

# Asia Pacific Internet of Cars - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

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### **Report description:**

The Asia Pacific Internet of Cars Market size is estimated at USD 42.24 billion in 2024, and is expected to reach USD 125.89 billion by 2029, growing at a CAGR of 24.41% during the forecast period (2024-2029).

Vehicles nowadays are outfitted with a variety of electronics and technology. However, considerable technical advancements over the last decade have resulted in connected cars being used, and this trend is projected to continue.

#### Key Highlights

-Connected cars can detect potential dangers and relay this information to other vehicles in the area, reducing the risk of accidents. They can offer access to a wide range of online services, such as live traffic updates, weather forecasts, and real-time GPS navigation. Connected cars can process data from various sources to enable autonomous driving. This can significantly reduce accidents and make driving safer. They can also analyze driving patterns and provide feedback to the driver on how to improve fuel efficiency, leading to cost savings and decreased environmental impact.

-The growing need for safer, more efficient, and convenient driving experiences and government measures to reduce the frequency of road accidents are key drivers driving demand for the Internet of cars market. For example, the government of India has mandated connecting features for public vehicles under AIS-140. The rule has been controlled and implemented, and it is anticipated to play a significant role in integrating connected technology in shared vehicles during the forecast period. -One of the critical causes driving demand for IoV (Internet of Vehicles) around the Asia Pacific is the increasing sales of autonomous vehicles (AVs) and growing awareness of their benefits. Furthermore, the increased emphasis on driver and passenger safety due to the growing number of fatal road accidents is fueling demand for IoV to reduce the severity of injuries and collisions with other cars. To that extent, in March 2022, ComfortDelGro Corporation, a multi-national land transport company headquartered in Singapore, announced that it would invest SGD 30 million in the research and development of autonomous

driving capabilities over the next five years. The company claimed that this new research center would help it develop a technology platform that supports using autonomous vehicles for mobility services and, eventually, deploying them commercially. Such investments are anticipated to advance the development of the studied market.

-Further, Japan is bolstering its autonomous driving ambitions with a new project introduced in September 2021 to expand the use of self-driving vehicles in over 40 locations around the country by 2025. The "Road to the L4" project strives to popularize advanced mobility services, including Level 4 autonomous driving, wherein vehicles can function without a human. According to the Ministry of Economy, Trade, and Industry, it would include demonstrations of the technology to promote acceptance and understanding. One of the goals of the project is to help revitalize communities. The Japanese government earmarked about USD 55 million for developing autonomous-driving services in fiscal 2021, including for the L4 project, as many elderly Japanese have given up driving. Such initiatives would significantly increase the adoption of connected cars.

-The Internet of Cars establishes a network of connected devices and integrates many services, technologies, and communication protocols, raising concerns about information security. It exposes the system to malicious interference, such as distributed denial-of-service (DDoS) assaults. They can be directed at several levels, such as the vehicle or the communication network carrying the data. Vehicle components such as the steering wheel, brakes, GPS, accelerator, and alarms can be remotely accessed, and a successful breach or hack can result in fatalities. Such factors are a few factors restraining the growth of the market.

-Consumer preferences can be considered a crucial macroeconomic factor as they can significantly influence the demand for goods and services in an economy. As consumer preferences change, their collective demands and spending can shift, leading to changes in overall production and consumption patterns. The automotive industry witnessed a significant change in consumer behavior. Travelers no longer feel comfortable with shared transportation (plane, train, public transit). People view private cars as a safe and comfortable mode of transportation. According to OICA, in 2022, over 57.5 million passenger cars were sold globally, up by about 1.9% year-on-year. At approximately 23.6 million units, China was the world's largest regional market for automobiles in 2022. The increase in demand for passenger vehicles is likely to offer lucrative opportunities for the growth of the studied market.

