the market scale and value space of high-end interior products.

Expanding Export Markets

China's automotive interior products have gained international recognition due to their cost-performance advantages and improved quality (e.g. low-VOC fabrics, intelligent interior components). Against the backdrop of global automotive supply chain restructuring, domestic interior manufacturers are actively expanding into overseas markets, with export volumes growing steadily. Deeper collaboration with international automakers and participation in global supply chains further inject new momentum into the industry's expansion.

Continuous Policy Support

China has issued standards such as Limits of Hazardous Substances in Automotive Interior Materials, mandating the use of low-VOC, flame-retardant, and recyclable materials. Meanwhile, policies like the New Energy Vehicle Industry Development Plan encourage R&D into intelligent and lightweight interior technologies, offering tax incentives and R&D subsidies to automotive enterprises that meet environmental and innovation requirements, driving the industry toward green and high-end transformation.

Well-established Domestic Industrial Chain

China has developed a comprehensive automotive interior supply chain that spans material supply, component manufacturing, and system integration. Key industrial clusters such as the Yangtze River Delta and the Chengdu-Chongqing region have formed significant collaborative advantages through geographical agglomeration effects, effectively enhancing the responsiveness of the supply chain. Through vertical integration of the industrial chain and continuous technological iteration, domestic enterprises have steadily optimized modular design and production capabilities. This has driven the standardization and integration of interior products, simplified assembly processes and reducing adaptation costs. The overall competitiveness of the domestic supply chain continues to grow, with its influence gradually increasing in the high-end vehicle market. These developments have strengthened the foundations of cost control and supply stability, providing strong support for the industry's large-scale growth.

Development Trends of China's Automotive Interior Trim System Solutions Market

Deepening Integration of Smart Cockpits

The wave of intelligence is transforming automotive interiors from functional carriers into interactive hubs. Multi-screen connectivity, voice interaction, and scenario-based controls have become mainstream. The integration of cockpit systems continues to deepen, with hardware and software merging more closely. Enhanced computing power in automotive-grade chips and optimized algorithms enable more precise responses and smoother transitions. Technologies such as augmented reality head-up displays and biosensing are gradually being implemented, extending the cockpit from a utilitarian space into an intelligent environment. This has become a core area for automakers' differentiated competition.

Upgrading of High-End Features and Functional Integration

New energy vehicles are driving a comprehensive upgrade in interior value, with functional integration and premium experiences leading industry advancement. Seat systems now extend beyond basic functions, commonly integrating ventilation, massage, and posture adjustment to enhance comfort and wellness. Instrument panels and central controls are deeply merged, incorporating more intelligent features, while interior parts evolve from isolated components into integrated systems. Overall design increasingly emphasizes space efficiency and premium tactile quality, shifting the industry from a utility focus toward experience-driven refinement.

Synergized Globalization and Localization

Interior solution providers are accelerating overseas capacity deployment, establishing localized production bases in key automotive manufacturing regions like Southeast Asia and Europe. This supports global sourcing needs of international automakers while lowering delivery costs. Leveraging cost advantages and rising quality, Chinese suppliers are increasingly entering global supply chains of international brands. As China's vehicle exports lead globally, interior parts are clearly "going abroad with vehicles." Recognition in emerging markets such as Southeast Asia and the Middle East is growing rapidly, and export scale continues to expand steadily. Globalization has become a crucial pathway for the industry to move beyond domestic competition.

Application of Green and Eco-Friendly Materials

Driven by the "dual-carbon" goals and stricter environmental standards, green materials have become central to the interior industry's transformation. Low-odor, recyclable, and bio-based materials are expanding in use, while reducing VOC emissions at source is now an industry consensus. Adoption of alternatives like natural fiber composites and recycled polymers is accelerating. Progress in balancing environmental and mechanical properties is advancing low-carbon, sustainable transformation, building a green industrial chain from development to recycling.

