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# China Smart Parking Industry Report, 2022 Sept.2022

# Smart parking market shows great potentials, and Baidu, Alibaba, Tencent and Huawei (BATH) have set foot in

Smart parking research: there are 4,000 players, and city-level parking platforms have been established.


**Smart parking market shows great potentials, and Baidu, Alibaba, Tencent and Huawei (BATH) have set foot in.**

By the end of 2021, there have been nearly 4,000 companies engaged in smart parking business across China, bringing about a very low market concentration. Smart parking companies in the core circle are divided into three major camps: system integrators, intelligent hardware companies, and investors/operators. Some of them boast both system integration and investment/operation capabilities.

Layout of Smart Parking Players in China

Company		Intelligent Hardware	Parking APP	System Integration	Investment /Operation	Target Market
	Jieshun Science and Technology	√	JParking	√	√	To B+C+G
	Intelligent Interconnection Technology (IICT)	√	AIpark	√		To B+C+G
	Beijing Yuechang Technology	√	ETCP	√		To B+C+G
	Xiamen Keytop Communication & Technology	√	Su Ting Che	√	√	To B+C+G
	Hangzhou Reformer Holding	√	Xinqbei	√	√	To B+C+G
	Hangzhou Hikvision Digital Technology	√	Hikvision Park	√	√	To B+C+G
	BlueCard Technologies	√		√	√	To B
	Shenzhen Door Intelligent Control Technology	√		√		To B
	Xi'an iRain IOT Technology Service	√		√	√	To B
	Shanghai Changting Information Technology	√	CTP Park	√	√	To B+C+G
	Beijing Tongtong Yilian Technology	√		√	√	To B+C
	Sonli Group	√	Wit-Parking	√	√	To B+C+G
	Jiangsu Wuyang Parking Industry Group				√	To B
	Guangdong Anjubao Digital Technology	√	Zhangtingbao			To B+C
	Shanghai EZParking Information Technology		YO! Parking		√	To B+C

# Layout of Smart Parking Players in China

 停车百事通 PARKING WE	Shenzhen Qianhai Soar		Parking We			To B+C
 Parkopedia 泊知港	Shanghai Parkopedia Information Technology		Parkopedia Parking			To B+C
 凯达尔 CADRE	Shenzhen CADRE Group	✓	Botong Parking	✓		To B+C+G
 全球泊 welinkpark	Welinkpark (Shenzhen) Technology	✓		✓	✓	To B+G
 停开心	Xiamen Carlinkin Network Technology		Tingkaixin		✓	To C+G
 LOTTOP 精英路通	Beijing Lottop Technology	✓	Tiantian Parking	✓		To C+G
 阳光海天 SUNSEA PARKING	Sunsea Parking Industry Group				✓	To B+G
 Turbo 拓宝科技	Wuhan Turbo Technologies	✓		✓		To B
 GUANCHAOKEJI 观潮科技	Henan Guanchao Intelligent Technology			✓	✓	To G
 首程控股 SHOUCHEG HOLDINGS	Shoucheng Holdings				✓	To G