### Asia Pacific Internet of Cars Market Trends

New Technologies like 5G, Big Data Solutions, and AI to Boost the Demand for Internet-Enabled Cars

- The connected cars and related IoT features in automobiles are gaining popularity among the audience. Brands are adding new features to existing and expected models for enhanced user experience, convenience, and safety. But this also demands better connectivity for these features to perform as they desire. Hence, Asia Pacific, as a growing technology hub, is also witnessing telecom providers offering network and integrated solutions.

- For instance, Vodafone Idea provides Vi Smart Mobility in India, offering fully-integrated, connected car solutions for automotive OEMs. The company continues to provide the same in the region. The connected features in cars require fast and consistent internet. The introduction of 5G will bolster the overall growth of the market.

- The expected number of subscriptions will likely encourage the network providers to upgrade the existing facilities and infrastructure to facilitate the demand for 5G IoT systems, both protective and regularly functioning, to receive the necessary network support. The high-speed internet would allow faster response time, increasing the effectiveness of in-car internet-driven features.

- According to the Mobile Economy Asia-Pacific 2022 report by the GSMA, 5G adoption will grow across Asia-Pacific, with more than 400 million 5G connections, accounting for just over 14% of total mobile connections, by 2025. This also encourages the automakers to install the existing and upcoming vehicles with compatible 5G bandwidths in respective markets for future-ready products.

- Such developments in supporting infrastructure are encouraging automakers to enhance the adoption of in-vehicle connectivity

solutions. For instance, in November 2022, BMW Japan selected MVNO Transatel's B2C connectivity service, Ubigi, to include in its new BMW 7 Series cars. The agreement is part of the partnership between NTT Communications Corporation, which owns BMW Japan, and Transatel.

- The increasing use of sensors and data technologies makes AI essential for quick and precise decision-making. Some automobiles use AI for Level 3 autonomous driving, but for the automotive industry to reach Level 5, significant enhancements must be made to the cars and infrastructure in Asia Pacific countries.

- According to the Society of Indian Automobile Manufacturers (SIAM), India was one of the world's leaders in car production. In the fiscal year 2022, India's overall automobile production volume was roughly 22.9 million units, an increase from the previous year. The increasing car production in Asia-Pacific is anticipated to drive the demand for the studied market.

China and India Will Hold A Significant Market Share

- Owing to the increase in the connectivity features of the latest car models, China is likely to lead the market in the Asia-Pacific. As China's domestic market grows, it will shape the future related car industry with increasing technological advantages in ICT, data processing and platform services, secure industrial investment, and a dedicated industrial strategy and support from the central government.

- The increasing adoption of electric vehicles in China indicates people's readiness to adopt new technologies. As most of the new-age electric vehicles feature connected car tech, including cloud-powered features, the rising sale of electric vehicles signifies the increasing interaction of the Chinese population with these features and technologies.

- In developing countries like India, the growth of communication and information technology infrastructures like 5G or 4G LTE will likely push the demand for connected cars. Also, favorable government policies will increase the growth market owing to the rise in the safety regulations for security, protection, and authorization.

- The growing passenger car sales in the Asia-Pacific region is another major factor driving the growth of the studied market. For instance, according to CAAM, about 1,864 thousand units of passenger cars were sold in China in March 2022, while in April 2022, about 965 thousand units of passenger cars were sold in the country.

Companies like Maruti Suzuki and Nissan India collaborate with connected car manufacturers to equip connecting-car technology and offer additional control, security, convenience, safety, and social sharing features. As a result, automobiles will witness carmakers provide more connected technology in their vehicles, utilizing the growing network infrastructure in the country.
In March 2023, Baidu, Inc., an Al business with a solid internet base, was granted the first-ever permission to provide a fully driverless ride-hailing service in Beijing, China. This marks a significant milestone as the world's first fully autonomous fleet deployed in a country's capital. Users can now use fully driverless robotaxiservice in Beijing, Wuhan, and Chongqing in three Chinese megacities. Moreover, Apollo, Baidu's in-house AV company, is at the forefront of China's self-driving and driver-assistance technologies. Apollo's products include the Duerautomotive operating system, an autonomous ride-hailing fleet, and self-driving electric automobiles. (EVs). Apollo benefits from access to Baidu's massive archives of search queries, pictures, video, and GPS data, which provide critical training for its Al to deal with a wide range of roadside scenarios. Baidu also manufactures hardware components for its autonomous vehicles, such as data collection and processing equipment. Apollo stated in March 2022 that it completed 25 million kilometers (15.5 million miles) of testing.