Key Raw Materials of China's Automotive Interior Trim

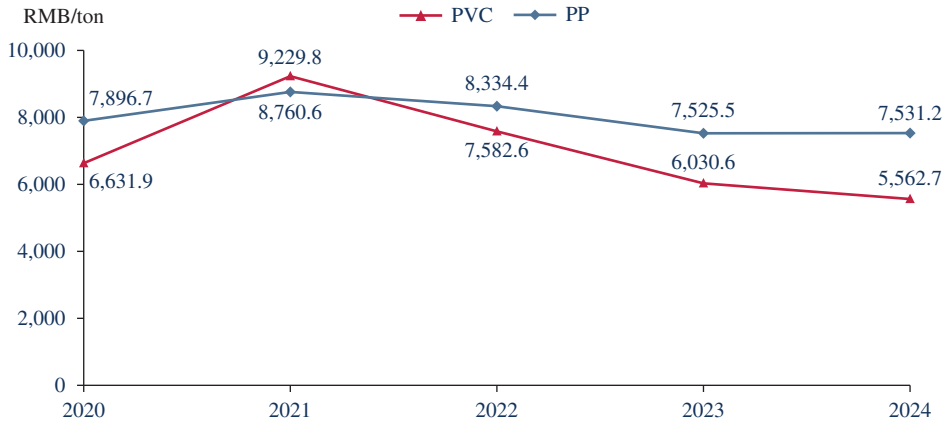
The main raw materials for automotive interiors include chemical materials, textiles, leather, and composite materials. Among them, PP (polypropylene) and PVC (polyvinyl chloride), as fundamental chemical materials, are widely used in hard components such as instrument panels, door panels, seat frames, and surface coverings.

From 2020 to 2024, influenced by multiple factors such as fluctuations in global energy prices, adjustments in upstream petrochemical production capacity, periodic supply chain constraints, and changes in demand from the downstream automotive industry, the prices of PP and PVC exhibited varying degrees of volatility. PVC prices, which are more closely linked to the cost of calcium carbide and demand from industries such as construction, experienced

relatively significant fluctuations during this period. In contrast, PP prices remained relatively stable but also underwent adjustments later due to the release of new production capacities and shifts in the supply-demand dynamics of propylene, its raw material.

Overall, over the past few years, the prices of major raw materials for automotive interiors have shown a fluctuating downward trend. This has provided some room for price reductions in interior components, particularly in the highly competitive mainstream vehicle market, where part of the cost savings has been passed on to vehicle manufacturers.

Average Price of Key Raw Materials of Automotive Interior Trim, China, 2020-2024



Source: National Bureau of Statistics of China, Frost & Sullivan

COMPETITIVE ANALYSIS OF CHINA'S AUTOMOTIVE INTERIOR TRIM SYSTEM SOLUTIONS MARKET

Competitive Overview of China's Automotive Interior Trim System Solutions Market

Market participants in China's automotive interior trim system solutions market can be mainly classified as third-party suppliers and OEMs. Third-party suppliers can be further distributed in domestic third-party suppliers and foreign-invested third-party suppliers.

Due to consumers' rising expectations for the automotive riding and driving experience, top automotive interior trim system solution providers typically possess strong R&D capabilities, supply chain advantages, financial strength, and customer relationship management capabilities, resulting in a relatively high degree of industry concentration.

Compared to the OEMs, third-party interior trim system solution providers have a comprehensive advantage in terms of cost efficiency, technological innovation, responsiveness, and supply chain resilience. Among them, compared to foreign-invested third-party suppliers, domestic suppliers have a better understanding of local needs and possess stronger cost advantages and NEV customer resources, giving them a stronger market competitiveness.

Ranking of China's Automotive Interior Trim System Solutions Providers

China's automotive interior trim system solution (excluding seating) market has a moderate concentration, with top five providers occupying 45.3% of the market in 2024. The Company ranked second by sales revenue, holding a market share of 7.8%.

Top Players in Automotive Interior Trim System (excluding seating) Solutions Market (by Revenue), China, 2024

Rank	Company Name	2024 Revenue (RMB Billion)	Market Share
1	Company A	27.8	21.3%
2	**The Company**	**10.2**	**7.8%**
3	Company B	9.9	7.5%
4	Company C	5.8	4.5%
5	Company D	5.5	4.2%
	Others	71.6	54.7%
	Total	**130.8**	**100.0%**

Note: Company A is a listed company, founded in 1992 and headquartered in Shanghai, China. Its main business includes the R&D, production, and sales of automotive parts and components, covering interior and exterior trims, metal forming and dies, seating, electrification, and chassis systems.

Company B is a listed company, founded in 1988 and headquartered in Zhejiang, China. Its main business includes the R&D, manufacturing, and sales of automotive interior and exterior trims, as well as body and structural metal parts.

Company C is a listed company, founded in 1993 and headquartered in Jilin, China. Its main business includes the R&D, production, and sales of automotive interior, exterior, seating, and wheel systems.

