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2021 Global Automotive Consumer Study

Global focus countries

To learn more about the Global Automotive Consumer Study, visit **www.deloitte.com/autoconsumers**

For more than a decade, Deloitte has been exploring automotive consumer behaviors and trends affecting a rapidly evolving global mobility ecosystem.

Key insights from our Global Automotive Consumer Study over the years:

2010 — Overall value ranked as the primary factor when evaluating brands

2011 — "Cockpit technology" and the shopping experience led differentiators

2012 — Interest in hybrids driven by cost and convenience, while interest in connectivity centers on safety

2014 — Shared mobility emerges as an alternative to owning a vehicle

2017 — Interest in full autonomy grows, but consumers want a track record of safety

2018 — Consumers in many global markets continue to move away from internal combustion engines (ICE)

2019 — Consumers "pump the brakes" on interest in autonomous vehicles

2020 — Questions remain regarding consumers' willingness to pay for advanced technologies

The Global Automotive Consumer Study informs Deloitte's point of view on the evolution of mobility, smart cities, connectivity, transportation, and other issues surrounding the movement of people and goods.

2021 Deloitte Global Automotive Consumer Study

From September through October 2020, Deloitte surveyed more than 24,000 consumers in 23 countries to explore opinions regarding a variety of critical issues affecting the automotive sector, including the development of advanced technologies. The overall goal of this annual study is to answer important questions that can help companies prioritize and better position their business strategies and investments.

EVs still have a few hurdles to clear

Although the longer-term trend toward EVs appears to be solidifying, consumers may be looking for more familiarity and affordability in the face of near-term uncertainty.

Younger consumers feeling the pressure?

The percentage of younger consumers in the United States and Germany that have requested a vehicle payment deferment this year is well above that of their older counterparts, raising questions about their ability to support a sustained demand recovery.

Downside risk for demand in some markets

As a result of the pandemic, a significant number of consumers in China, India, and the Republic of Korea have altered their timeline for acquiring their next vehicle, with some people planning to delay it as they consider more affordable options.

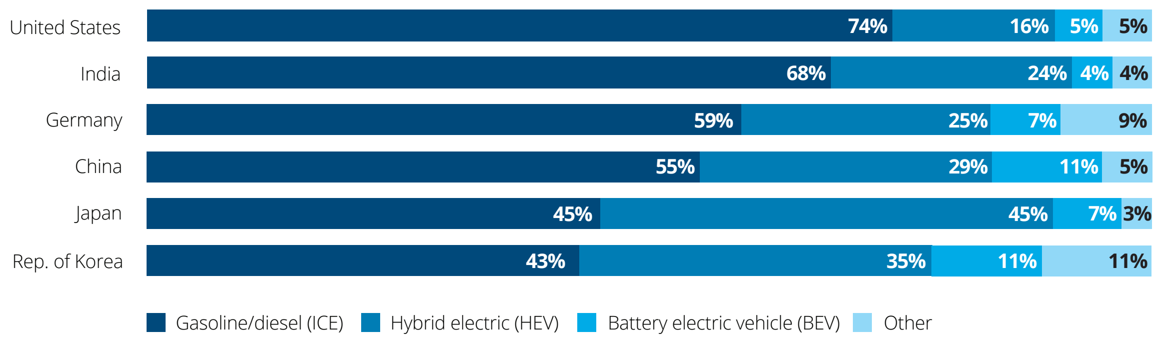
Vehicle sales moving online? Not so fast

Even though virtual vehicle sales may be here to stay, a majority of consumers would still prefer to acquire their next vehicle in person at an authorized dealer, as some aspects of the buying process remain difficult to digitize.

Vehicle electrification and connectivity

Intention to buy a gasoline or diesel vehicle jumps back up, as consumers may be looking for the comfort of affordable, tried, and tested technology in uncertain times.

Consumer powertrain preferences for their next vehicle



Non-gasoline/diesel (ICE) YoY

	2020	2021
United States	41%	26%
India	49%	32%
Germany	51%	41%
China	57%	45%
Japan	63%	55%
Rep. of Korea	58%	57%

Note: "Other" category includes ethanol, CNG, and hydrogen fuel cell.
Q42. What type of engine would you prefer in your next vehicle?
Sample size: Germany=779; United States=879; China=886; India=880; Japan=597; Republic of Korea=906

Range anxiety and a lack of charging infrastructure are top concerns for consumers in most countries, but safety is top of mind for people in China.

Greatest concerns regarding all-battery-powered electric vehicles

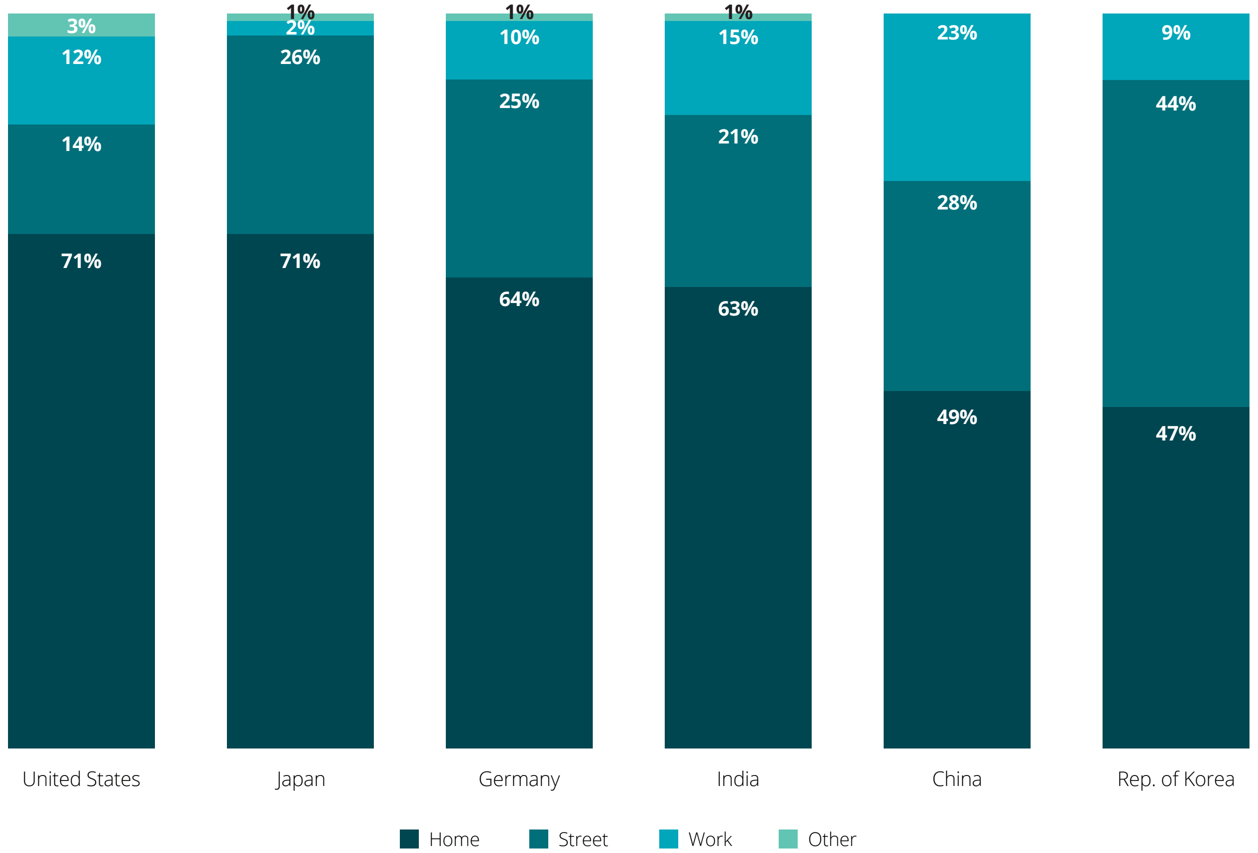
Concern	United States	Germany	Japan	Rep. of Korea	China	India
Driving range	28%	28%	22%	11%	25%	13%
Lack of charging infrastructure	25%	22%	29%	32%	20%	26%
Cost/price premium	20%	16%	23%	17%	9%	16%
Time required to charge	13%	13%	15%	18%	13%	14%
Safety concerns	8%	12%	10%	19%	29%	25%
Lack of choice	4%	5%	1%	3%	4%	6%
Other	2%	4%	0%	0%	0%	0%

