

Global E-Commerce Intelligence we report, you grow

SNAPSHOT: EUROPE IN-CAR PAYMENT

PUBLICATION DATE: JULY 2022



PREFACE

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OBJECTIVE

₩ 20%

Sample Report

A LIST OF ADVANTAGES

- yStats.com provides secondary market research: By using various sources of information we ensure maximus all obtained data. As a result companies get a precise and unbiased impression of the market situation.
- Only reliable sources such as national and international statistical offices, industry and trade associations, business reports, business and company databases, journals, company registries and news portals are used as a basis for the analyses, statistical reports and forecasts.
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Secondary Market Research

- The reports are compiled based on secondary market research. Secondary research is information gathered from previously published sources based on information and data acquired from national and international statistical offices, industry and trade associations, business reports, company databases, journals, company registries, news portals and many other reliable sources. By using various sources, we ensure maximum object for reported data. As a result, companies gain a precise and unbiased impression of the market situation.
- Cross referencing of data is conducted in order to ensure validity and reliability.
- The source of information and its release date are provided on every chart. It is possible that the information contained in one chart is derived from several sources. If this is the case, all sources are mentioned on the chart.
- The reports include mainly data from the last 12 months prior to the date of report publication. Exact publication dates are mentioned in every chart.

Definitions

• The reports consider a broad definition of B2C E-Commerce, which might include mobile commerce. As definitions may vary among sources, exact definition used by the source (if available) is included at the bottom of the chart.

Chart Types

• Our reports include text charts, pie charts, bar charts, rankings, line graphs and tables. Every chart contains an Action Title, which summarizes the main idea/finding of the chart and a Subtitle, which provides necessary information about the country, the topic, units or measures of currency, and the applicable time period(s) to which the data refers. With respect to rankings, it is possible that the summation of all categories amounts to more than 100%. In this case, multiple answers were possible, which is noted at the bottom of the chart.

Report Structure

• Reports are comprised of the following elements, in the following order: Cover page, preface, legal notice, methodology, definitions, table of contents, management summary (summarizing main information contained in each section of report) and report content (divided into sections and chapters). When available, we also include forecasts in our report content. These forecasts are not our own; they are published by reliable sources. Within Global and Regional reports, we include all major developed and emerging markets, ranked in order of importance by using evaluative criteria such as sales figures.

Notes and Currency Values

- If available, additional information about the data collection, for example the time of survey and number of people surveyed, is provided in the form of a note. In some cases, the note (also) contains additional information needed to fully understand the contents of the respective data.
- When providing information about amounts of money, local currencies are most often used. When referencing currency values in the Action Title, the EUR values are also provided in brackets. The conversions are made using the average currency exchange rate for the respective time period. Should the currency figure be in the future, the average exchange rate of the past 12 months is used.

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Report Coverage

- This snapshot covers the European mobility payment solutions, especially in-car payments. It includes information about use cases of in-car payments as fuel payment, parking fee payment, EV charging payment, among others. It considers a wide definition of connected cars, including number of connected cars, connected car solution market size, number of in-car payments etc.
- Selected major markets within the region are covered.
- Besides regional and country data, information about global development is also included in this report.

Report Structure

- The opening chapter of the report is devoted to global development, including worldwide revenue figures, international comparisons and trends.
- The rest of the report is divided by region/country.
- Within the regional chapter, regional information is provided first, followed by countries presented in the descending order.
- The following types of information are included, where available: breakdown of total number of connected vehicles, total number of in-car payments made and information about various collaborations and partnerships between OEMs and other stakeholders in the automotive, payments industry and the steps taken by them towards facilitating the use of in-car payments.



DEFINITIONS

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The following expressions and definitions are used in this market report*:

Connected car is a car that can be linked to other devices via a network. The car connects via mobility CONNECTED CARS can transmit data to other devices either inside or outside the car. This includes remote access smartphone.

