Deloitte.

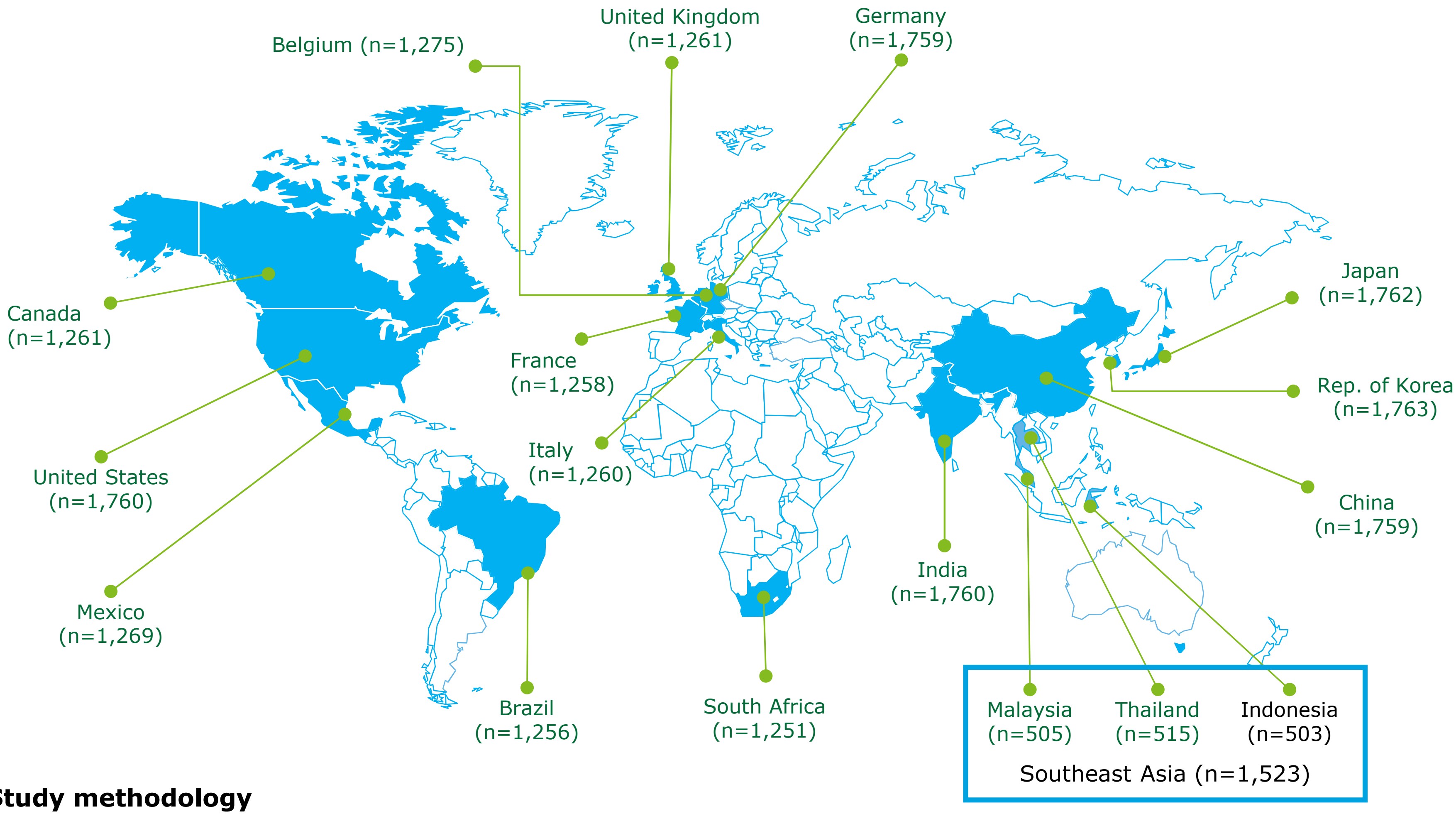
2018 Deloitte Global Automotive Consumer Study

Module 2: Advanced Technology Update & Customer Experience

Primary Insights: Germany

March, 2018

The 2018 Deloitte Global Automotive Consumer Study includes 22,177 consumer responses across 15 global markets