Top concern

Q47: What is your greatest concern regarding all-battery-powered electric vehicles?
Sample size: Germany=779; United States=879; China=886; India=880; Japan=597; Republic of Korea=906

Most consumers intending to acquire an EV expect to charge it at home, but the importance of charging networks is high in the Rep. of Korea and China.

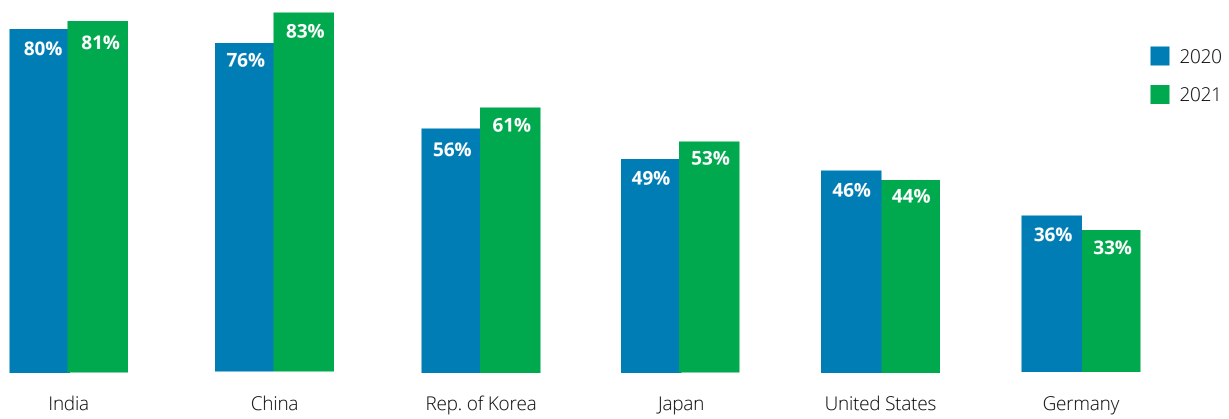
Location people expect to charge their electrified vehicle most often



Q45: Where do you expect to charge your electrified vehicle most often?
Sample size: Germany=246; United States=185; China=352; India=244; Japan=314; Republic of Korea=411

A positive consumer perception of connected vehicles appears to be edging up in some markets, including China, Japan, and the Republic of Korea.

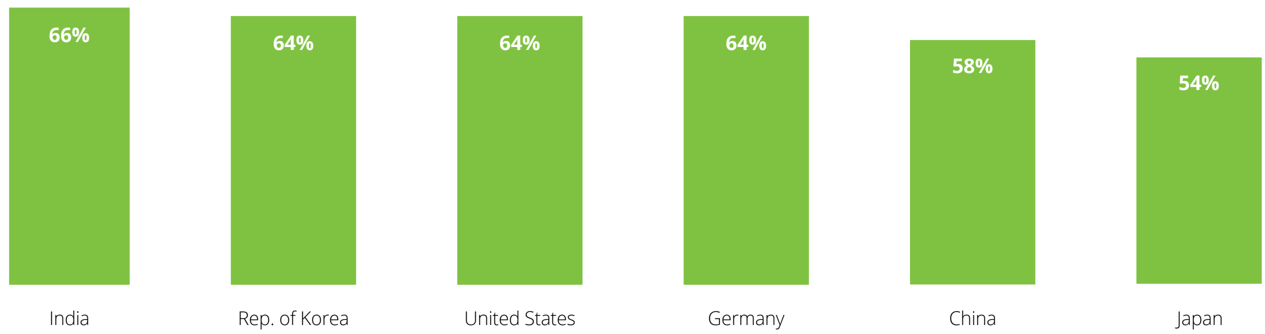
Percentage of consumers who feel that increased vehicle connectivity will be beneficial



Q3. To what extent do you agree with the following statements regarding future vehicle technology?
Sample size 2020/2021: Germany=2,862/996; United States=2,922/1,022; India=2,979/991; China=2,980/1,034; Japan=2,912/916; Republic of Korea=2,974/1,031

Having said that, there are a significant number of people across these focus countries who remain concerned about the security of a connected vehicle.

Percentage of consumers who fear someone hacking into their connected car and risking their personal safety (% agree)



Q3. To what extent do you agree with the following statements regarding future vehicle technology?
Sample size: Germany=1,017; United States=1,018; India=987; China=1,037; Japan=904; Republic of Korea=1,032

What other advanced features do consumers want? Overall, safety continues to be most important when people are thinking about their next vehicle.

Importance (somewhat or very important) of various vehicles features for next vehicle purchase

Advanced vehicle feature	United States	Germany	Japan	Rep. of Korea	China	India
Blind spot warning/alert	70%	65%	77%	83%	82%	85%
Automatic emergency braking	60%	57%	83%	79%	85%	89%
Lane departure warning	59%	55%	60%	77%	82%	82%
Built-in navigation system	59%	65%	77%	65%	79%	87%
Physical knobs/buttons for controls	56%	55%	56%	59%	66%	78%
360-degree camera system	54%	45%	66%	70%	77%	85%
Automatic/dual-zone climate control	53%	45%	37%	55%	69%	78%
Heated/cooled seats	52%	56%	56%	74%	61%	76%
Adaptive cruise control	52%	48%	41%	50%	74%	77%
Electronic parking assist	43%	57%	49%	64%	73%	84%
Built-in Wi-Fi hotspot	41%	31%	43%	58%	66%	82%
Over-the-air software updates	40%	31%	50%	59%	65%	78%
Apple CarPlay/Android Auto interface	35%	31%	30%	42%	61%	70%
Semi-autonomous drive mode	32%	30%	42%	56%	69%	76%

Q26. How important are each of the following features for your next vehicle?
Sample size: Germany=804; United States=901; China=899; India=948; Japan=678; Republic of Korea=949

Most important

At the end of the day, building value in both EVs and connected technology will be key for OEMs looking to generate an ROI on massive R&D investments.