Company D is a private company, founded in 1950 and headquartered in Spain. Its main business includes the design, development, and manufacturing of automotive interior components, overhead systems, and lighting solutions.

Source: Frost & Sullivan

China's mid-to-high-end automotive interior trim system solution (excluding seating) market is relatively concentrated, with top five providers occupying 44.0% of the market in 2024. The Company ranked second by sales revenue, holding a market share of 8.3%.

Top Players in Automotive Mid-to-high-end Interior Trim System (excluding seating) Solutions Market (by Revenue), China, 2024

Rank	Company Name	2024 Revenue (RMB Billion)	Market Share
1	Company A	23.1	20.0%
2	**The Company**	**9.6**	**8.3%**
3	Company B	8.4	7.3%
4	Company C	5.3	4.6%
5	Company E	4.6	4.0%
	Others	64.6	55.9%
	Total	**115.5**	**100.0%**

Note: Revenues from mid-to-high-end automotive interior trim system (excluding seating) solutions refer to sales revenue generated from interior trim system (excluding seating) applied to vehicles with a value not less than RMB100k.

Company E is a listed company, founded in 2004 and headquartered in Zhejiang, China. Its main business includes the R&D, manufacturing, and sales of automotive NVH (Noise, Vibration, Harshness) products, interior trim, chassis systems, lightweight body components, and intelligent driving systems.

Source: Frost & Sullivan

China's automotive instrument panel assembly market is relatively concentrated, with top five providers occupying 67.9% of the market in 2024. The Company ranked second by sales revenue, holding a market share of 21.0%.

Top Players in Automotive Instrument Panel Assembly Market (by Revenue), China, 2024

Rank	Company Name	2024 Revenue (RMB Billion)	Market Share
1	Company A	12.5	33.2%
2	**The Company**	**7.9**	**21.0%**
3	Company F	2.0	5.4%
4	Company C	1.7	4.5%
5	Company B	1.6	4.3%
	Others	12.0	32.1%
	Total	**37.6**	**100%**

Note: Company F is a listed company, founded in 1996 and headquartered in Jiangsu, China. Its main business includes the R&D, manufacturing, and sales of automotive interior trims, such as instrument panels, door panels, and center consoles.

Source: Frost & Sullivan

Barriers of China's Automotive Interior Trim System Solutions Market

Capital Barrier

The automotive interior solutions sector is capital-intensive, characterized by high barriers to entry. Suppliers face substantial initial investments and extended cash conversion cycles. The journey from project bidding and collaborative development to final production approval typically spans several years, requiring continuous capital commitment with minimal revenue generation during this phase. Furthermore, top suppliers leverage high-volume orders to achieve cost advantages in procurement and manufacturing. New entrants, without a comparable order base, find it difficult to offset the heavy upfront capital expenditure and sustain the associated financial pressure.

Supply Chain Barrier

Vehicle manufacturers and interior trim suppliers have formed a relatively fixed interdependent relationship, with a strong cooperative bond. Major vehicle manufacturers all have strict certification requirements for interior trim suppliers, demanding that suppliers possess leading technology, products, services, and stable production capabilities within the industry. Moreover, the automotive interior trim industry has high requirements for supply chain integration. Suppliers need to ensure high coordination among various stages, including raw material procurement, parts production, and logistics delivery, to meet the strict requirements of vehicle manufacturers regarding the stability and timeliness of supply.

Talent Barrier

The automotive interior trim industry has a high demand for professional talent, especially in the fields of technology R&D, quality management, and production management. Leading suppliers in the industry have established a relatively comprehensive talent system through long-term accumulation and cultivation, which presents significant challenges for new entrants in terms of talent acquisition and development. Moreover, the rapid technological updates in the industry require companies to continuously invest resources in talent training and recruitment to maintain their competitiveness.

Technical Barrier

The automotive interior trim industry is highly technology intensive. Modern vehicle interiors represent a sophisticated convergence of mechanical engineering, electronic hardware, and software systems, which need suppliers to have advanced R&D capabilities and production technologies to meet the strict requirements of vehicle manufacturers for interior trims. In addition, leading suppliers have established high technological barriers through long-term technological accumulation and innovation, making it difficult for new entrants to break through these technological challenges in a short period of time.

