



Featured Interview with Tencent The Shift to Software-Defined Vehicles

May 2024



Background



Tencent's automotive strategy focuses on digital infrastructure, cloud services, and collaboration with automakers to provide connected services.

Mainland China's complex road systems, megacities, dense populations, and unique traffic behaviors present challenges for autonomous driving technology development. However, the country also offers rich scenarios, abundant data, and numerous rare and unexpected corner cases that are crucial for the safe and effective evolution of autonomous driving. The Gen-X demographic in mainland China, a significant portion of whom plan to purchase cars with Level 2+ driver assistance functions, provides ideal training conditions for autonomous driving. Leading global original equipment manufacturers could then establish research and development teams in mainland China and promote autonomous driving solutions worldwide.

To address the autonomous driving and cloud needs of international companies, internet tech innovator Tencent has launched the Intelligent Vehicle Cloud platform. Built on Tencent's security and compliance capabilities, the platform provides advanced cloud data storage solutions to overcome the challenges of handling large volumes of data and high storage costs in autonomous driving development. It also supports the company's international strategy by offering technology solutions to foreign automakers entering mainland China's electric vehicle market. To learn more about this business and how it is strengthening its foothold in the automotive industry, we spoke to Dr. Pei Shen, general manager of strategy, Tencent Intelligent Mobility.



Key Takeaways



- Tencent's strategy in the automotive industry focuses on providing digital infrastructure, cloud services and built-platform services. The company collaborates with automotive companies to connect users with services such as music, in-car video, gaming and potentially meetings. It aims to leverage its digital content and expertise in the emerging intelligent mobility space.
- Tencent offers both cross-industry standard products and vertical-specific products for the automotive industry. It serves both upstream and downstream customers, helping OEMs connect with their downstream services through platforms like WeChat.
- Its long-term objectives in the automotive industry include gaining market share in the auto cloud market, providing digital sales, marketing and in-cabin services, as well as integrating its cloud services. Tencent also envisions changes in in-car digitalization, focusing on connecting with external services and providing mobile content within the car.
- The company's revenue streams in the automotive software market come from licensing, subscriptions for music and video services, revenue from mobility services, and integrated revenue from existing hardware. It sees the potential for gaming-related revenue as OEMs explore capabilities in cars.
- The collaboration landscape between tech companies and automakers is evolving towards business models that bring profits for both sides. Traditional supply models will continue to dominate, but ecosystem-based supply models are emerging, allowing OEMs to focus on their core business while tech companies provide online transactions and cloud services.



S&P Global Mobility

S&P Global Mobility:

Could you share an overview of Tencent's strategy, involvement and motivation in the automotive industry, particularly around the areas of the cloud, vehicle experience and autonomous driving?

Tencent:

"Tencent, a 26-year old company, started as a social media and instant messaging service before expanding into gaming and the WeChat business. In 2015, Tencent began serving B2B [business-to-business] companies with its cloud and AI technologies. Tencent focuses on providing basic tech infrastructure like payment, cloud, and security services, without interfering too much in the business of the invested company. Tencent invests in various ecosystems and aims for synergy with its own capabilities.

In 2018, Tencent formed the Cloud and Smart Industries Group (CSIG) to better serve industrial companies, with intelligent mobility being one of the verticals alongside intelligent healthcare and retail, etc. Today, our strategy prioritizes cloud and AI technology, targeting industries eager to embrace digitalization and connected vehicles. We offer cloud and data services with a margin, collaborate with partners to develop cloud infrastructure and data platforms and provide services like QQ Music [owned by Tencent Music], in-car gaming and in-car meeting apps. Tencent positions itself as a digital assistant and welcomes white-label solutions, such as NIO map powered by Tencent."



S&P Global Mobility:

How does the nature of collaboration between Tencent and your automotive customers differ from other industries?

Tencent:

"I believe there are both similarities and differences between Tencent's offerings in the automotive industry and other industries. The core similarity is that Tencent provides crossindustry standard products such as cloud and security services. However, what sets us apart in the automotive industry is our ability to offer vertical-specific products like in-cabin services, such as music in car rides. This is because cars are becoming the new smart devices, creating a unique opportunity for Tencent to leverage its digital content in this space.

Another difference is the extensive value chain in the automotive industry. We serve both upstream and downstream customers, which allows us to develop new services. For example, through our B2C [business-to-consumer] in WeChat, we help OEMs connect with their downstream services. One example is the use of WeChat as a digital key platform, where users can share their keys via instant messengers like WhatsApp. This provides real business value by enabling access to services for drivers who may not have access to the brand's application. This aspect of our business is unique to the automotive industry."



S&P Global Mobility:

Considering the gradual progression towards fully autonomous driving, how do you anticipate the dynamics of car ownership, car-sharing, and in-car entertainment to change, especially with the emergence of streaming and gaming services in electric vehicles?