Percentage of consumers that are unwilling to pay more than ~US$500[1] for a vehicle with advanced technologies (including people that would not pay any more)

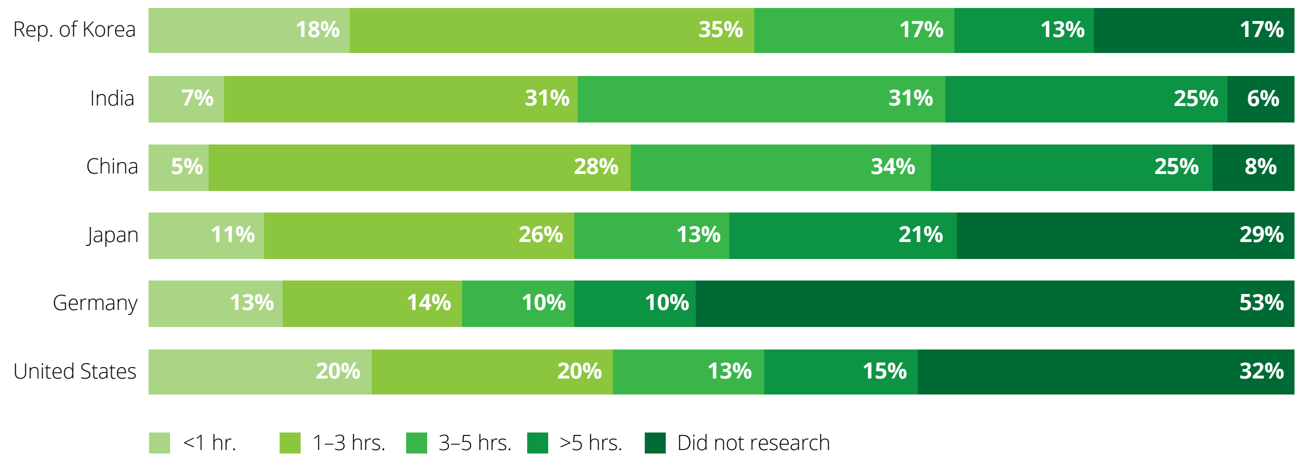
Advanced techonology category	Germany	United States	Japan	Rep. of Korea	China	India
Safety	64%	58%	68%	50%	43%	47%
Connectivity	74%	66%	78%	60%	51%	49%
Infotainment	79%	74%	84%	70%	58%	55%
Autonomy	66%	63%	62%	39%	38%	37%
Alternative engine solutions	54%	57%	61%	38%	40%	38%
Unwilling to pay more than...	€400	$500	¥50,000	₩500,000	¥2,500	₹25,000

[1] Calculated for each country in local market currency (roughly equivalent to $US500)
Q4: How much more would you be willing to pay for a vehicle that had each of the technologies listed below?
Sample size: Germany=928; United States=966; China=1,036; India=980; Japan=856; Republic of Korea=1,006

Vehicle financing trends

Global consumer behavior varies significantly regarding the amount of time spent researching finance options prior to acquiring a vehicle.

Time spent by consumers in researching finance options prior to acquiring their current vehicle



Q13: In total, how long did you spend researching finance options prior to acquiring your current vehicle?
Sample size: Germany=746; United States=826; China=790; India=692; Japan=470; Republic of Korea=697

Unlike some countries where low rates and convenience top the list, having the flexibility for early termination and swapping vehicles is the most important characteristic of a vehicle finance account in Germany, China, and India.

Most important things related to loan, lease, or subscription account

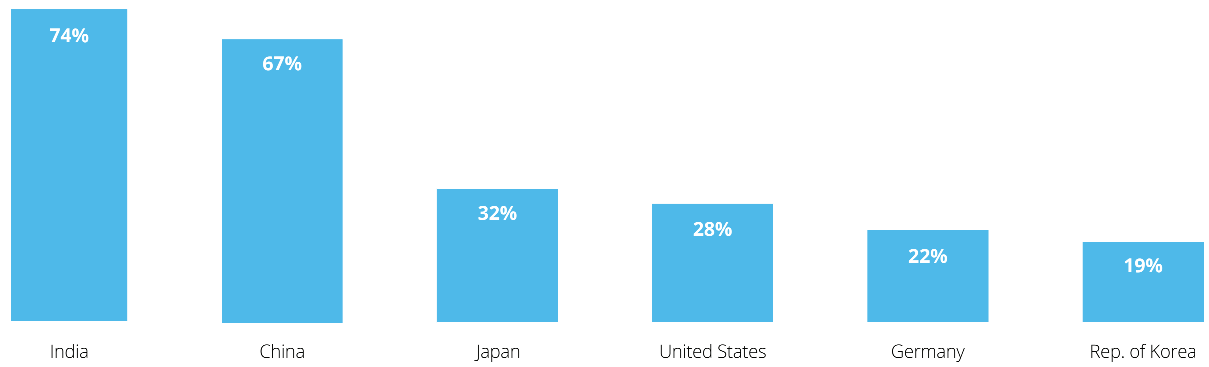
Most important characteristic	United States	Germany	Japan	Rep. of Korea	China	India
Lowest rate for credit rating	43%	26%	21%	38%	27%	43%
Convenience	33%	24%	44%	38%	31%	42%
Easy pay process/auto-pay	29%	28%	27%	21%	36%	48%
Access to loan payoff/equity status	23%	18%	11%	25%	21%	35%
Flexibility (e.g., early termination)	22%	35%	28%	28%	41%	50%
Simple web/app account management	20%	13%	9%	14%	31%	41%
Choosing established auto lender brand	19%	15%	24%	37%	30%	43%
All-in rates	17%	34%	21%	17%	27%	27%
Access to live agent on phone	15%	9%	11%	15%	28%	36%
Receiving customized offers	10%	15%	26%	16%	39%	40%
Ability to text-message lender	8%	6%	7%	12%	18%	27%

Most important

Q14: When it comes to your loan/lease/subscription account, what is most important to you? Please select all that apply.
Sample size: Germany=746; United States=826; China=790; India=692; Japan=470; Republic of Korea=697

Consumers in India and China are the most risk-averse when it comes to taking a vehicle loan, as people in other markets are far less likely to buy loan or lease insurance.