A touchscreen or display mounted on the car dashboard that offers information about the vehicle as well as the outside IN-CAR INFOTAINMENT environment. It also allows integration of mobile devices and autonomous driving in more advanced car models.

Any means by which a person can be uniquely identified based on evaluation of one or more distinguishing biological BIOMETRICS traits, e.g., fingerprint, voice, retina/iris scan, and facial recognition.

Biometric authentication allows verification processes via recognizable user features. These include voice recognition, iris recognition, and fingerprint senor.

> In-car payments allows drivers to pay for an array of goods and services via the car dashboard, with the system operating via wireless connection such as Bluetooth Low Energy or long range-radio frequency. The driver activates the payment using voice or touchscreen commands.

The payment system is a model wherein the customer pays for using the product or service rather than buying it. The more the use of the service the more the customer has to pay for it and vice versa.

A car that uses electric motor for its functioning which draws its current from storage batteries or from overhead cables.

Payments that do not require the need for cash or card for the purpose of making payments and work on RFID or NFC technology. The consumers can make payments via their smartphone or contactless card at payment terminal.

Voice Assistants, or Virtual Assistants, are computer-generated characters able to simulate a conversation, deliver information and fulfill various user commands. Virtual assistants can be installed in smartphones, laptops, voice-enabled speakers and other digital devices.

VOICE PAYMENTS Payments made using voice-enabled technology, e.g., via smart speakers.

Note: *the definitions used by the original sources might differ from the ones stated on this chart; the exact definition used by each source, where available, is included on the respective charts

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BIOMETRIC AUTHENTICATION

IN-CAR PAYMENTS

PAY-PER-USE PAYMENTS

ELECTRIC VEHICLES

CONTACTLESS PAYMENTS

VOICE ASSISTANTS

TABLE OF CONTENTS (1 OF

Global E-Commerce Intelligence we report, you grow

DBJECTIVE

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ample Rep

1. Management Summary

2. Global

- Overview of In-Car Payment Solutions and Trends, June 2023 (1 of 4)
- Overview of In-Car Payment Solutions and Trends, June 2023 (2 of 4)
- Overview of In-Car Payment Solutions and Trends, June 2023 (3 of 4)
- Overview of In-Car Payment Solutions and Trends, June 2023 (4 of 4)
- Total Value Created By Connected Car Use Cases, in USD billion, 2020 & 2030f
- Number of Connected Cars in Service, in millions, 2023e & 2027f
- Share of OEMs Investing or Planning to Invest in Connected Car Services in the Next 2 Years, in %, May 2022
- Connected Car Penetration Rate, by Countries, in %, Q4 2022
- Connected Car Penetration Rate, in %, Q4 2022
- Share of Motorists Who Value In-Car Integrated Parking Services & Those Who Cite In-Car Payments as a Solution to Inaccurate Parking Information, in %, May 2023
- Share of Respondents Who Value Vehicle Centric In-Car Payments vs Those Who Want Single Sign-on Access Across Providers, in %, May 2023
- Top Activities For Which Respondents Lean Towards In-Car Payments, in % of Respondents, May 2023
- Share of EV Drivers Who Regarded In-Car Activations and Payments for Charging as Important Standalone Features & Share of EV Respondents Preferring Vehicles With Park and Charge Enabling Them to Locate and Pay From the Car in %, May 2023
- Share of Respondents For Whom In-Car Payments is an Important Feature of Connected Cars, in %, Q4 2022
- Share of Potential Users Who Believe In-Car Payment to Be Key Competitive Advantage of Manufacturers, by Selected Countries, in %, February 2022

TABLE OF CONTENTS (2 OF

Global E-Commerce Intelligence we report, you grow

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Sample Report

3. Europe

3.1. Regional

- Overview of In-Car Payment Solutions and Trends, May 2023 (1 of 3)
- Overview of In-Car Payment Solutions and Trends, May 2023 (2 of 3)
- Overview of In-Car Payment Solutions and Trends, May 2023 (3 of 3)
- Overview of In-Car Payment Regulatory Environment, July 2023