ANALYSIS OF CHINA'S AUTOMOTIVE EXTERIOR TRIM SYSTEM SOLUTIONS MARKET

Definition and Classification of Automotive Exterior Trim System Solutions Market

Automotive exterior trim refers to the non-structural, visible components on a vehicle's outside that enhance its appearance, offer protection, and sometimes improve function, including parts like bumper, window surrounds, grilles, door handles, spoilers, and body moldings, made from materials like plastic, chrome, or aluminum to resist weather and impacts.

According to the installation area, automotive exterior trims can be classified into front-end module exterior trims, rear-end module exterior trims, door and side exterior trims, roof and glass system exterior trims, and other functional and decorative exterior trims.

Market Size of China's Automotive Exterior Trim System Solutions Industry

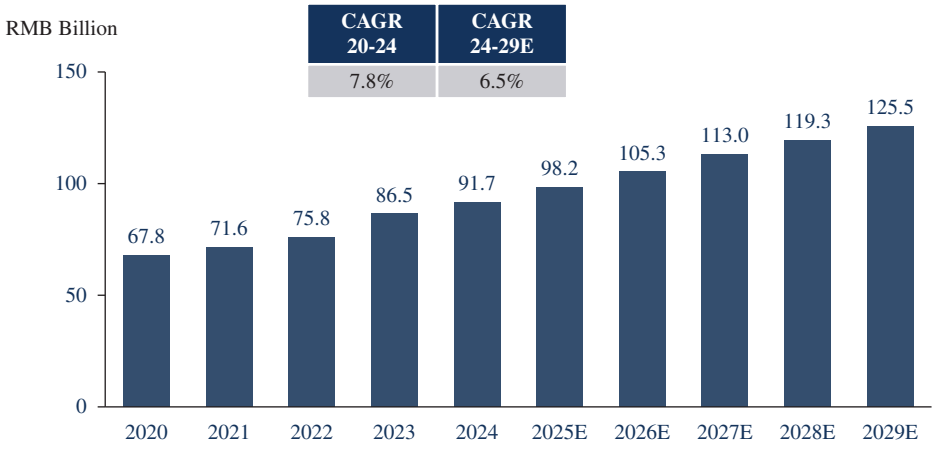
The market for automotive exterior solutions in China is expanding, driven primarily by the steady growth in NEV production and a corresponding increase in the value of exterior trims. While China's overall annual vehicle production increased slowly, the rapid rise in NEV penetration continues to generate sustained incremental demand.

On one hand, the widespread adoption of NEVs has reshaped automotive design paradigms. Features such as closed front fascias, flush door handles, and streamlined body shapes have become mainstream, directly generating demand for new types of exterior trims. The tailgate is also gradually evolving into an "exterior trim," with its styling highly integrated into the vehicle's overall design language and increasingly featuring personalized trim panels, full-width light bars, and other decorative details. Concurrently, rising consumer preference for personalization and aesthetics is accelerating the adoption of premium exterior features, including panoramic glass roofs, sporty body kits, and special paint finishes.

On the other hand, exterior trims are undergoing a fundamental evolution, transitioning from simple protective coverings to integrated and intelligent functional elements. The adoption of smart lighting systems, bumpers and tailgates integrated with sensors, and lightweight composite materials has significantly increased technical complexity and unit value.

In terms of revenue, the market size of China's automotive exterior trim system solutions market increased from RMB67.8 billion in 2020 to RMB91.7 billion in 2024, with a CAGR of 7.8%. In the forecast period, it is expected that China's automotive exterior trim system solution market will further grow to RMB125.5 billion in 2029 with a CAGR of 6.5% from 2024 to 2029.

Market Size of Automotive Exterior Trim System Solutions (by Revenue), China, 2020-2029E



Source: Frost & Sullivan

Development Trends of China's Automotive Exterior Trim System Solutions Market

Rise of Domestic Brands Driving Comprehensive Supply Chain Localization

The vigorous development of the new energy vehicle industry serves as the core driver for the localization of the automotive exterior trim supply chain. With the rapid increase in market share of domestic automotive brands, their demands for supply chain responsiveness, cost control, and security have intensified. Leveraging advantages in synchronous R&D, rapid response, and cost-effectiveness, domestic suppliers are continuously expanding their market share. Through deep collaboration with OEMs in areas such as new material application and integrated design, their industry role is undergoing a fundamental upgrade from passive manufacturing execution to leading collaborative design, jointly forging a more robust and efficient localized supply chain ecosystem.

