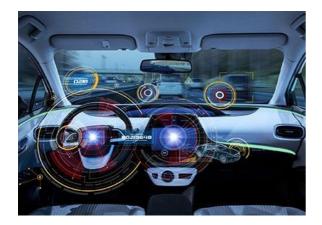


Report Price: £3302.97 | \$4460.00 | €3717.16

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.



"Although most car manufacturers have invested much in their independent in-car systems, most consumers use mobile-to-car connectivity instead to avoid extra data spending. Low equipped rate of advanced function is another reason that independent in-car systems are easily substituted by mobile phones." – Terence Zhou, Research Analyst

This report looks at the following areas:

- A perceived holistic in-car solution led by autonomous driving
- Low tolerance toward unstable connectivity systems and high expectation of consistently extendable and upgradable functions
- Better affordability of 5G enables more application possibilities

Consumers have high expectations for future in-car functions, including autonomous driving, social functions and infotainment systems, which will open the door to a new world of totally different in-car experiences. Our research shows 5G service pricing is affordable and falls within the range consumers are willing to pay for. We anticipate the penetration of 5G data services will propel car connectivity into a new era.

This Report discusses car owners' choice of connectivity system, which includes Android Auto, Apple CarPlay and independent systems. We also explore their choice of data service based on their usage of these connectivity systems. Usage and satisfaction of current connectivity functions are also covered in this Report.

BUY THIS REPORT NOW

VISIT: store.mintel.com

CALL: EMEA +44 (0) 20 7606 4533

> Brazil 0800 095 9094

Americas +1 (312) 943 5250

China +86 (21) 6032 7300

_{АРАС} +61 (0) 2 8284 8100

EMAIL: reports@mintel.com

DID YOU KNOW?

This report is part of a series of reports, produced to provide you with a more holistic view of this market



Report Price: £3302.97 | \$4460.00 | €3717.16

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

Table of Contents

Overview What you need to know Covered in this report Definition **Executive Summary** The consumer One third of car owners don't use in-car infotainment systems Figure 1: Usage of connectivity systems, by generation, July 2019 Android systems like CarLife and Android Auto beat iOS even among high-end car owners Figure 2: Usage of connectivity systems, by car purchasing price, July 2019 NEV car owners have higher usage of cars' independent systems Figure 3: Usage of connectivity systems, by car energy type, July 2019 Mobile hotspot usage rate accounts for 70% Figure 4: Choice of data service, July 2019 Car owners who use independent systems are more likely to use free data from the car brand and pay extra for data Figure 5: Choice of data service, by usage of connectivity system, July 2019 Most free data package users switch to mobile hotspots after free data package expires after the first year Figure 6: Choice of data service, by car ownership situation, July 2019 Penetration rates of advanced functions still low for cars bought within the last three years Figure 7: Usage rate and satisfaction level of connectivity functions, July 2019 Voice recognition function is more favoured by females but sees lower satisfaction in lower tier cities Figure 8: Usage rate and satisfaction level of connectivity functions - selected item, by selected demographics, July 2019 Built-in app stores the future trend for infotainment systems due to higher satisfaction among young car owners

Figure 9: Usage rate and satisfaction level of connectivity functions – selected item, by car energy type, July 2019

OTA system upgrade's actual satisfaction is low for both fuel and NEV cars Figure 10: Usage rate and satisfaction level of connectivity functions – selected item, by car energy type, July 2019

Holistic in-car experience rather than pure driving experience is expected

Figure 11: Expected functions in the future, July 2019

Figure 12: Attitudes towards car connectivity – selected item, by city tiers, July 2019

- Male car owners are expecting easier driving, while females anticipate easier living Figure 13: Expected functions in the future – selected item, by gender, July 2019
- Young car owners seek more self-indulgence while older car owners want cars to be a social platform Figure 14: Expected functions in the future – selected item, by generation, July 2019

Ideal price for car connectivity data service according to consumers

Figure 15: Price sensitivity – optimal price, July 2019

Figure 16: Price sensitivity – threshold prices, July 2019

Household income has little impact on how much car owners are willing to pay for data service

BUY THIS REPORT NOW



Report Price: £3302.97 | \$4460.00 | €3717.16

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

Figure 17: Price sensitivity, by monthly household income, July 2019

No obvious preference for a particular control method due to lack of killer functions Figure 18: Attitudes towards car connectivity – selected item, by generation, July 2019

NEV owners in lower tier cities care more about connectivity systems

Figure 19: Attitudes towards car connectivity - selected item, by city tiers, July 2019

Car owners in tier two cities are more tolerant of imperfect connectivity systems Figure 20: Attitudes towards car connectivity – selected item, by city tiers, July 2019