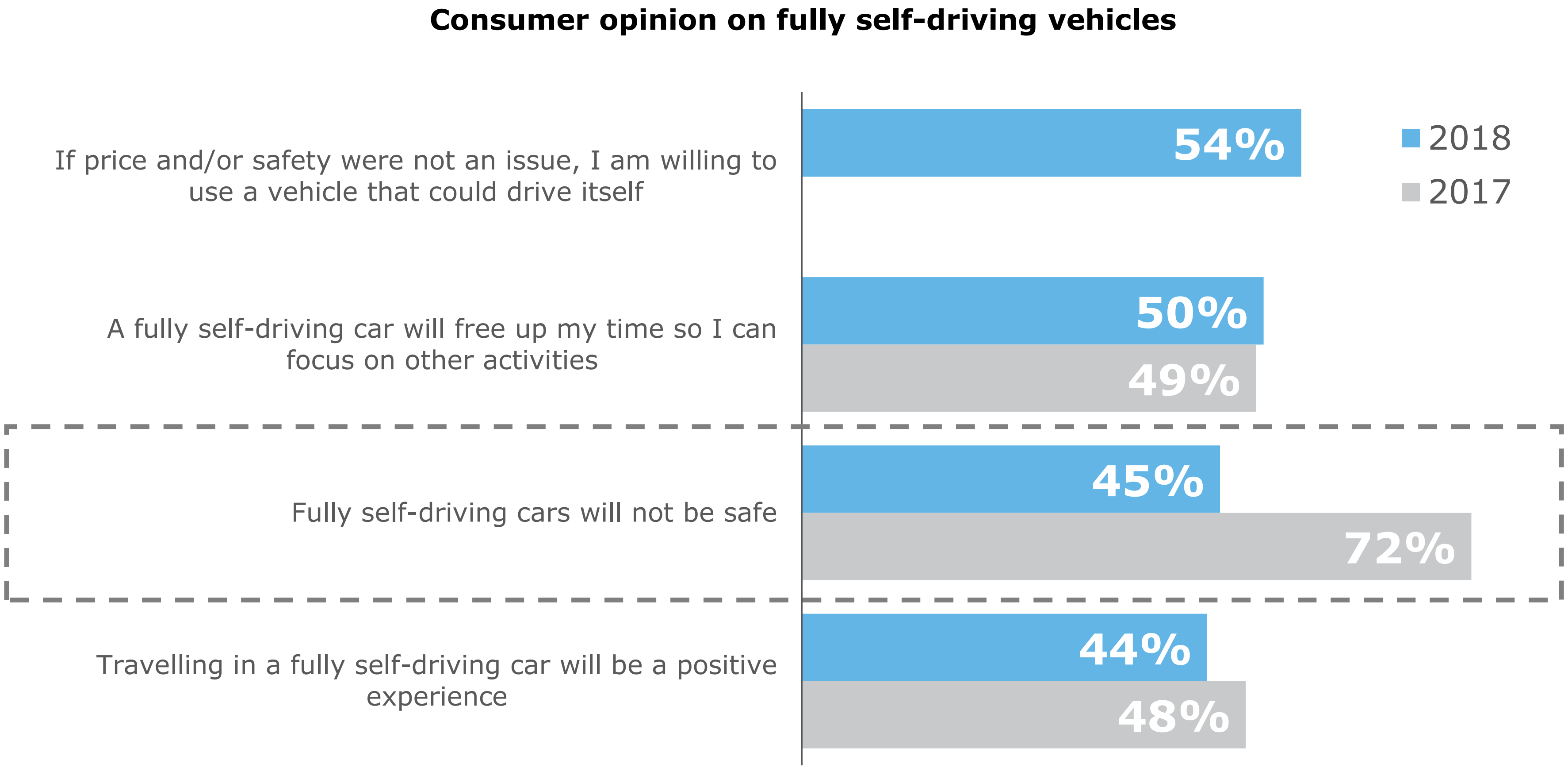
Study methodology

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. It was fielded in 17 countries and designed to be nationally representative of the overall population in each country.

How do consumers feel about autonomous vehicles?

Consumers are more positive about fully self-driving vehicles

Consumers see benefits such as being able to focus on other activities while traveling in a fully self-driving vehicle



Note: Percentage of respondents who strongly agreed or agreed have been added together