Percentage of consumers who are somewhat or very likely to purchase credit protection on a new loan or lease

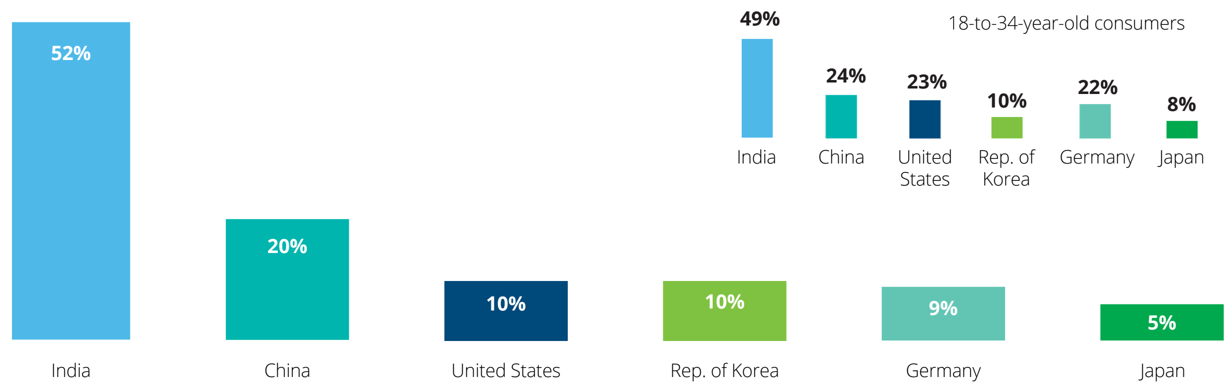


Q37. How likely would you be to purchase credit protection on a new loan/lease (i.e., a small increase in monthly payment for protection that pays off or reduces your amount owed in the case of disability, death, job loss, etc.)?

Sample size: Germany=656; United States=739; China=805; India=744; Japan=574; Republic of Korea=815

The overall average for the number of consumers requesting a payment deferment this year may be masking an underlying concern among younger consumers in some markets around the world.

Percentage of consumers who have requested a payment deferment this year (% Yes)



Note: Respondents can select either "Yes," "No," or "Not applicable."

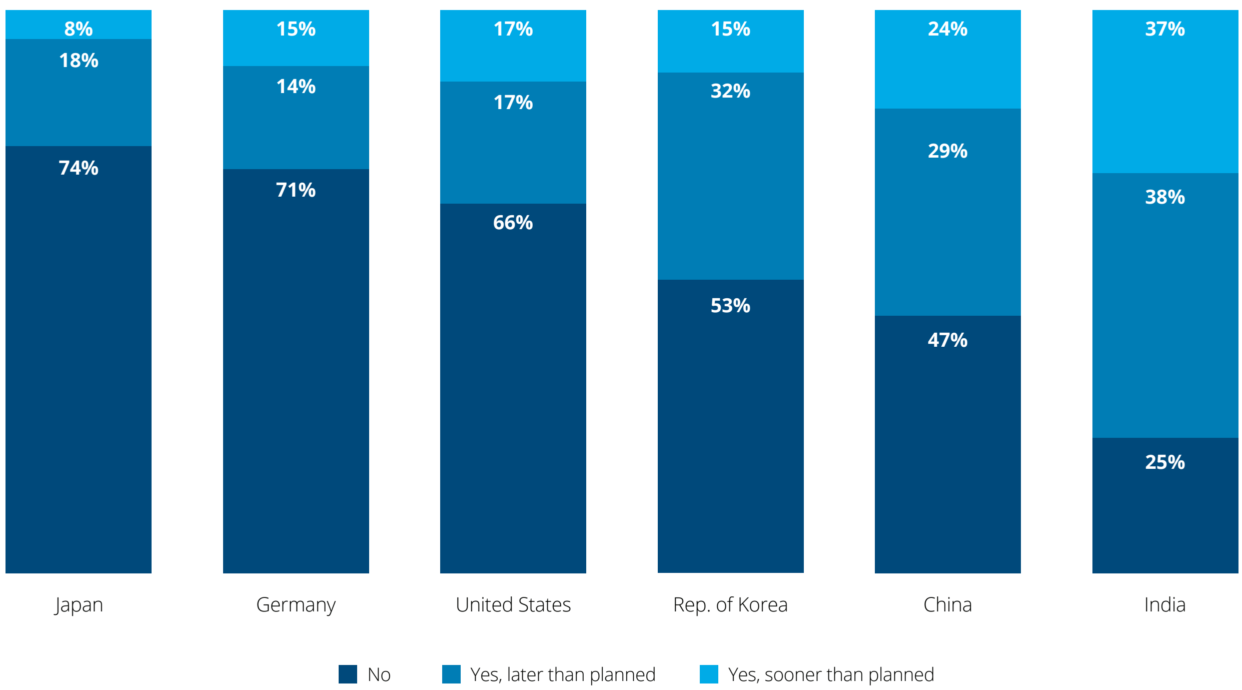
Q16: Have you requested a payment deferment this year?

Sample size: Germany=746; United States=826; China=790; India=692; Japan=470; Republic of Korea=697

Future vehicle intentions

A significant downside demand risk exists in India, China, and the Rep. of Korea, as roughly a third of consumers plan to delay the acquisition of their next vehicle.