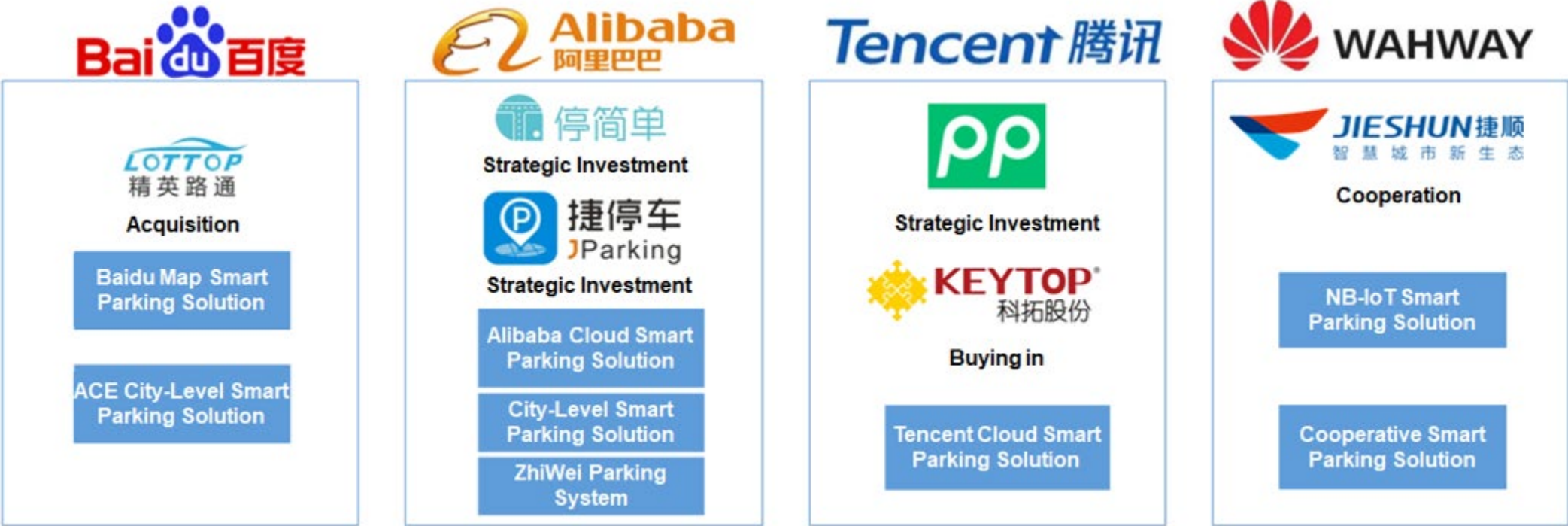
Note: rankings are in no particular order.

Source: ResearchInChina

# Layout of BATH in Smart Parking

Attracted by enormous potential of smart parking market, technology firms including Baidu, Alibaba, Tencent and Huawei (BATH) have also entered the market.