3.2. UK

• Benefits of Connected Cars, in % of Respondents, March 2022

3.3. Germany

- Top Benefits and Concerns of Connected Cars Among Respondents, in % of Respondents, March 2022
- Share of Drivers Who Can Imagine Shopping and Paying Directly via Display in the Vehicle, in %, September 2022
- Preferred Car Related Services For Which Drivers Are Willing to Pay Using In-Car Payments, in %, September 2022
- Top Concerns That Respondents Who Rejected In-Car Commerce Have, in % of Respondents, September 2022
- Level of Consumer Interest in Select Connected Car Features, in % of Respondents, 2022

TABLE OF CONTENTS

Global E-Commerce Intelligence we report, you grow

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₩ 20%

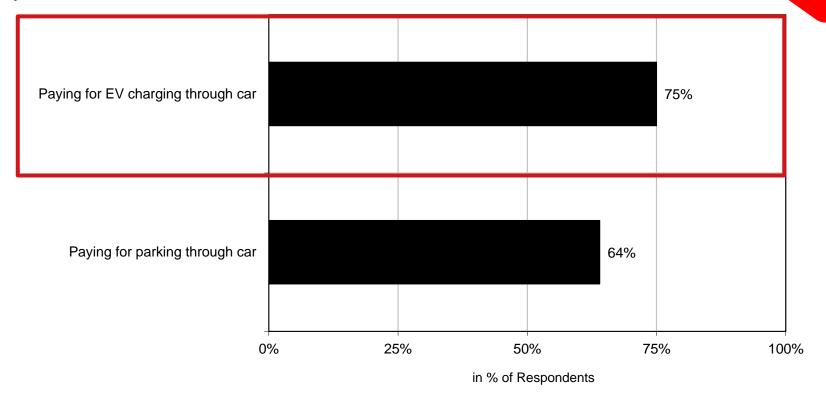
Sample Report

1.	Management Summary	9 – 11
2.	Global	12 – 27
3.	Europe	28 – 38
3.1.	Regional	29 – 32
3.2.	UK	33 – 33
3.3.	Germany	34 – 38



Three-quarters (75%) of respondents globally showed towards using in-car payments for EV charging as of May of Respondents in % of Respondents.

Global: Top Activities For Which Respondents Lean Towards In-Car Payments, in % of Respondents 2023



Note: does not add to 100% due to multiple answers possible

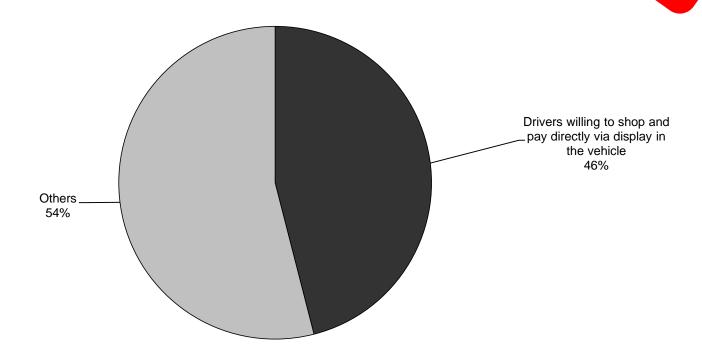
Survey: based on a survey of 5,454 motorists and 2,225 EV owners across US, Germany, France, UK, Italy and Japan, conducted in May 2023

Source: Parkopedia & Borderless Access, June 2023



In Germany, 46% of surveyed drivers envisioned shop payments through their vehicle's display as of September 1977.

Germany: Share of Drivers Who Can Imagine Shopping and Paying Directly via Display in the %, September 2022



Survey:

based on a survey of 1,003 consumers and 786 drivers across Germany, aged 18-74 years, conducted between $8^{th} - 12^{th}$ September 2022

Source: Gfk & Mastercard, October 2022