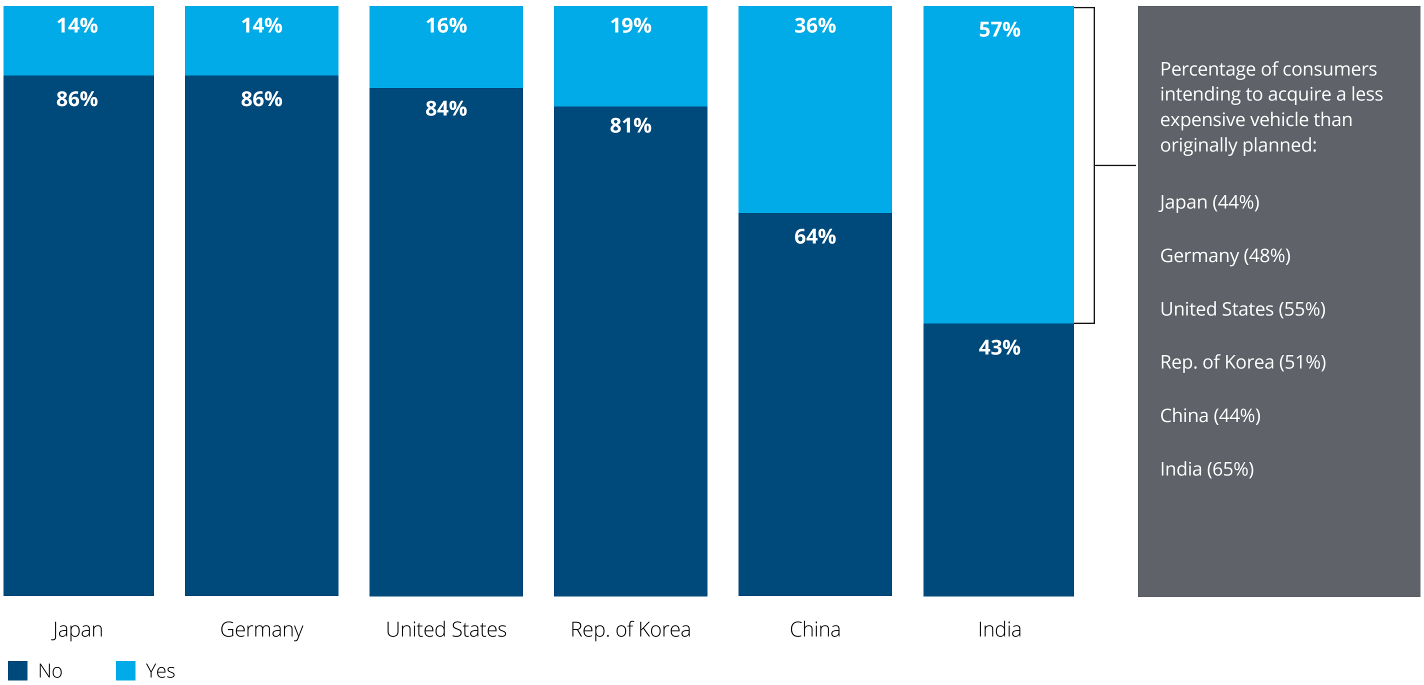
Percentage of consumers who altered their timeline for acquiring next vehicle because of the COVID-19 pandemic



Q23. Have you altered your timeline for acquiring your next vehicle because of the COVID-19 pandemic?
Sample size: Germany=804; United States=901; China=899; India=948; Japan=678; Republic of Korea=949

Along with the risk of downside demand pressure, consumers in India and China may be rethinking the type of vehicle they will acquire next.

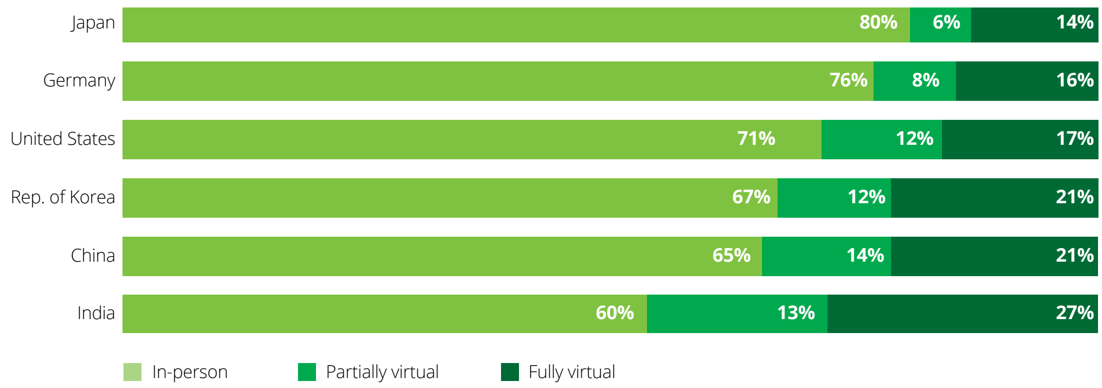
Has COVID-19 caused you to change your mind regarding what type of vehicle you would most like to acquire next?



Q30. Has the COVID-19 pandemic caused you to change your mind regarding what type of vehicle you would most like to acquire next?
Sample size: Germany=804; United States=901; China=899; India=947; Japan=678; Republic of Korea=949

Will there be virtual vehicle sales in the future? Absolutely, but let's not write off the in-person experience just yet, as most consumers still want it going forward.

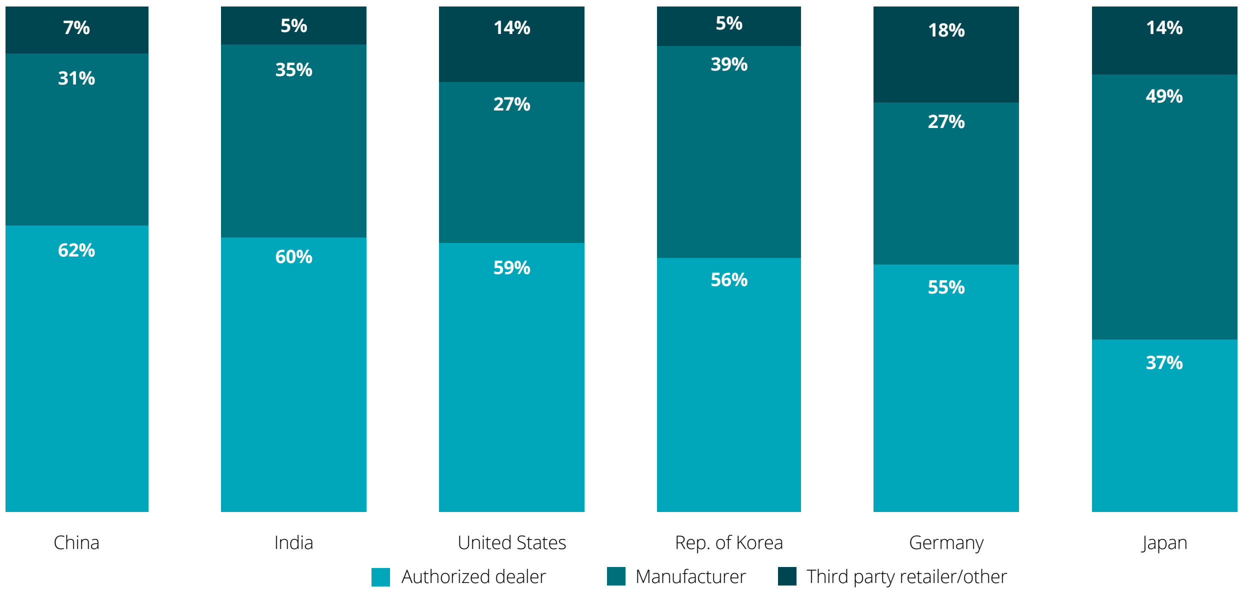
Most preferred way to acquire next vehicle



Q48. How would you most prefer to acquire your next vehicle?
Sample size: Germany=779; United States=879; China=886; India=880; Japan=597; Republic of Korea=906

In most countries, even those consumers who want a virtual buying process for their next vehicle would still most prefer to interact with an authorized dealer.