## Layout of BATH in Smart Parking

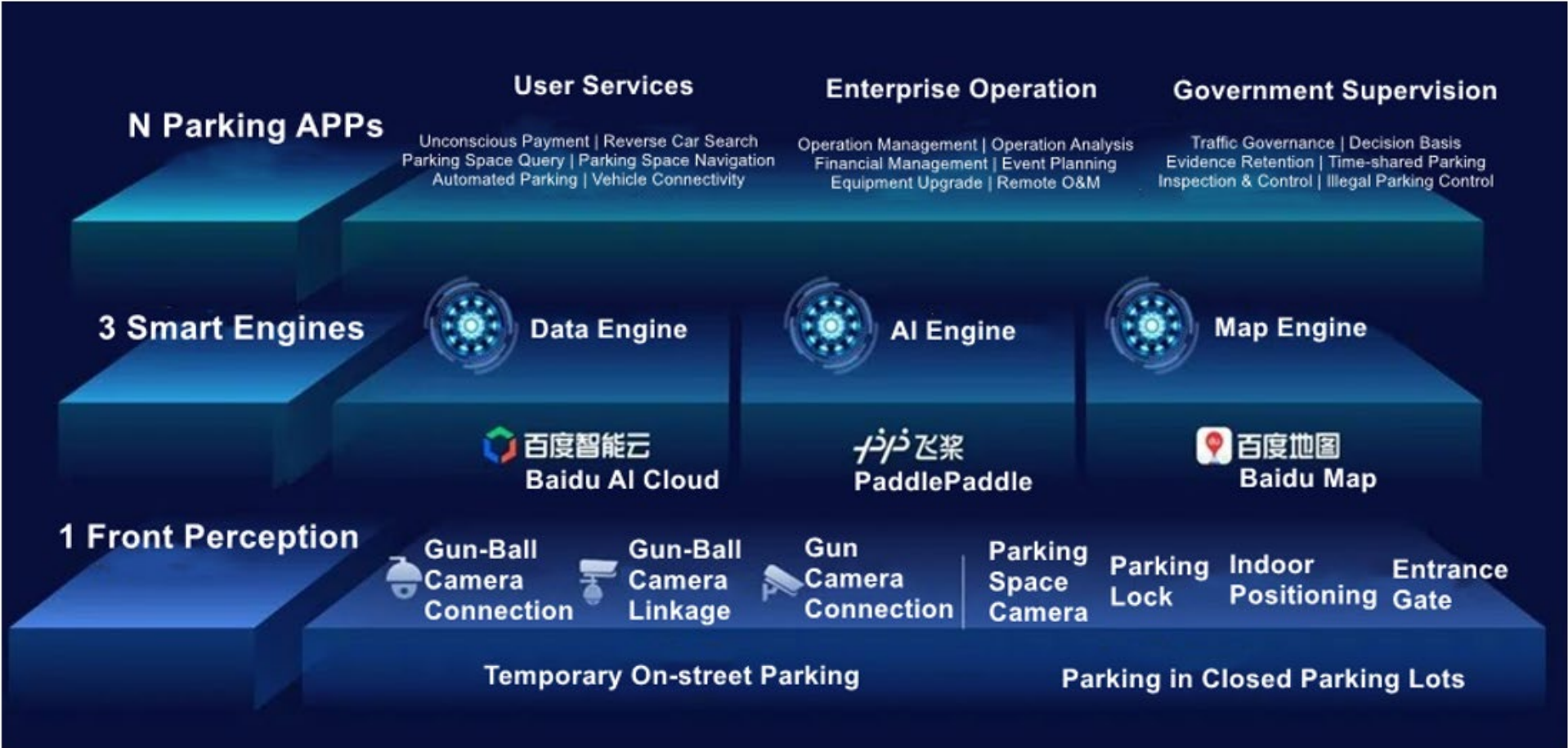


Source: ResearchInChina



For example, Baidu previously launched Baidu Map Smart Parking Solution based on Baidu Map. In June 2021, Baidu bought a 100% stake in Beijing Lottop Technology, aiming to shore up its weak spots in static traffic smart parking and deploy city-level smart parking. In October 2021, Beijing Lottop Technology introduced "Baidu ACE City-level Smart Parking Solution". At present, Baidu has launched city-level smart parking projects in more than 30 areas.

## Baidu ACE City-Level Smart Parking Solution



## City-level parking platform: one city, one network

The implementation of city-level parking platforms is led by local competent authorities. Within an administrative region (city/district/county), all or most parking resources are connected to a platform, providing the public with services including parking inquiry, navigation, reservation and payment and building an overall pattern of "one city, one network, one APP", through integrating static and dynamic data of parking lots. The investment in construction of a single city-level parking platform project ranges from one million to hundreds of millions of yuan. City-level smart parking is therefore the most promising smart parking segment. It is also the main development direction of smart parking in current stage.

Policies and regulations favor the construction of city-level platforms: the people's governments of all cities are required to develop mobile terminal smart parking service applications that integrate service functions such as information inquiry, parking space reservation and electronic payment, and promote the deep integration of parking information management platform and city information modeling (CIM) basic platform, according to the Opinions on Promoting the Development of Urban Parking Facilities issued by the General Office of the State Council in May 2021. In addition, local governments including Liuzhou, Xiong'an New Area of Hebei, Tianjin, Henan and Dongguan have also released relevant policies requiring the building of city-level parking platforms.