Modular Production as a Key Model for Enhancing R&D and Delivery Efficiency

In response to rapidly changing market demands, modular production has become a mainstream trend in the automotive exterior trim sector. Its essence lies in suppliers pre-assembling numerous individual parts into complete functional modules, such as front-end modules and door modules, for delivery. This model significantly shortens the R&D cycle for new vehicles for OEMs. By reducing the number of assembly steps and individual parts on the production line, it markedly accelerates production pace and final delivery speed. This trend is reshaping the traditional supply chain division of labor, concentrating value creation towards suppliers with capabilities in modular design, integration, and synchronous engineering.

Intelligent Features as a Critical Path for Value Addition and Brand Differentiation

The trend toward intelligent exterior trim is a natural extension of the automotive industry's transformation into "mobile smart devices." The core driver is the enhancement of product competitiveness and brand differentiation through expanded exterior functionalities. In terms of perception integration, exterior trims serve as carriers for sensors, requiring a balance of styling, aerodynamics, and signal performance. In terms of interactive expansion, exterior trims evolve from static design elements into dynamic information interfaces via lighting, display, and other technologies. This necessitates the deep integration of electronics, software, and design in exterior solutions.

Enhanced Sustainability across Full Lifecycle

To enhance automotive energy efficiency and reduce emissions, lightweight materials including aluminum alloys, magnesium alloys, and carbon fiber are seeing increasingly extensive application in auto parts manufacturing. These materials effectively reduce vehicle weight, improving fuel economy for traditional vehicles and extending the range of electric vehicles. Component manufacturers must stay ahead of this trend by developing innovative lightweight products and optimizing production processes to meet automakers' evolving demands.

ANALYSIS OF GLOBAL AND CHINA'S AUTOMOTIVE SEAT SOLUTIONS MARKET

Definition and Classification of Automotive Seat Solutions Market

An automotive seat is a vehicle component designed for occupant comfort, support, and safety, integrating features like adjustable mechanisms, ergonomic design, and vibration dampening, with specialized child safety seats providing crucial protection for younger passengers. Modern automotive seats are complex systems, incorporating advanced materials, heating/cooling, and smart tech, going beyond simple seating to enhance the driving experience and meet strict safety regulations.

According to the function and design, automotive seats can be classified into manual fabric seats, power leather seats, multi-way power adjustable seats, and sport seats.

Market Size of Global and China's Automotive Seat Solutions Industry

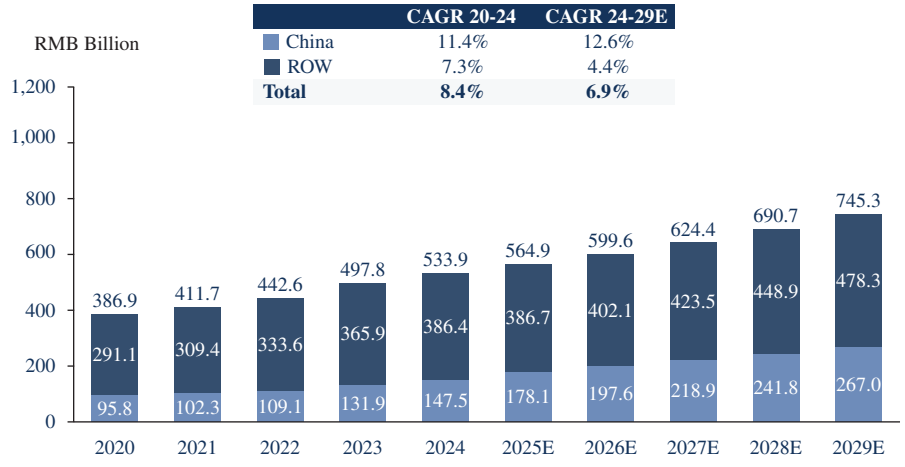
The market for automotive seat solutions in China is undergoing a period of robust expansion, primarily driven by the dual forces of steady growth in vehicle production and a significant increase in the seat value. Except for sustained incremental demand caused by rapidly rising penetration of NEVs in China, growing consumer expectations for seat comfort and functionality are directly boosting the adoption rate of mid-to-high-configuration seats.

Furthermore, the automotive seat is evolving from a basic, commoditized component into a central element of the intelligent cockpit, integrating perception, interaction, and comfort features. This transformation, fueled by trends such as functional intelligence, the use of premium materials and designs, and the prevailing business model of supplying complete seat systems, has markedly elevated the value of seating units. Whereas the value of a traditional mechanical seat typically falls below RMB2,000, the current mainstream intelligent seat system now commands a value ranging from several thousand to over ten thousand yuan.