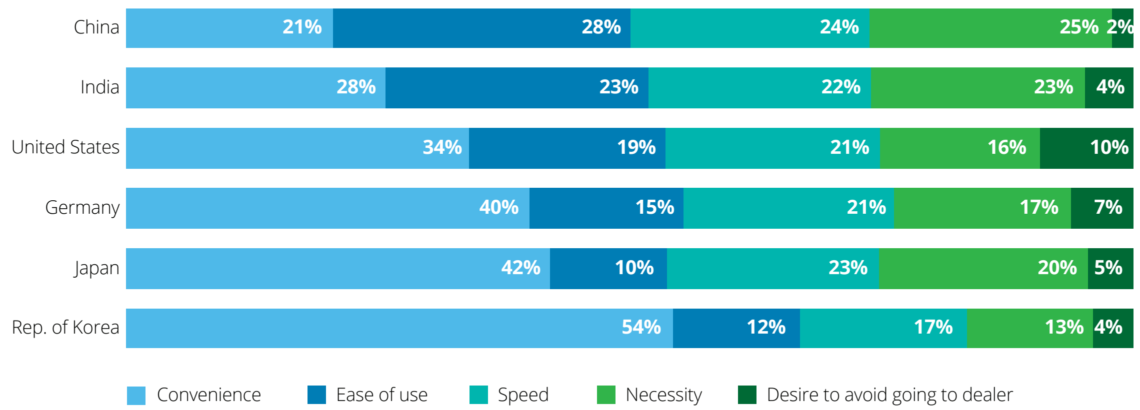
Most preferred way to acquire next vehicle via a virtual process



Q49. From whom would you most prefer to acquire your next vehicle via a virtual process?
Sample size: Germany=188; United States=258; China=312; India=350; Japan=117; Republic of Korea=297

The reason people want a virtual buying process for their next vehicle can vary significantly by country.

Main reason to acquire next vehicle via a virtual process



Note: For Germany, "Desire to avoid going to dealer" includes one percentage point from "Other" reason

Q50. What is the main reason you would prefer to acquire your next vehicle via a virtual process?

Sample size: Germany=188; United States=258; China=312; India=350; Japan=117; Republic of Korea=297

But, some things are simply hard to digitize, as people still want to see, touch, and smell (and drive) a vehicle before they buy it.

Main reasons for being not interested in acquiring next vehicle via a virtual process

Reason	United States	Germany	Japan	Rep. of Korea	China	India
I have to see the vehicle before buying it	75%	76%	80%	70%	47%	75%
I have to test drive the vehicle	64%	58%	58%	48%	59%	58%
I prefer to negotiate in-person	38%	39%	39%	29%	34%	44%
I don't feel comfortable buying online	37%	18%	41%	25%	26%	42%
I want to interact with a real person	34%	35%	30%	32%	28%	41%
I want a personal contact	27%	33%	18%	23%	21%	26%
I want to be treated like I'm important	17%	11%	14%	15%	15%	21%
I want to build a relationship for service	16%	23%	23%	14%	39%	42%

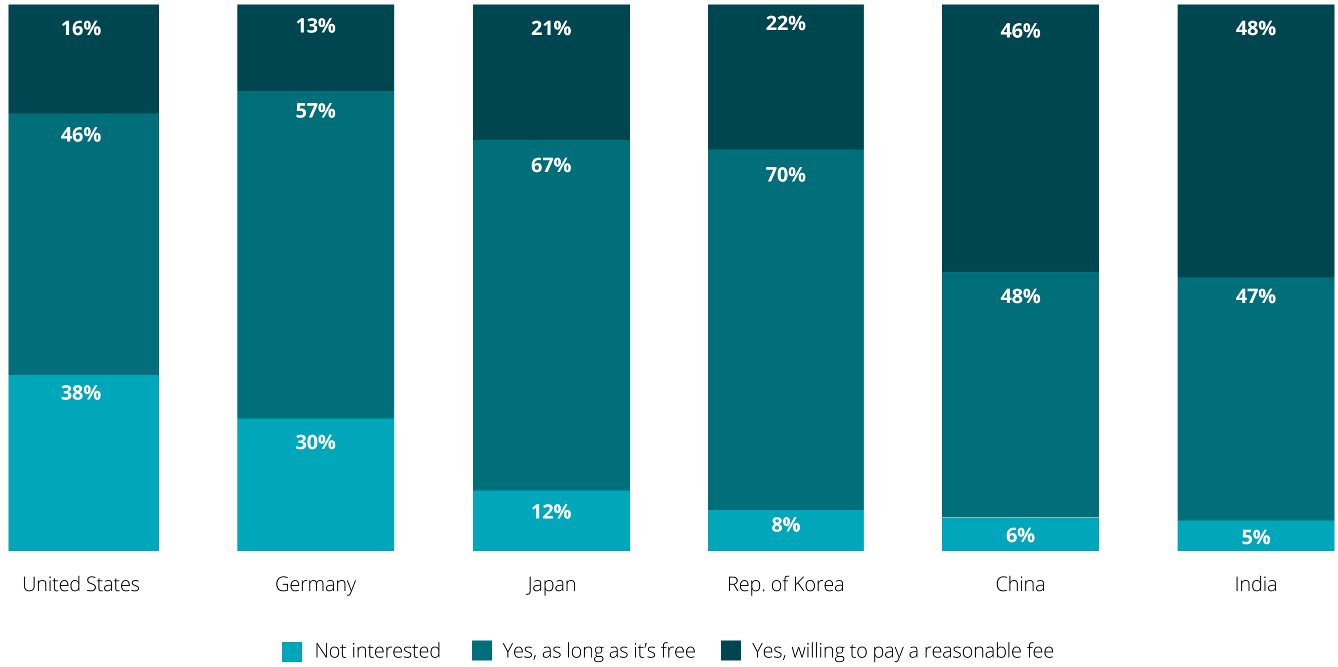
Most important

Q51. What are the main reasons you are not interested in acquiring your next vehicle via a virtual process? (Select all that apply)

Sample size: Germany=591; United States=621; China=574; India=530; Japan=480; Republic of Korea=609

What about "virtual servicing?" Most consumers are interested, but a significant percentage don't want to pay for it. Can dealers absorb the cost to maintain it?