# Major Local Governments' Policies Concerning City-level Parking Platforms

Major Local Governments' Policies Concerning City-Level Parking Platforms

Province /City	Date of Issue	Policy	Smart Parking Related Content
Liuzhou	Jun. 2022	Motor Vehicle Parking Regulations of Liuzhou City	The People's Government of Liuzhou City should promote the construction of an intelligent transportation city in an orderly manner, and establish a <b>citywide unified parking information management platform</b> that enables functional service applications such as information inquiry, parking space reservation, parking guidance and electronic toll collection.
Xiong'an New Area of Hebei	Mar. 2022	Interim Measures Xiong'an New Area, Hebei for the Administration of Motor Vehicle Parking Lots	The new area should establish a <b>comprehensive parking management service system</b> , dynamically supervise parking lots, and share administrative information with the Bureau of Reform and Development, the Bureau of Natural Resources and Planning, the Bureau of Construction and Transportation, the Bureau of Public Services, the Bureau of Public Security and other departments. A parking open data interface should be set up in the comprehensive parking management service system of the new area to release the dynamic information of parking lots to the public in real time, including distribution, location, usage status, and number of parking spaces, so as to guide vehicles to park in order.
Tianjin	Mar. 2022	Implementation Plan of Tianjin Municipality for Promoting the Development of Urban Parking Facilities	It suggests building <b>city- and district-level smart parking management platforms</b> to integrate on/off-street public parking resources and establish an integrated smart parking system; formulating the smart parking platform system access interface standard to guide the standardized renovation of existing parking facilities to facilitate data collection and sharing; promoting the deep integration of smart parking management platform and city information modeling (CIM) basic platform.

Henan	Apr. 2022	Implementation Opinions of the General Office of the People's Government of Henan Province on Accelerating the Development of Urban Parking Facilities	It suggests establishing an <b>urban smart parking management system</b> that timely displays the location, available parking spaces and charging standards of each parking facility to enable refined and intelligent parking management; promoting the construction of a government-led smart parking management cloud platform to support the development and promotion of mobile Internet terminal parking applications that enable such functions as parking information inquiry, parking space reservation, parking guidance, automatic billing and automatic payment.
Dongguan	Mar. 2022	Administrative Measures of Dongguan City for Motor Vehicle Parking Facilities	It encourages public parking lots to <b>charge parking service fees in an intelligent way</b> . Parking lots that use the computer billing management approach should ensure the normal use of management devices such as video surveillance, entrance control and license plate recognition, and the real-time transmission of data including parking space information, recognized license plate information, vehicle entry and exit time, charging standards, video surveillance and vehicle snapshot, via the <b>citywide unified parking information management system</b> .