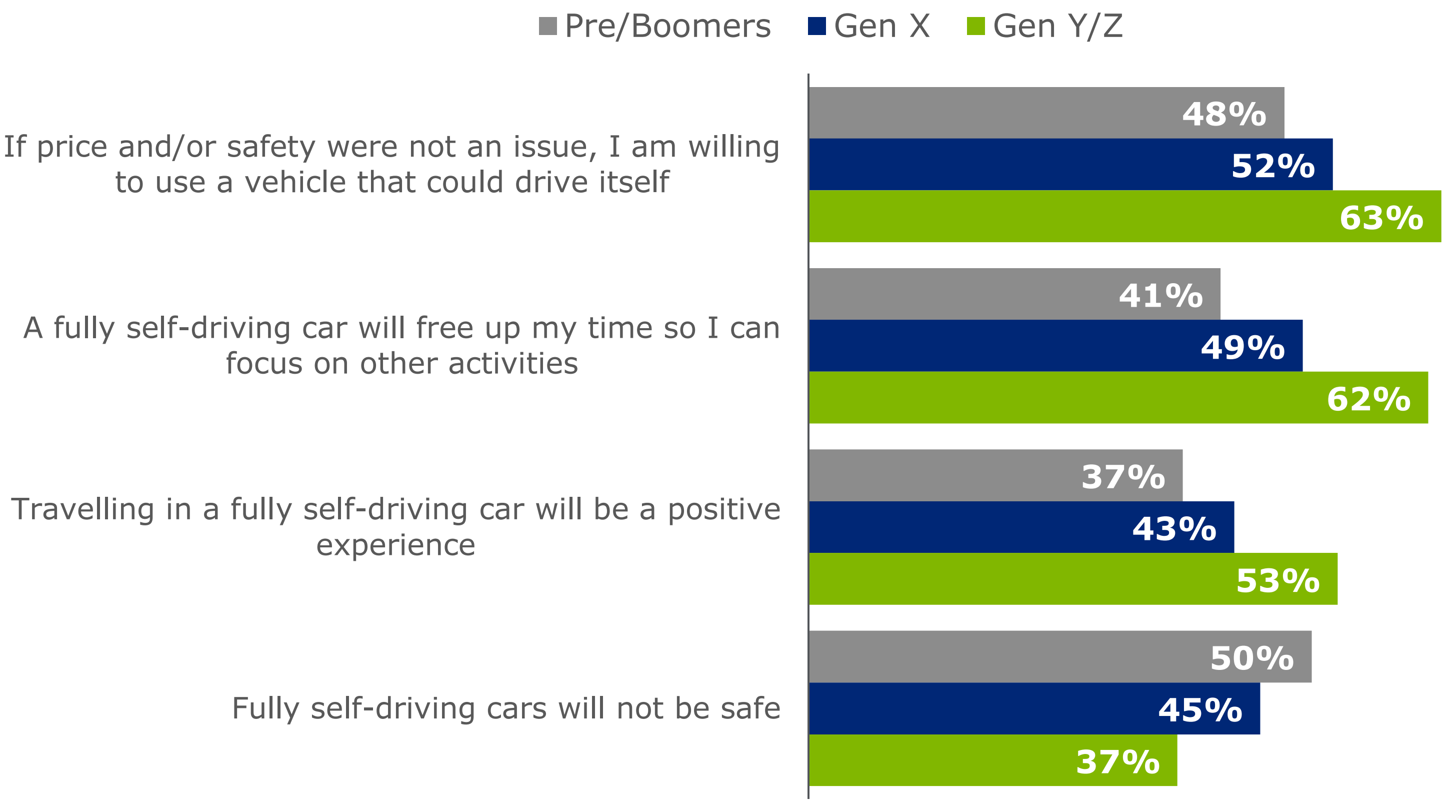
Q1: To what extent do you agree or disagree with the following statements?

Sample size: n= 1,695 [MOD 2], n= 1,553 [MOD 1]

Younger generations are more accepting of self-driving vehicles

But, almost half of older consumers are least open to the idea of fully self-driving vehicles (assuming price is not an issue)

Consumer opinion on fully self-driving vehicles



Note: Percentage of respondents who strongly agreed or agreed have been added together