In terms of revenue, the market size of China's automotive seat solution market increased from RMB95.8 billion in 2020 to RMB147.5 billion in 2024, with a CAGR of 11.4%. In the forecast period, it is expected that China's automotive seat solution market will further grow to RMB267.0 billion in 2029 with a CAGR of 12.6% from 2024 to 2029.

In terms of revenue, the market size of Global automotive seat solution market increased from RMB386.9 billion in 2020 to RMB533.9 billion in 2024, with a CAGR of 8.4%. In the forecast period, it is expected that global automotive seat solution market will further grow to RMB745.3 billion in 2029 with a CAGR of 6.9% from 2024 to 2029.

Market Size of Automotive Seat Solutions (by Revenue), Global and China, 2020-2029E



Source: Frost & Sullivan

Development Trends of China's Automotive Seat Solutions Market

Supply Chain Localization and Upgrading of Domestic Suppliers

The rapid expansion of domestic automotive brands, especially in the electric vehicle sector, is fundamentally reshaping the supply chain for seat systems. This shift extends beyond simple import substitution, compelling leading domestic seat suppliers to evolve from component manufacturers to integrated system solution providers. They are gaining competitiveness not only through cost efficiency and rapid response but increasingly by mastering core technologies such as advanced structural design, complete seat assembly, and synchronized development with OEMs. This trend is solidifying a more independent, resilient, and technologically capable local supply chain, moving up the value chain from basic manufacturing.

Intelligent Evolution from Basic Comfort to Interactive and Health Monitoring

Seat intelligence is progressing beyond foundational features like power adjustment and heating/ventilation. The current trend is focused on transforming the seat into a key interactive node within the smart cockpit and a platform for occupant well-being. This involves integrating advanced functionalities which are being deployed in production vehicles, such as posture adjustment that adapts to different driving scenarios, embedded sensors for occupant presence detection and vital sign monitoring, and multi-point massage systems. The development focus is on creating seats that interact holistically with other vehicle systems, enabling personalized comfort settings and well-being features, thereby enhancing both the user experience and safety.

Innovation in Sustainable and Performance-Driven Materials

Driven by stringent environmental regulations and the pursuit of enhanced comfort, material innovation within automotive seats is accelerating. The adoption of sustainable materials is a clear trend, with seats utilizing bio-based foams, fabrics containing recycled plastics, and synthetic leather alternatives entering mass production. In parallel, advancements in high-performance materials are critical for meeting key industry challenges. This includes new-generation foam formulations for improved comfort and durability, alongside the use of lightweight composite structures for seat frames and components. These innovations are essential for achieving significant weight reduction, a vital factor for electric vehicle range, while maintaining or improving safety and ergonomic support.

Integration as a Core Component of the Smart Cockpit Ecosystem

The seat is no longer an isolated component but is becoming deeply integrated into the vehicle's electronic and digital architecture. This trend sees the seat's electronic control unit (ECU), sensors, and actuators being seamlessly connected to the central computing platform. It enables scenario-based functionalities, such as the seat automatically adjusting to an optimal resting position in autonomous driving mode or coordinating with ambient lighting and infotainment systems to create a unified cabin experience. This deep connectivity turns the seat into a smart, context-aware endpoint within the cockpit, whose value is maximized through software-defined features and over-the-air updates.

ANALYSIS OF CHINA'S INTELLIGENT COCKPIT MARKET

Definition and Classification of Intelligent Cockpit Market

An intelligent cockpit refers to an integrated in-vehicle system that combines intelligent and networked electronic products, designed to enhance the driving experience, safety, and convenience through advanced digital interaction. It primarily consists of three key dimensions: hardware, software, and services.

Hardware forms the physical foundation of the intelligent cockpit, including components such as high-resolution displays (digital instrument clusters, central touchscreens, and head-up displays), advanced processors, dedicated cockpit domain controllers, microphones, cameras, biometric sensors, and premium audio systems. These elements enable core input/output functions and support real-time data processing.

Software serves as the "brain" of the system, integrating the operating system (OS), human-machine interaction (HMI) interfaces, in-vehicle applications, AI-driven voice assistants, driver monitoring systems, and environmental perception algorithms. It ensures seamless connectivity between the vehicle, passengers, and external ecosystems, while enabling personalized and adaptive user experiences.