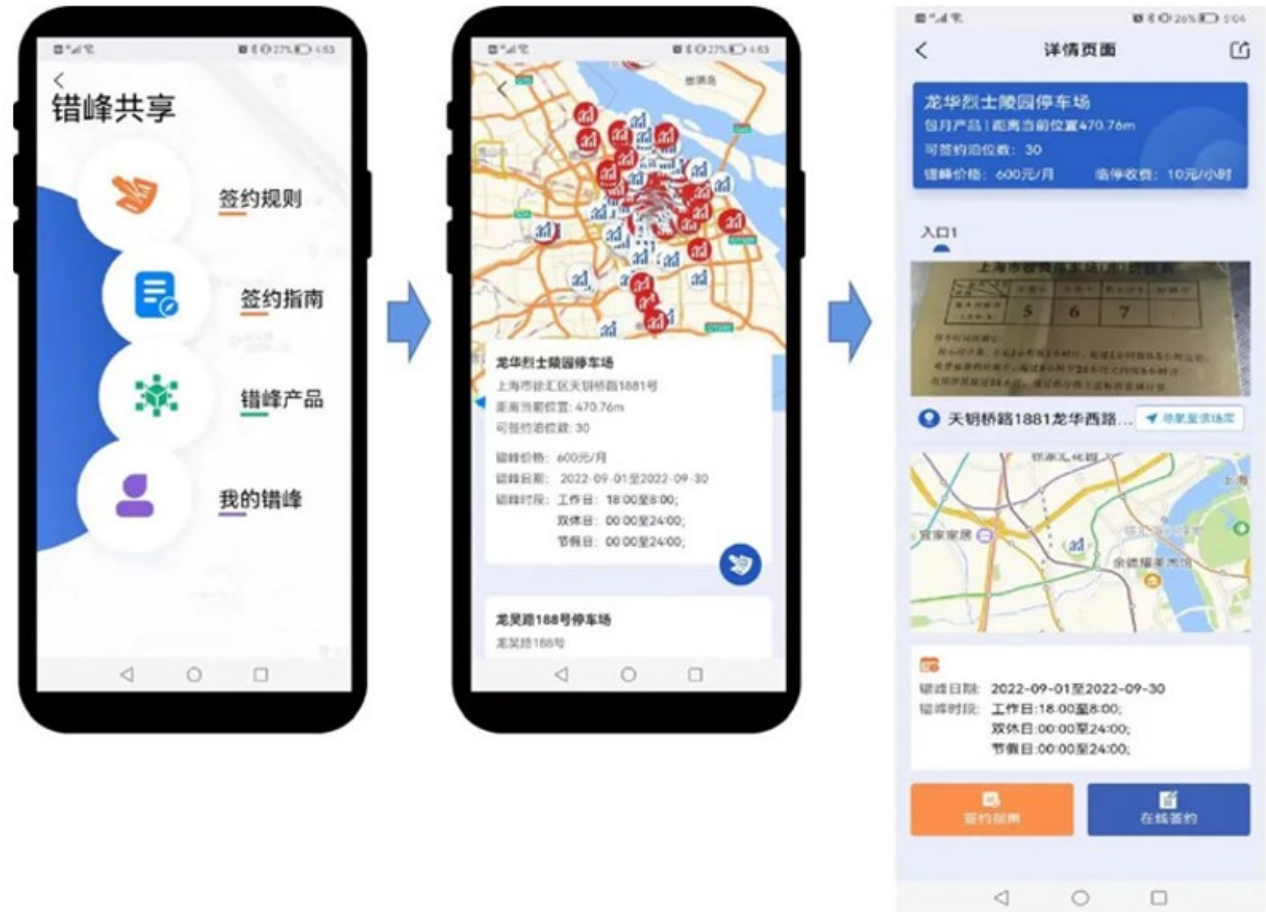
# Urban Parking Platforms mushroom in China

**Urban parking platforms mushroom in China:** driven by relevant policies, about 300 cities across the country, typically Beijing, Shanghai, Kunming, Dongguan, Nanjing, Qingdao and Ningbo, have launched smart parking platforms.

In Shanghai's case, "Shanghai Parking", a city-level smart parking platform launched in 2020, has covered a total of 890,000 public parking spaces in more than 4,300 public parking lots (garages) and toll road parking lots in the city. In August 2022, Shanghai Parking 2.0 was introduced. It supports over 2,800 public parking lots (garages) and all toll road parking lots, offers the unified electronic payment feature "parking payment", and allows 49 hospitals to provide online parking reservation service.

Shared parking is also a smart parking application field encouraged by China. The off-peak parking sharing function in Shanghai Parking APP 2.0 has been available to 212 parking lots (garages), providing one-click inquiry and order signing services for residents in surrounding communities, that is, residents can park their cars conveniently within the usage period after signing contract online.