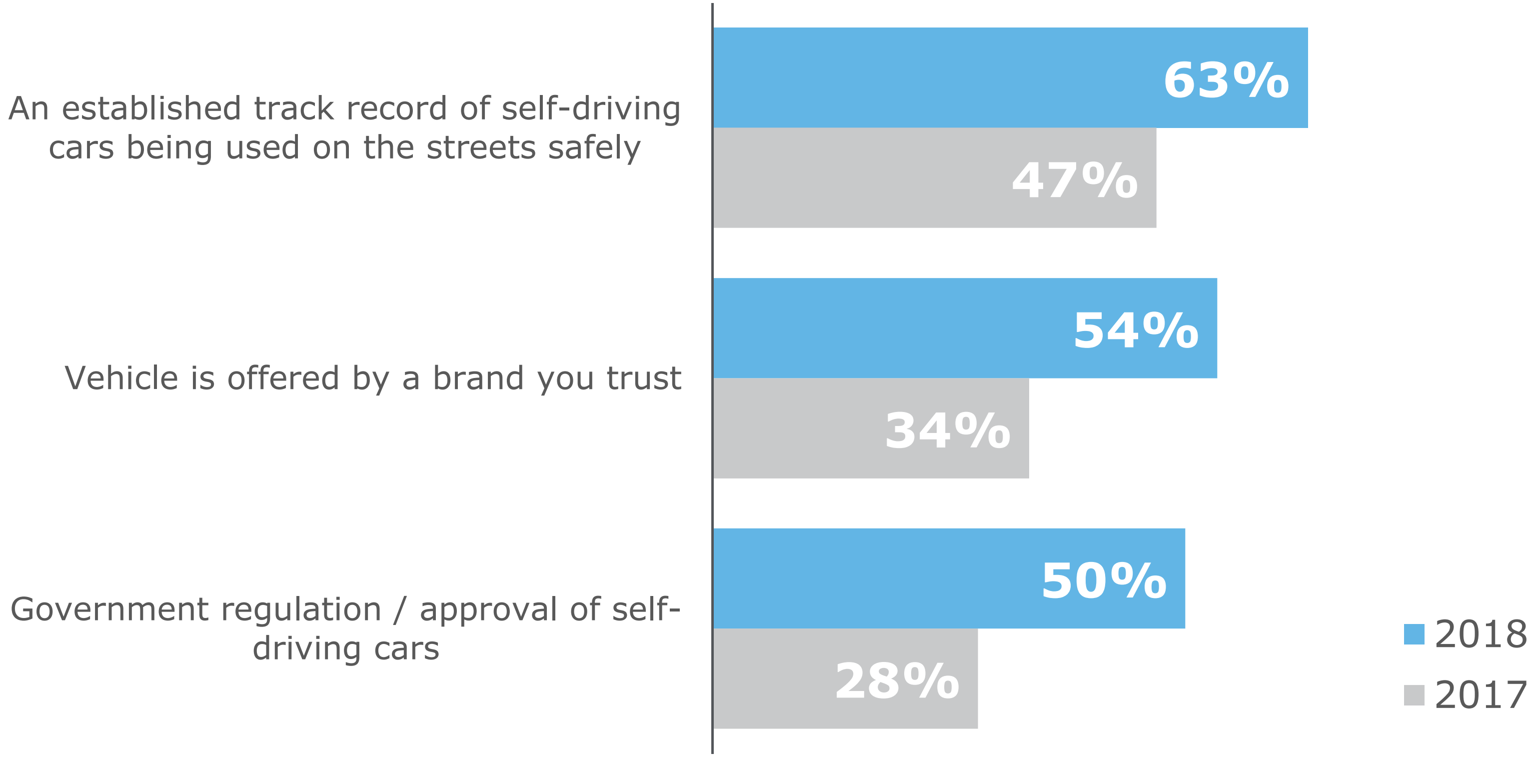
Q1: To what extent do you agree or disagree with the following statements?

Sample sizes – [Pre/boomers, N= 777; Gen X, N= 383; Gen Y/Z, N= 536]

Consumers still want an established safety record for AVs

More than half of consumers would feel more comfortable if self-driving vehicles were offered by a brand they trust

Factors making consumers feel better about riding in a fully self-driving vehicle



Note: Percentage of respondents who strongly agreed or agreed have been added together