Tencent:

"The ownership structure in the automotive industry is expected to change gradually in China. There has been an increase in the number of people who own cars, and car sales are surging. The rise of e-hailing services has not stopped the growth of private car ownership. It is important to note that e-hailing services are not replacing car sales; this is what we have observed in the market. However, car sharing services have not been successful in China, as people prefer to have their own car rather than sharing or relying on someone else's car."

S&P Global Mobility

S&P Global Mobility:

What are your long-term objectives in securing a significant market share in the automotive industry, particularly with the advent of autonomous driving and software-defined vehicles?

Tencent:

"Tencent has gained market share by understanding the digitalization needs of the automotive industry and developing a complementary strategy with OEMs. They work closely with OEMs on digital sales, marketing, and in-cabin services, integrating their cloud services.

There has been a shift in focus in terms of in-car digitalization. Initially, there was an attempt to integrate smartphone ecosystems and applications into cars, but usage was low as people still preferred using their phones for navigation and music. However, the focus has now shifted to connecting with mobility services to make software and related services more convenient. Tencent aims to enhance the overall mobility experience by bringing destination services, such as meetings, into the car. In the next few years, Tencent's strength will lie in connecting with external services and providing digital content and services within the car."

S&P Global Mobility

S&P Global Mobility:

As vehicles evolve to become software-defined, there is a potential for recurring software revenue. How do you plan to leverage this opportunity, and what monetization strategies are you considering in the automotive software market?

Tencent:

"Traditionally, Tencent's main source of revenue comes from licensing, including license fees and potentially some revenue from subscriptions. While music and video subscriptions may be offered in cars, they are not expected to contribute significantly to revenue as most people prefer to use their smartphones while driving. However, as cars become more autonomous and screens receive more attention, there may be potential for increased subscriptions in the future.

In addition to licensing, we also see revenue potential from mobility services. By leveraging our digital key, users can access valet parking or charging services, providing an opportunity for charging revenue based on a percentage of the gross value. However, it will take some time to effectively organize these services.

We also generate revenue from integrated hardware, such as karaoke functions with built-in microphones. They receive a portion of the revenue from microphone sales, which is also a revenue stream for OEMs.

Looking ahead, we see potential for gaming-related revenue as Chinese and European OEMs explore gaming capabilities in cars. This may involve hardware integration and provide additional revenue opportunities."

S&P Global Mobility

S&P Global Mobility:

With the emergence of Chinese suppliers and increased collaboration between tech companies and automakers, how do you anticipate the collaboration landscape to evolve in the future, and what opportunities could this create for further partnerships and innovations?

Tencent:

"The automotive industry is adopting various collaboration models, including joint ventures, strategic partnerships and joint labs. OEMs are establishing in-house capabilities, while the traditional OEM-supplier relationship involves buying and supplying components.

The industry is also moving towards enhanced relationships within ecosystems and strategic partnerships to co-create solutions, even though there is currently no legal framework for such collaborations. Joint venture is a solution as well; for example, Volkswagen's software unit Cariad and Horizon Robotics are forming a new joint venture to develop autonomous driving system in China.

The industry is now in a consolidation phase, and we are well-prepared to provide thin-layer services for the automotive industry, including cloud, security and consumer-centric services, leveraging our expertise in these areas."

Moderator





Matthew Beecham

AutoTechInsight Research Manager, Supply Chain & Technology, S&P Global Mobility

Matthew Beecham is a research manager for

S&P Global Mobility's AutoTechInsight platform.

Matthew brings almost three decades of industry knowledge and an extensive network to his role. His expertise spans ATI domains, providing shop floor insights and conducting high-level interviews.

He has worked for GlobalData plc, Just Auto, HORIBA MIRA, Economist Intelligence Unit (EIU), McKinsey, AT Kearney, and Supplier Business, a predecessor of ATI.

Matthew's academic credentials include a PhD in Automotive Technology Transfer from Cranfield University.



Fanni Li

Principal Research Analyst, Automotive Supply Chain & Technology, S&P Global Mobility

Fanni is Principal Research Analyst focused on Connected Car and related technology at S&P Global Mobility. Her responsibilities include China market research and analysis of digital cockpit and connected car, as well as global market analysis of over the air updates, connected services and vehicle software paid updates.

Fanni has more than 10 years working experience in automotive industry with engineering background. Prior to joining S&P Global, she worked for global OEM engineering centre in China for several years focusing on project management and product development of infotainment domain products.

Fanni holds a Master of Engineering in Mechatronic System from University of Technology of Compiegne in France, along with an MBA from University of Canberra.

Partner





Dr. Pei Shen

General Manager of Strategy

Tencent Intelligent Mobility

Dr. Pei Shen is General Manager of Strategy for Tencent Intelligent Mobility, a Tencent Business Units focusing on providing digital products and services for the automotive industry based on cloud, big data, map and Al.

Dr. Pei Shen graduated as Diplom Kaufmann from University of Mannheim, and holds a PhD in supply chain management from WHU – Otto Beisheim School of Management. Before joining Tencent, he was Associate Partner at McKinsey & Co. with focus on automotive and advanced industry sector.