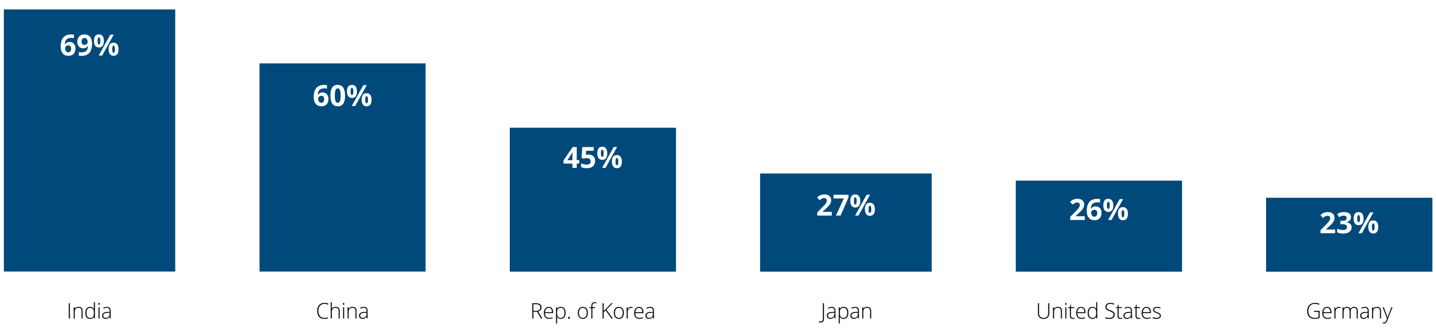
Percentage of consumers who are interested in having their vehicle picked up from home or office when it needs service



Q20: To what extent are you interested in the following services?
Sample size: Germany=413; United States=489; China=599; India=630; Japan=360; Republic of Korea=461

The idea of a subscription service is significantly more interesting to consumers in India, China, and the Rep. of Korea when compared with people in Japan, Germany, or the United States.

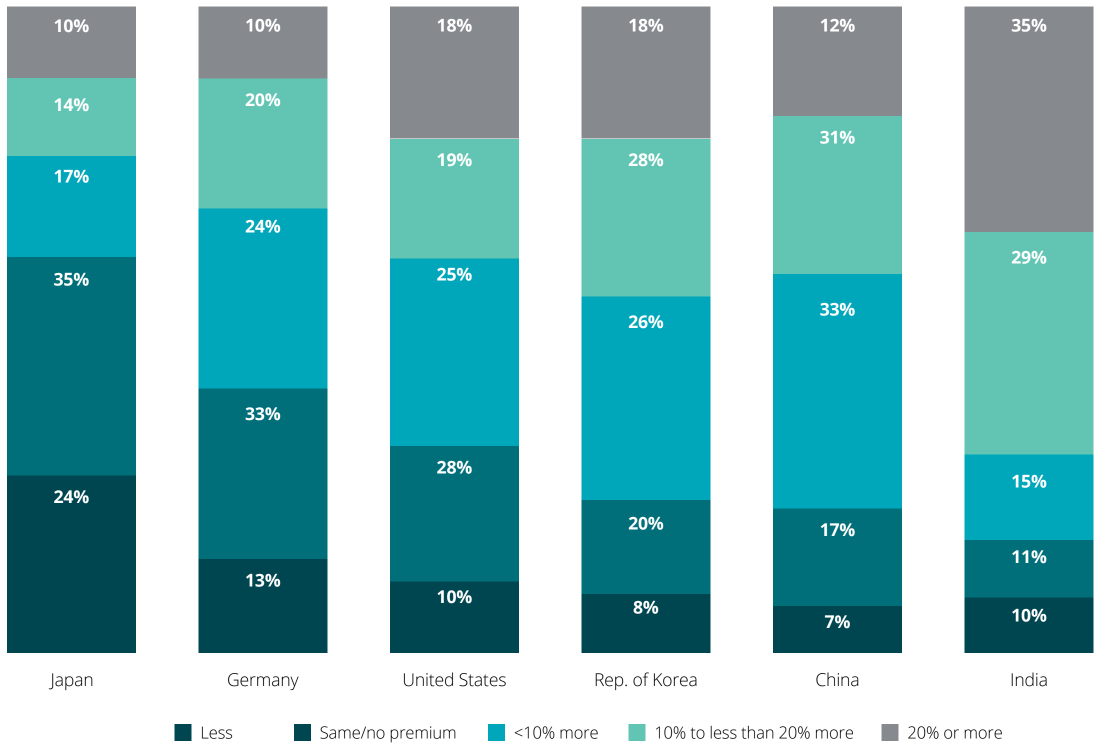
Percentage of consumers who are somewhat or very interested in a subscription that allows access to different models from the same brand



Q59. How interested are you in each of the following scenarios?
Sample size: Germany=1,050; United States=1,053; China=1,049; India=1,002; Japan=1,009; Republic of Korea=1,050

Consumers in India and China are also more willing to pay for access to a vehicle subscription service compared with people in Japan, Germany, and the United States.

How much consumers are willing to pay for a subscription service to access different models from the same brand

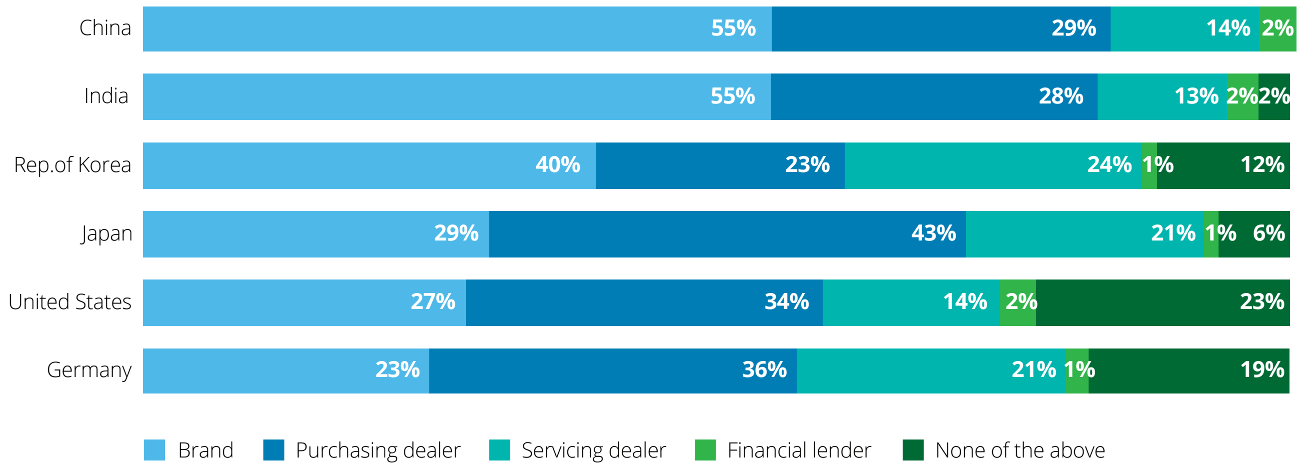


Q60. How much would you be willing to pay for each of the following services? (A subscription service where you have the convenience and flexibility to periodically opt for a different vehicle model from the same brand)

Sample size: Germany=563; United States=530; China=931; India=881; Japan=569; Republic of Korea=902

Consumers across geographies feel most connected to either the brand of vehicle they currently own or the dealer where they bought it.

Percentage of consumers for whom the most trusted relationship is with...