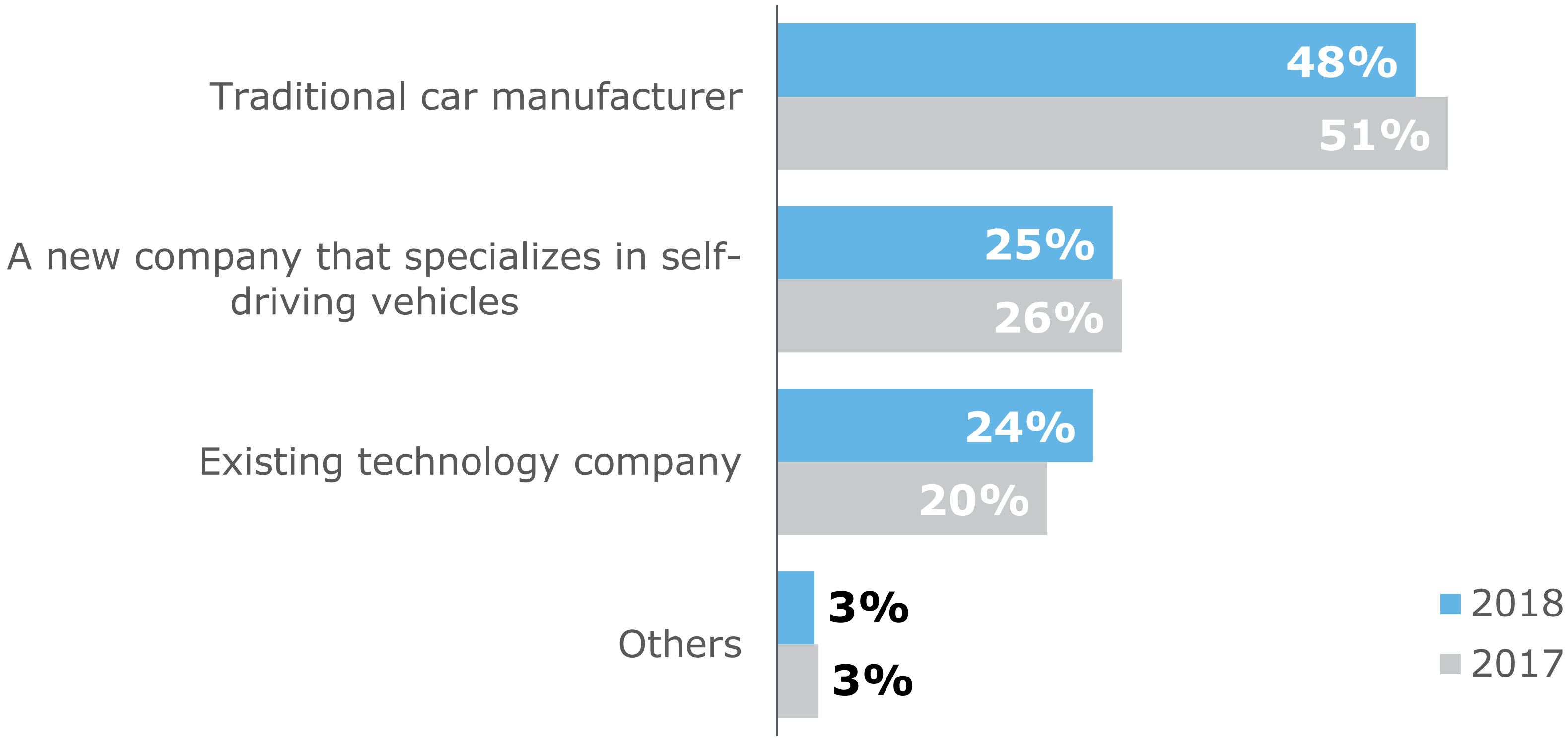
Q2: Would the following factors make you more or less likely to ride in a self-driving car?

Sample size: n= 1,624 [MOD 2], n= 1,584 [MOD 1]

Consumers are looking to traditional OEs for AV technology

However, 52% of consumers would most trust someone else to bring AV technology to market, perhaps signaling an opportunity for partnerships

Type of company consumers trust the most to bring fully self-driving technology to market