Corporate Profile



S&P Global Mobility

S&P Global Mobility

S&P Global Mobility enables customers to anticipate change and make decisions with conviction.

We help them to optimize their businesses, reach the right consumers, and shape the future of mobility. Leveraging technology and data science, we provide unique insights, forecasts and advisory services spanning every major market and the entire automotive value chain—from product planning to marketing, sales and the aftermarket.

With a legacy dating back to the 1920s when R. L. Polk published the first vehicle registration reports, our solutions are used by nearly every OEM, more than 95% of tier one suppliers, media agencies, governments, insurance companies, and financial stakeholders to provide actionable insights that enable better decisions and better results.

腾讯智慧出行 Tencent Intelligent Mobility

Tencent Intelligent Mobility Division is all about user value and integrating social responsibility into its products and services, while promoting technological innovation and cultural heritage to help various industries upgrade and promote sustainable social development. Through our communication and social platforms, WeChat and QQ, we help users connect with digital content and lifestyle services. We also help brands and marketers reach hundreds of millions of Chinese consumers through our highly effective advertising platforms.

Tencent Intelligent Mobility also facilitates partners' business development and digital upgrades through financial technology and enterprise services, and actively participates in the synergistic development of the Internet industry by investing heavily in its talent pool and driving technological innovation.

Contact Us

Americas+18004472273EMEA+441344328300Asia Pacific+6042913600Japan+81362621887

AskMobility@spglobal.com

Corporate Mobility Site



<u>Calendar</u> | <u>Community</u> | <u>Conversation</u>



Mobility LinkedIn Group



Automotive WeChat



Mobility Customer Bulletin



Mobility YouTube Copyright © 2024 S&P Global Inc. All rights reserved.

These materials, including any software, data, processing technology, index data, ratings, credit-related analysis, research, model, software or other application or output described herein, or any part thereof (collectively the "Property") constitute the proprietary and confidential information of S&P Global Inc its affiliates (each and together "S&P Global") and/or its third party provider licensors. S&P Global on behalf of itself and its third-party licensors reserves all rights in and to the Property. These materials have been prepared solely for information purposes based upon information generally available to the public and from sources believed to be reliable.

Any copying, reproduction, reverse-engineering, modification, distribution, transmission or disclosure of the Property, in any form or by any means, is strictly prohibited without the prior written consent of S&P Global. The Property shall not be used for any unauthorized or unlawful purposes. S&P Global's opinions, statements, estimates, projections, quotes and credit-related and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security, and there is no obligation on S&P Global to update the foregoing or any other element of the Property. S&P Global may provide index data. Direct investment in an index is not possible. Exposure to an asset class represented by an index is available through investable instruments based on that index. The Property and its composition and content are subject to change without notice.

THE PROPERTY IS PROVIDED ON AN "AS IS" BASIS. NEITHER S&P GLOBAL NOR ANY THIRD PARTY PROVIDERS (TOGETHER, "S&P GLOBAL PARTIES") MAKE ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE PROPERTY'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE PROPERTY WILL OPERATE IN ANY SOFTWARE OR HARDWARE CONFIGURATION, NOR ANY WARRANTIES, EXPRESS OR IMPLIED, AS TO ITS ACCURACY, AVAILABILITY, COMPLETENESS OR TIMELINESS, OR TO THE RESULTS TO BE OBTAINED FROM THE USE OF THE PROPERTY. S&P GLOBAL PARTIES SHALL NOT IN ANY WAY BE LIABLE TO ANY RECIPIENT FOR ANY INACCURACIES, ERRORS OR OMISSIONS REGARDLESS OF THE CAUSE. Without limiting the foregoing, S&P Global Parties shall have no liability whatsoever to any recipient, whether in contract, in tort (including negligence), under warranty, under statute or otherwise, in respect of any loss or damage suffered by any recipient as a result of or in connection with the Property, or any course of action determined, by it or any third party, whether or not based on or relating to the Property. In no event shall S&P Global be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees or losses (including without limitation lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Property even if advised of the possibility of such damages. The Property should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions.

The S&P Global logo is a registered trademark of S&P Global, and the trademarks of S&P Global used within this document or materials are protected by international laws. Any other names may be trademarks of their respective owners.

The inclusion of a link to an external website by S&P Global should not be understood to be an endorsement of that website or the website's owners (or their products/services). S&P Global is not responsible for either the content or output of external websites. S&P Global keeps certain activities of its divisions separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions of S&P Global may have information that is not available to other S&P Global divisions. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process. S&P Global may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Global reserves the right to disseminate its opinions and analyses. S&P Global Ratings' public ratings and analyses are made available on its sites, www.spglobal.com/ratings (free of charge) and www.capitaliq.com (subscription), and may be distributed through other means, including via S&P Global publications and third party redistributors.