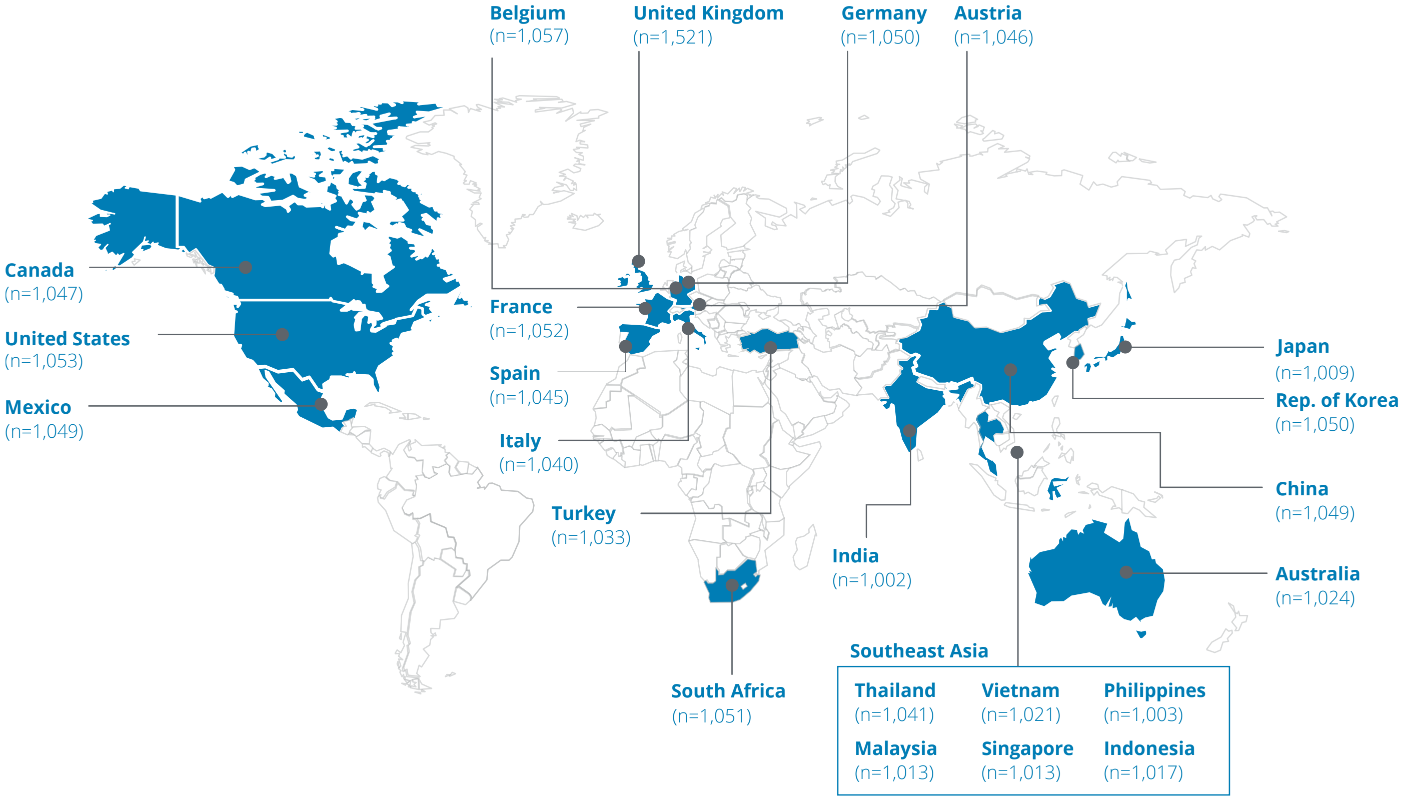


Q21. With whom do you have the most trusted relationship?

Sample size: Germany=779; United States=884; China=812; India=742; Japan=483; Republic of Korea=715

About the study

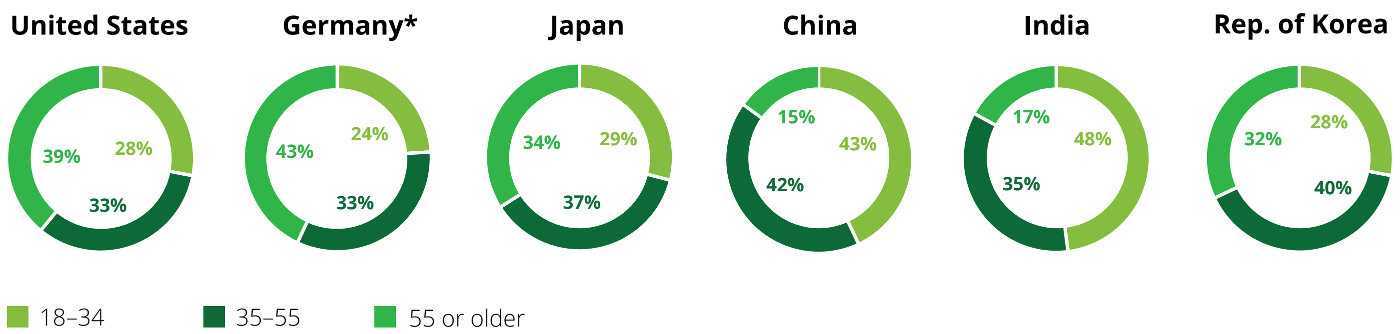
The 2021 study includes more than 24,000 consumer responses from 23 countries around the world.

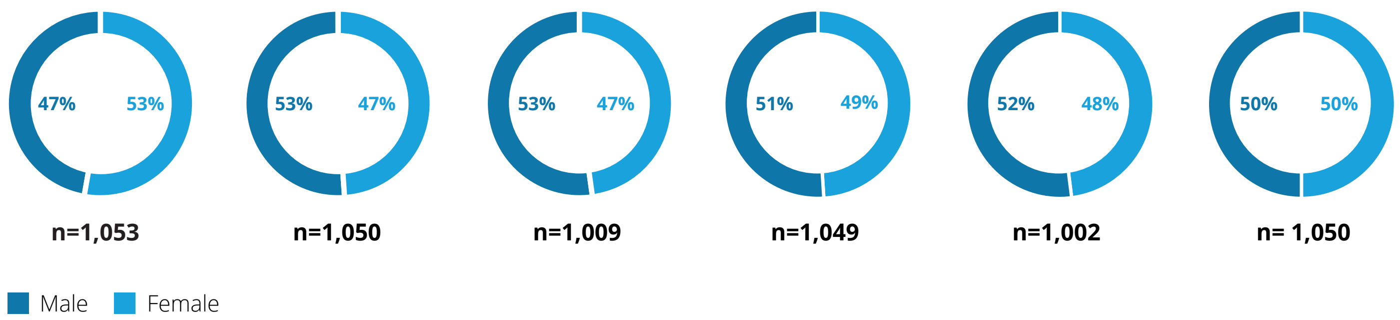


Study methodology
The study is fielded using an online panel methodology where consumers of driving age are invited to complete the questionnaire (translated into local languages) via email.

Note: "n" represents the number of survey respondents in each country.

Study demographics





Note: "n" represents the number of survey respondents in each country.
*Data for Germany has been weighted by age group.

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