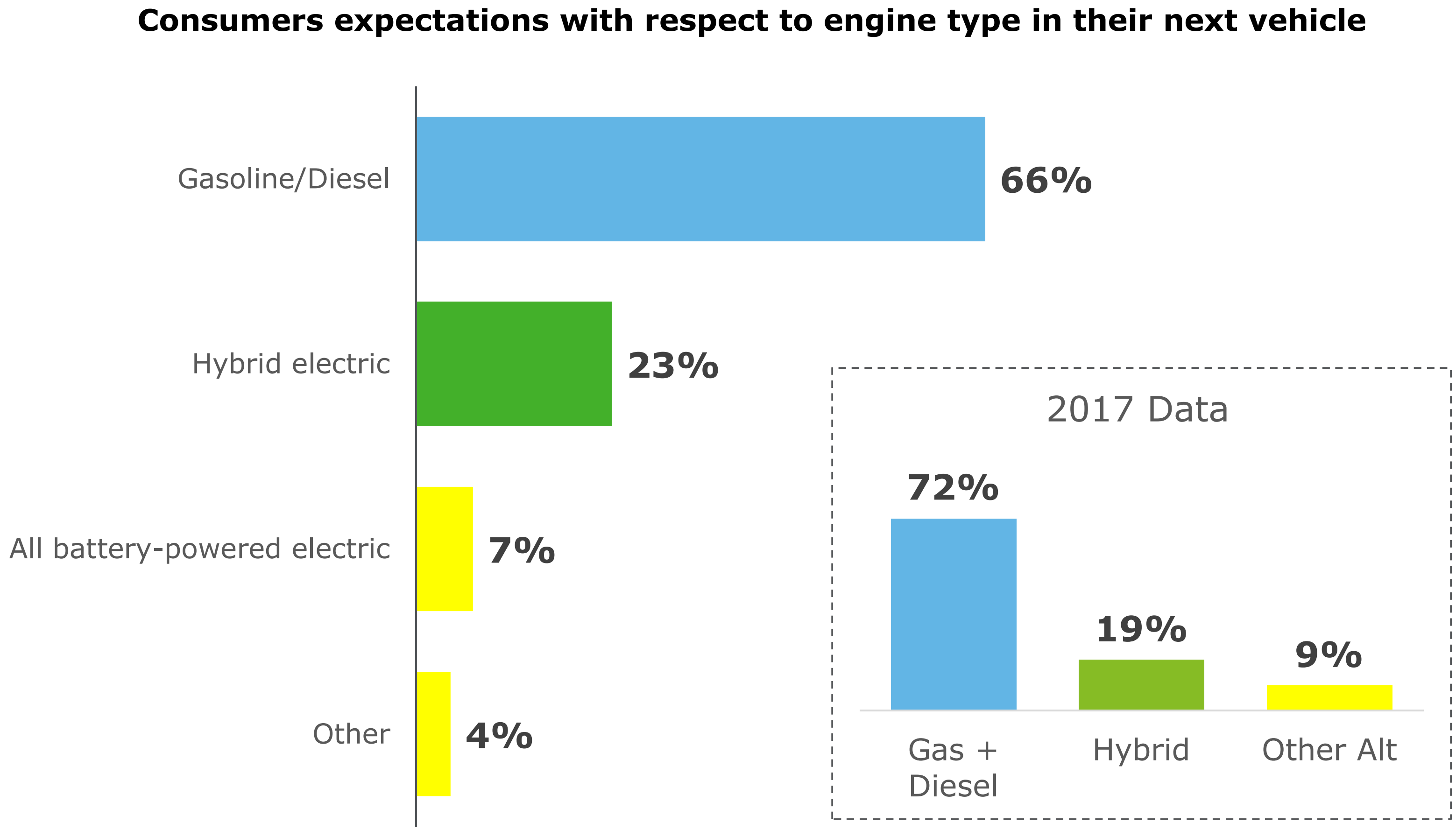


Q3: Would the following factors make you more or less likely to ride in a self-driving car?
Sample size: n= 1,759 [MOD 2], n= 1,743 [MOD 1]

How do consumers feel about electrified vehicles?