## Off-Peak Parking Sharing Function in Shanghai Parking APP 2.0





# Layout of automakers in smart parking: improve parking experience for car owners

## **Layout of automakers in smart parking: improve parking experience for car owners.**

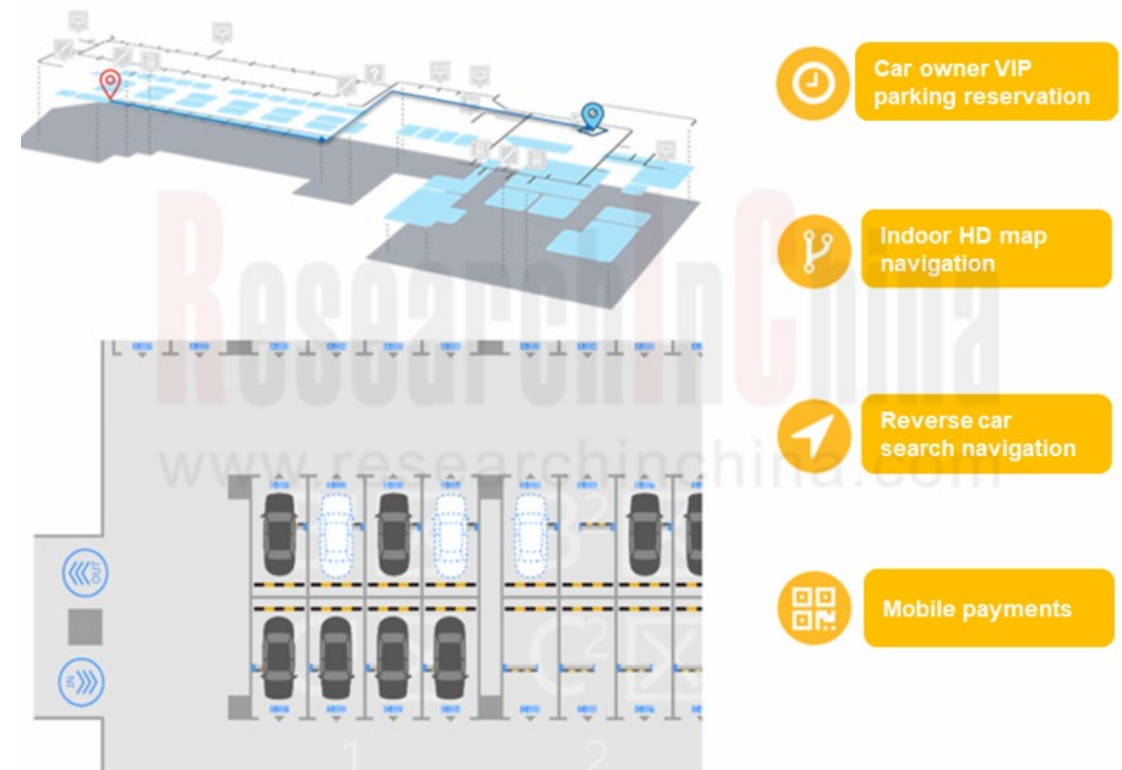
According to the survey data from Parkopedia, relatively speaking, 56.6% smart parking users tend to use vehicle navigation to receive parking information, so it is necessary to embed parking information in IVI systems.

At present, major automakers have embedded smart parking functions in their telematics systems by way of cooperating with parking data service providers or telematics service providers. Typical parking data service providers are Parkopedia and EZParking, of which Parkopedia makes a global layout and often cooperates with foreign automakers such as Mercedes-Benz and Audi; EZParking deploys the Chinese market and most of its partners are Chinese automakers.

**Weltmeister and EZParking joined hands in smart parking:** in August 2022, the "Smart Parking" service jointly developed by Weltmeister and EZParking was launched on the WM iMOTOR APP, allowing Weltmeister owners to enjoy free inquiry services, for example, inquiring about the information of more than 10 million parking spaces (available/busy/full) of more than 70,000 parking lots (garages) in more than 100 cities.

Weltmeister will continue the iteration of its "Smart Parking" service. In the future, it will enable such functions as mobility route intelligent planning and navigation, indoor HD map navigation in parking garages, automatic parking and reverse car search, and unconscious payments when leaving parking lots.

## **Highlights of EZParking-Weltmeister Whole-Process Intelligent Experience in Parking Scenario**



# Layout of automakers in smart parking: improve parking experience for car owners

**Honda together with Parkopedia provides parking information and payment solutions for Chinese car owners:** in October 2021, Honda, Parkopedia and MXNAVI together added the parking information and payment solution to the Honda CONNECT 3.0 entertainment system.

Honda owners can inquire about dynamic parking information via Honda CONNECT 3.0. The vehicle intelligent voice assistant can provide drivers with nearby parking suggestions when approaching the destination. Honda owners can also pay parking fees through the in-vehicle password-free parking payment service or the QR code displayed on the car screen.



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