# Asia Pacific Internet of Cars Industry Overview

The Asia-Pacific Internet of Cars market is moderately consolidated with different players. As the demand for connected systems and the Internet of Things are growing in the region, car manufacturers are trying to have an edge over their competitors by making joint ventures and partnerships and launching new products with advanced technology. This includes laying down the network foundation for the expected features and technologies to be introduced in the automotive industry. Some key market

In June 2022, Nippon Telegraph & Telephone Corporation's data subsidiary partnered with Toyota Motor Corporation to develop connected cars to collect and share data. NTT Data Corp. would actively consider mergers and acquisitions to push into overseas markets, spending as much as 400 billion yen (USD 3 billion) for deals over the next four years.

In May 2022, Chiratae Ventures led a seed round of USD 1.7 million for India's first firm producing inexpensive, fully self-driving cars. JITO Angel Network, a few top executives from American chipmaker NVIDIA, and US-based car-hailing firm Lyft, which competes with Uber, also attended the round. Minus Zero intended to use this funding to expand its staff and establish substantial autonomous vehicle research and development (R&D) infrastructure to have its first vehicle on the road by late 2022 to early 2023.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

# **Table of Contents:**

- 1 INTRODUCTION
- 1.1 Study Assumptions and Market Definition
- 1.2 Scope of the Study

# 2 EXECUTIVE SUMMARY

### **3 MARKET INSIGHTS**

- 3.1 Market Overview
- 3.2 Industry Attractiveness Porter's Five Forces Analysis
- 3.2.1 Bargaining Power of Suppliers
- 3.2.2 Bargaining Power of Buyers/Consumers
- 3.2.3 Threat of New Entrants
- 3.2.4 Threat of Substitutes
- 3.2.5 Intensity of Competitive Rivalry
- 3.3 Impact of Macro Economic Trends on the Market
- 3.4 Industry Policies
- 3.5 Technology Snapshot

# **4 MARKET DYNAMICS**

- 4.1 Market Drivers
- 4.1.1 Increasing number of people connected to internet
- 4.1.2 Growth in adoption of Big Data solutions
- 4.2 Market Restraints
- 4.2.1 Technology yet to become fully functional
- 4.2.2 Initial Costs are high
- **5 MARKET SEGMENTATION**
- 5.1 By Component
- 5.1.1 Hardware

5.1.2 Software 5.1.3 Service 5.2 By Technology 5.2.1 Wi-FI 5.2.2 Bluetooth 5.2.3 NFC 5.2.4 Cellular 5.2.5 Other Technology Types 5.3 By Communication Equipment 5.3.1 Car-to-Car 5.3.2 Car-to-Infrastructure 5.3.3 Other Communication Equipment 6 ASIA-PACIFIC INTERNET OF CARS MARKET - FORECAST 6.1 Asia-Pacific 6.1.1 Overview 6.1.2 Market Forecast and Analysis 6.1.3 Analyst View **7 COMPETITIVE LANDSCAPE** 7.1 Company Profiles 7.1.1 Cisco System Inc. 7.1.2 Google LLC 7.1.3 IBM Corporation 7.1.4 AT&T Inc. 7.1.5 Verizon Communications Inc. 7.1.6 Toyota Connected Asia-Pacific Limited 7.1.7 Volvo 7.1.8 Tesla Motors

7.1.9 Telefonaktiebolaget LM Ericsson

8 FUTURE OF ASIA-PACIFIC INTERNET OF CARS MARKET



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