Next vehicle

Consumers still prefer vehicles with conventional engines

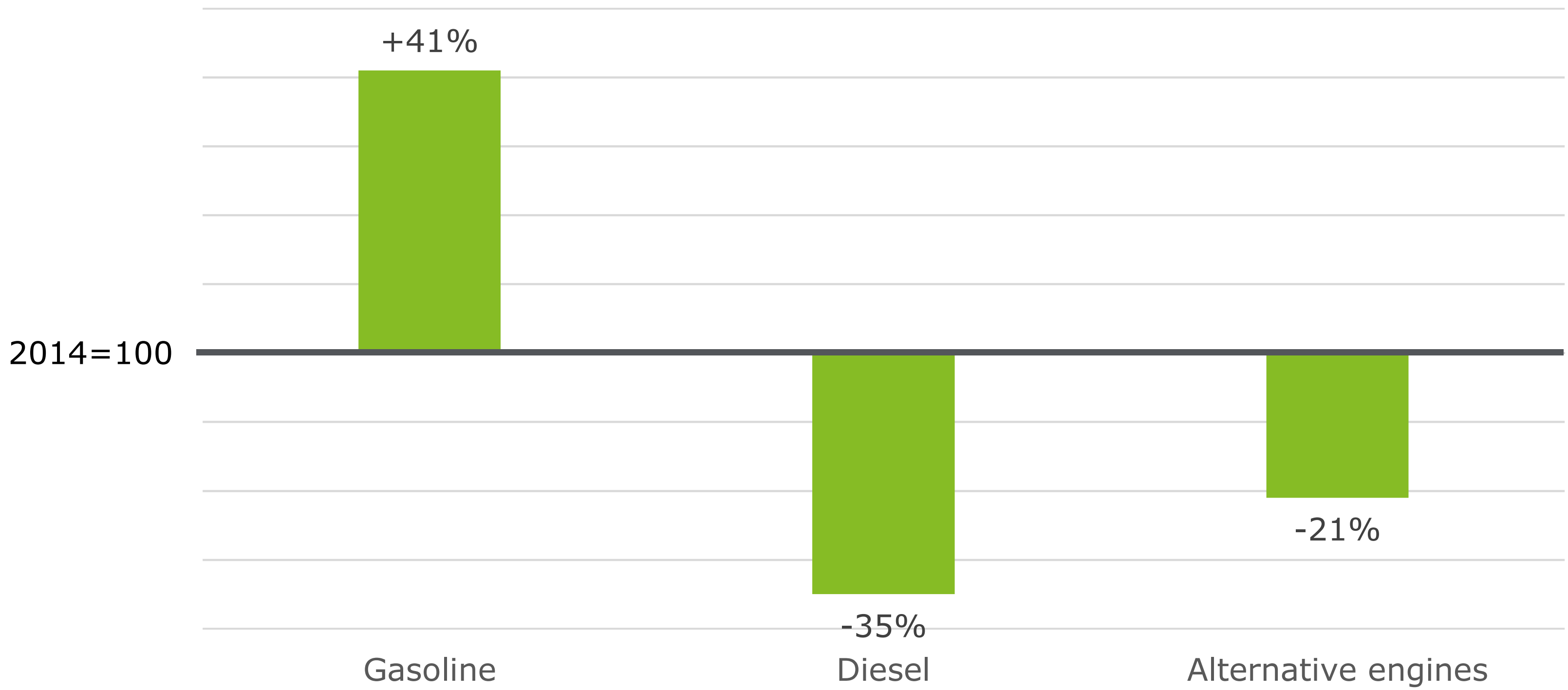


Note: 'Other" category in 2018 data includes ethanol, CNG, and fuel cell
Q38. What type of engine would you prefer in your next vehicle?
Sample size: n=1,287

Consumer preferences over time

Less Germans consider to buy a diesel; biggest beneficiary are vehicles with gasoline engines due to the lack of alternatives

Consumers expectations with respect to engine type in their next vehicle, 2014=100

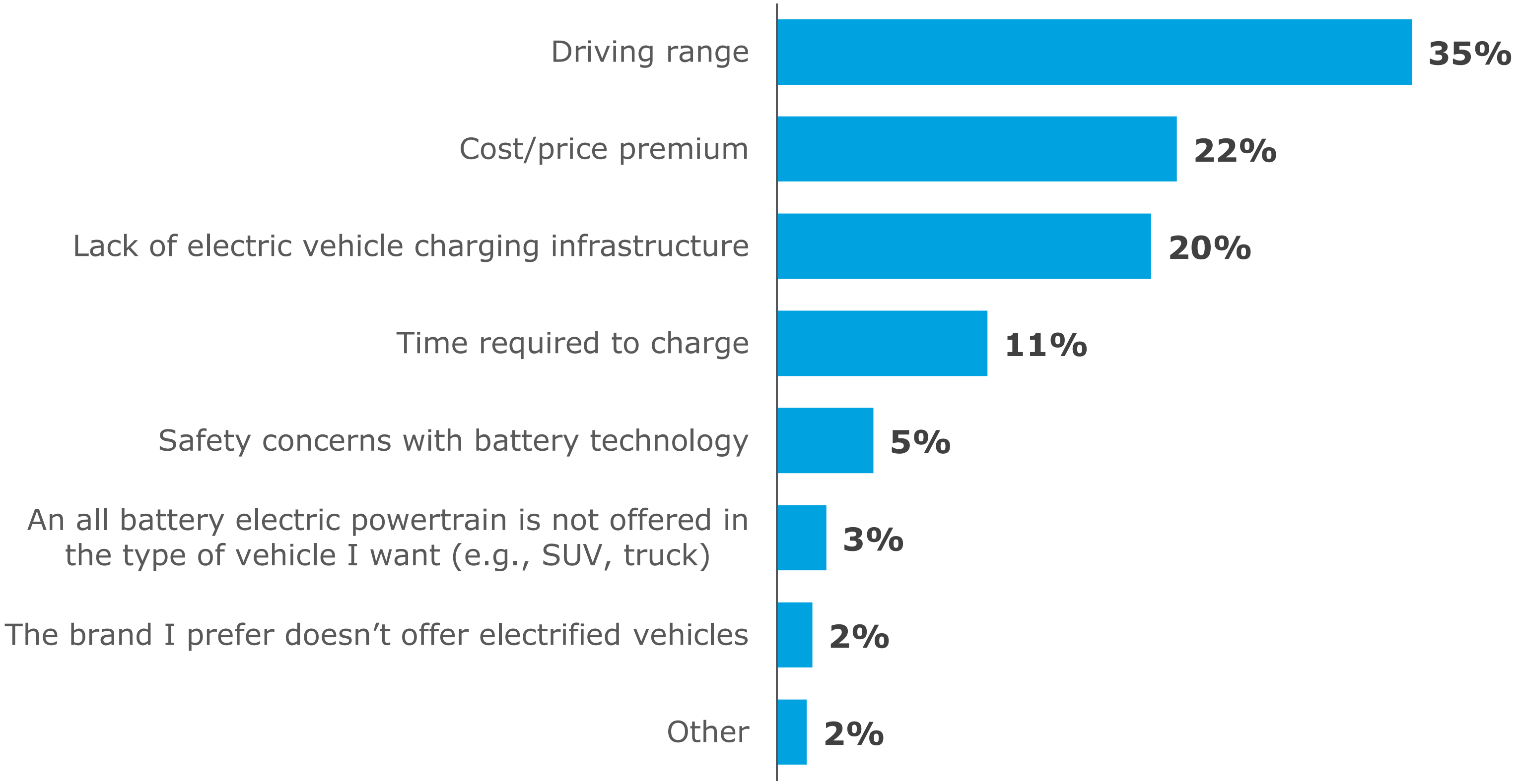


Q38. What type of engine would you prefer in your next vehicle?
Sample size: n=1,287