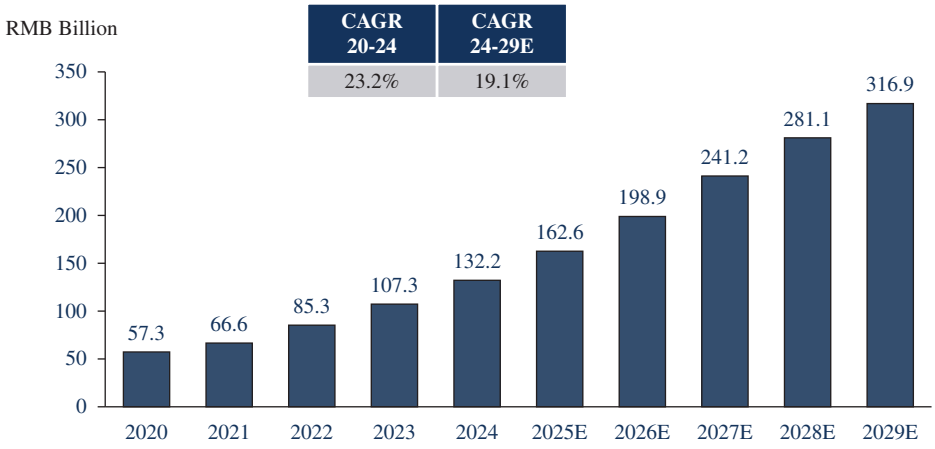
Services encompass the cloud-based and connectivity features that extend functionality beyond the vehicle. These include over-the-air (OTA) updates, navigation and real-time traffic information, multimedia streaming, remote vehicle control, smart home integration, and tailored mobility solutions — all aimed at delivering continuous value and engagement throughout the vehicle's lifecycle.

Together, these components create a cohesive, intelligent cabin environment that is interactive, context-aware, and consistently upgradable. The table below provides an overview of the core elements within an intelligent cockpit system.

Market Size of China's Intelligent Cockpit Industry

Over the past few years, driven by leading intelligent cockpit technologies, China's intelligent cockpit solutions industry has developed rapidly. From 2020 to 2024, the market size of China's intelligent cockpit solutions industry grew from RMB57.3 billion to RMB132.2 billion. It is expected that the market size of China's intelligent cockpit solutions industry will reach RMB316.9 billion by 2029, with a CAGR of approximately 19.1% from 2024 to 2029.

Market Size of Intelligent Cockpit (by Revenue), China, 2020-2029E



Source: Frost & Sullivan

Development Trends of China's Intelligent Cockpit Market

Key Component Manufacturers Transitioning into Tier 1 Suppliers

Specialized hardware manufacturers are evolving into full-service Tier 1 suppliers for intelligent cockpit systems. Leveraging their deep expertise in core components and R&D, they now offer integrated solutions that combine advanced hardware with tailored software. This shift allows them to meet the growing demand for seamless, high-performance cockpit experiences directly, presenting a competitive alternative to traditional Tier 1 suppliers by offering greater innovation agility and cost efficiency.

Growing Centrality of the Software-Defined Vehicle

The automotive industry's focus has shifted toward the Software-Defined Vehicle model, where software fundamentally defines functionality and enables continuous upgrades. This paradigm makes software development, integration capabilities, and OTA update platforms critical competencies. For intelligent cockpit suppliers, success now depends on close collaboration with automakers and mastery of agile software cycles to deliver personalized and evolving user experiences throughout the vehicle's lifecycle.

Evolving Competitive Landscape for Tier 1 Suppliers

The traditional Tier 1 supplier market is being disrupted by new entrants, including technology companies and startups. These players bring innovative approaches and software-centric solutions, reshaping competition and forcing established suppliers to accelerate their own digital transformation. This results in a more dynamic and competitive ecosystem, driving faster technological advancement and more diverse partnership models between automakers and their technology providers.

Strategic Imperative of Supplier-OEM Collaboration

With the rise of the SDV, a deep, collaborative partnership between intelligent cockpit suppliers and automakers has become essential. This goes beyond traditional vendor relationships, requiring joint development processes, shared data platforms, and aligned roadmaps. The focus is on co-creating scalable architecture that allows for rapid feature deployment and customization, ensuring the cockpit system remains at the cutting edge through continuous software innovation.