What we think

Issues and Insights

A perceived holistic in-car solution led by autonomous driving

The facts

The implications

Figure 21: Bestune T77

Figure 22: WeChat on Changan CS75 Plus

Figure 23: Sitech

Figure 24: Tesla Arcade

Figure 25: Garmin and Mercedes

Low tolerance toward unstable connectivity systems and high expectation of consistently extendable and upgradable functions The facts

The implications

Better affordability of 5G enables more application possibilities

The facts

The implications

Figure 26: 5G applications

Figure 27: Driverless with 5G

The Consumer – What You Need to Know

Most use infotainment systems through their smartphone, while one third of car owners don't use them at all

Penetration of advanced functions still low but satisfaction is high, especially among young car owners

Holistic in-car experience rather than pure driving experience is expected

Usage of Connectivity System

One third car owners don't use in-car infotainment systems

Figure 28: Usage of connectivity systems, by generation, July 2019

Android systems like CarLife and Android Auto beat iOS even among high-end car owners

Figure 29: Usage of connectivity systems, by car purchasing price, July 2019

iOS and independent systems more used in replacement cars

Figure 30: Market share of mobile brands in China

Figure 31: Usage of connectivity systems, by car ownership condition, July 2019

NEV car owners have higher usage of cars' independent systems

BUY THIS REPORT NOW



Report Price: £3302.97 | \$4460.00 | €3717.16

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

Figure 32: Usage of connectivity systems, by car energy type, July 2019

Figure 33: Infotainment system introductions from new energy brands

Choice of Data Service

Mobile hotspot usage rate accounts for 70%

Figure 34: Choice of data service, July 2019

Car owners who use independent systems are more likely to use free data from car brands and pay extra for data

Figure 35: Choice of data service, by usage of connectivity system, July 2019

Figure 36: Cadillac's infotainment interface

Most free data package users switch to mobile hotspots after free data package expires after a year

Figure 37: Choice of data service, by car ownership situation, July 2019

Figure 38: Roewe's data service

Usage and Satisfaction of Connectivity Functions

Penetration of advanced functions still low for cars bought within the last three years

Figure 39: Usage rate and satisfaction level of connectivity functions, July 2019

Screen projection suffers from low satisfaction due to high expectations

Figure 40: Attitudes towards car connectivity - selected item, by usage of connectivity system, July 2019

Figure 41: Baidu CarLife

Voice recognition function is more favoured by females but sees less satisfaction in lower tier cities

Figure 42: Usage rate and satisfaction level of connectivity functions – selected item, by selected demographics, July 2019 Figure 43: iFlytek

Built-in app stores the future trend for infotainment systems due to higher satisfaction among young car owners

Figure 44: Usage rate and satisfaction level of connectivity functions – selected item, by car energy type, July 2019

OTA system upgrade's actual satisfaction is low for both fuel and NEV cars

Figure 45: Usage rate and satisfaction level of connectivity functions - selected item, by car energy type, July 2019

Expected Functions in the Future

Holistic in-car experience rather than pure driving experience is expected

Figure 46: Expected functions in the future, July 2019

Figure 47: Attitudes towards car connectivity - selected item, by city tiers, July 2019

Fully autonomous driving and voice assistant are more likely to attract infotainment system non-users

Figure 48: Expected functions in the future, by usage of connectivity system, July 2019

Male car owners are expecting easier driving, while females anticipate easier living

Figure 49: Expected functions in the future - selected item, by gender, July 2019

Young car owners seek more self-indulgence while older car owners want cars to be a social platform

Figure 50: Expected functions in the future – selected item, by generation, July 2019

Optimal Pricing for Car Connectivity Data Services

Methodology

Ideal price for car connectivity data service according to consumers

Figure 51: Price sensitivity – optimal price, July 2019

BUY THIS REPORT NOW



Report Price: £3302.97 | \$4460.00 | €3717.16

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

Figure 52: Price sensitivity – threshold prices, July 2019

Household income has little impact on how much car owners are willing to pay for data services Figure 53: Price sensitivity, by monthly household income, July 2019

Attitudes towards Car Connectivity

No obvious preference for a particular control method due to lack of killer functions Figure 54: Attitudes towards car connectivity – selected item, by generation, July 2019

NEV owners in lower tier cities care more about connectivity systems Figure 55: Attitudes towards car connectivity – selected item, by city tiers, July 2019

Car owners in tier two cities are more tolerant of imperfect connectivity systems Figure 56: Attitudes towards car connectivity – selected item, by city tiers, July 2019

Meet the Mintropolitans

Non-MinTs have higher usage of Android connectivity, while MinTs have higher usage of iOS and independent systems Figure 57: Usage of connectivity systems, by consumer classification, July 2019

An easy-to-use system is more important than brands to MinTs, but neither MinTs or non-MinTs would compromise on stability Figure 58: Attitudes towards car connectivity – selected item, by consumer classification, July 2019

Appendix – Methodology and Abbreviations

Methodology

Abbreviations

BUY THIS REPORT NOW