ANALYSIS OF CHINA'S INTELLIGENT ROBOT MARKET

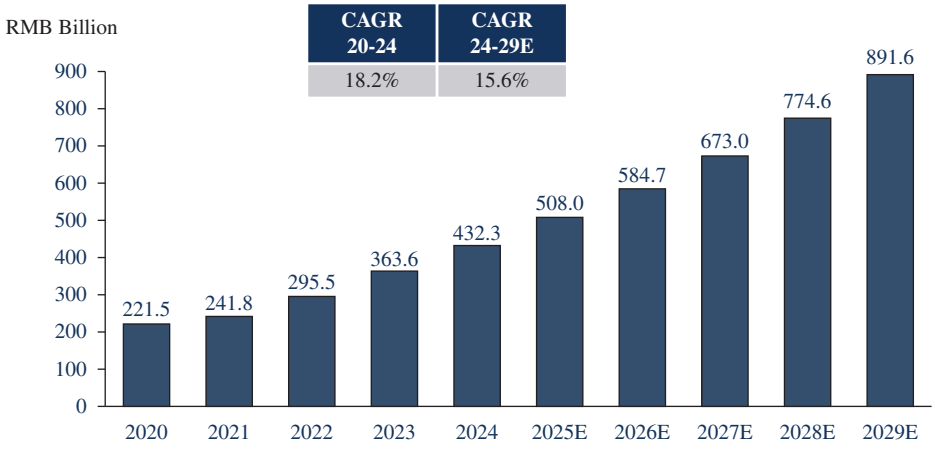
Definition and Classification of Intelligent Robot Market

Intelligent robots are categorized by usage into industrial robots and service robots, with humanoid robots being a novel type of product under service robots. Industrial robots refer to automatically controlled, programmable multipurpose manipulators with three or more programmable axes, typically used in industrial applications. Humanoid robots are robots whose shape and size resemble those of humans and are capable of imitating human movements, expressions, interactions, and locomotion.

Market Size of Global Intelligent Robot Industry

The Global intelligent robot market has demonstrated remarkable growth from 2020 to 2029. Starting at a size of RMB 221.5 billion in 2020, it expanded rapidly to RMB 432.3 billion by 2024, achieving a CAGR of 18.2% during this period. Looking ahead to 2029, the market is projected to reach RMB 891.6 billion, continuing its strong expansion at a slightly moderated but still robust CAGR of 15.6% from 2024 onwards. This trajectory reflects the market's sustained momentum, shifting from an initial phase of accelerated expansion to a phase of steady, high-growth development. As a rapidly growing category within intelligent robots, the market size of humanoid robots in China is projected to grow from RMB 2.2 billion in 2024 to RMB 24.3 billion in 2029 with a CAGR of 62.3%, illustrating the high potential growth of China in this industry.

Market Size of Intelligent Robot (by Revenue), Global, 2020-2029E



Source: Frost & Sullivan

Synergy Analysis for Intelligent Automotive Supply Chain Companies Expanding into the Intelligent Robot Business

Core Technology Synergy

The foundational technologies enabling smart automotive functions, such as advanced sensor fusion, AI perception algorithms, embedded control systems, and high-performance computing platforms, are directly transferable to intelligent robotics. This shared R&D base allows companies to amortize development costs across both sectors, accelerate robotics prototyping using validated automotive-grade components, and establish a competitive edge through deep expertise in real-time, safety-critical systems

Market Access Synergy

Established relationships with automotive OEMs and Tier-1 manufacturers provide a natural entry point into robotics for industrial applications. These customers increasingly seek integrated automation and logistics solutions, such as AMRs for parts handling or collaborative robots for assembly. Leveraging existing trust and sales channels significantly reduces customer acquisition costs and shortens the commercialization path for new robotics products.

Supply Chain Synergy

Supply chain companies possess mature capabilities in precision manufacturing, quality control, and scalable production, which are essential for robotics. Existing supply networks for motors, actuators, electronic components, and structural parts can be leveraged or adapted for robotics production. This vertical integration capability improves cost control, ensures supply stability, and enables rapid iteration based on unified manufacturing and sourcing strategies, for example auto exterior specialist Minshi has teamed up with humanoid startup Zhiyuan to co-develop "electronic-skin" shells, redeploying its automotive coating, sealing and soft-touch know-how to become a robot exterior-system supplier.

Data Ecosystem Synergy

The vast data ecosystems built around connected vehicles — including real-time operational data, simulation environments, and OTA update platforms — can be extended to train, monitor, and upgrade robotic systems. Shared data architectures and cloud platforms facilitate the development of more adaptive and intelligent robots while creating a unified service model for predictive maintenance and performance optimization across both product lines.