Driving range is still a significant concern for BEVs…

Also, upfront cost/price premium is holding a significant number of consumers back regarding all battery-powered electric vehicles

Greatest concern regarding all battery-powered electric vehicles

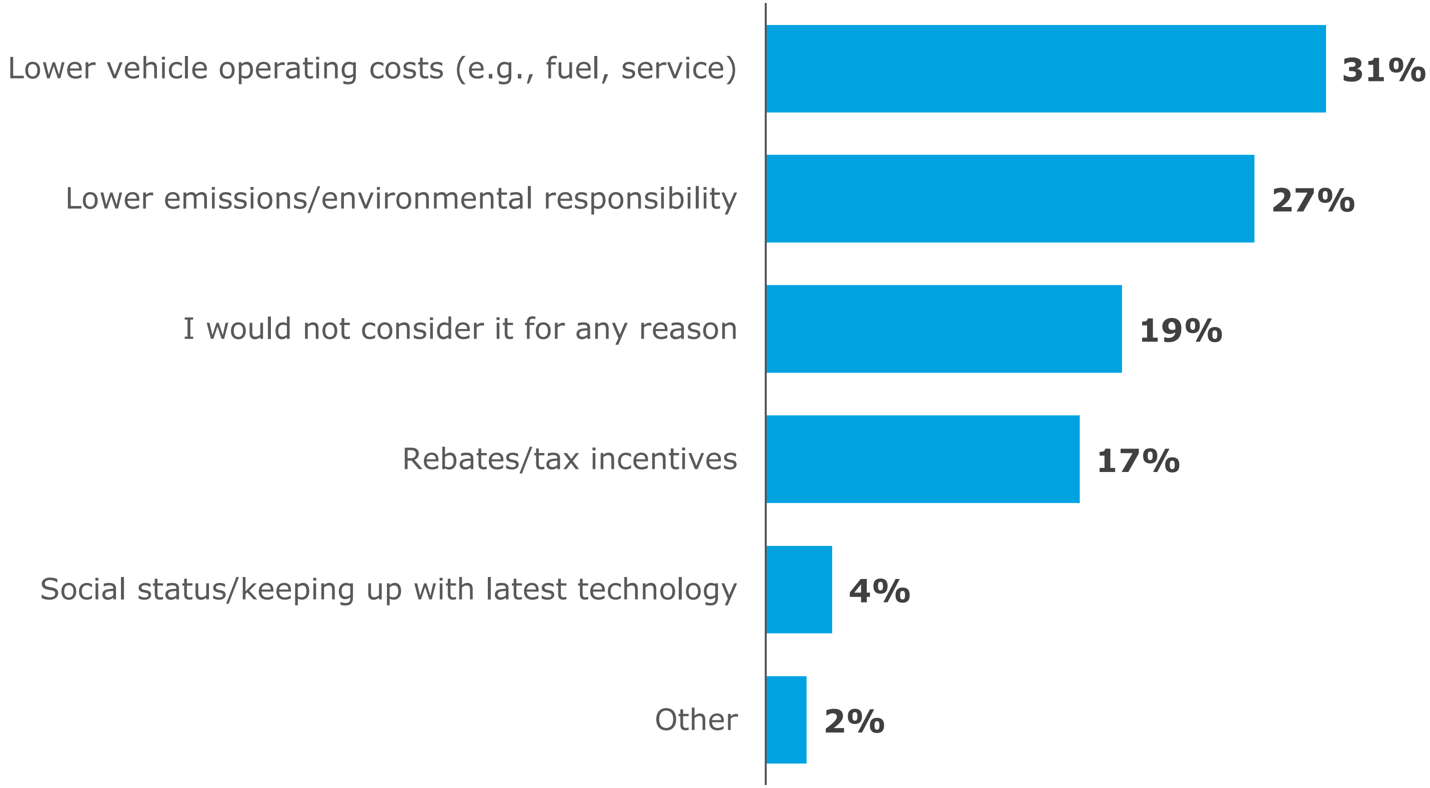


Q39. What is your greatest concern regarding all battery-powered electric vehicles?
Sample size: n=1,287

…however, lower operating costs remain attractive

31% of consumers would consider a fully electric vehicle for its lower operating costs over time

Reason to consider an all battery-powered electric vehicles



Q40. What would be the main reason for you to consider an all battery-powered electric vehicle?

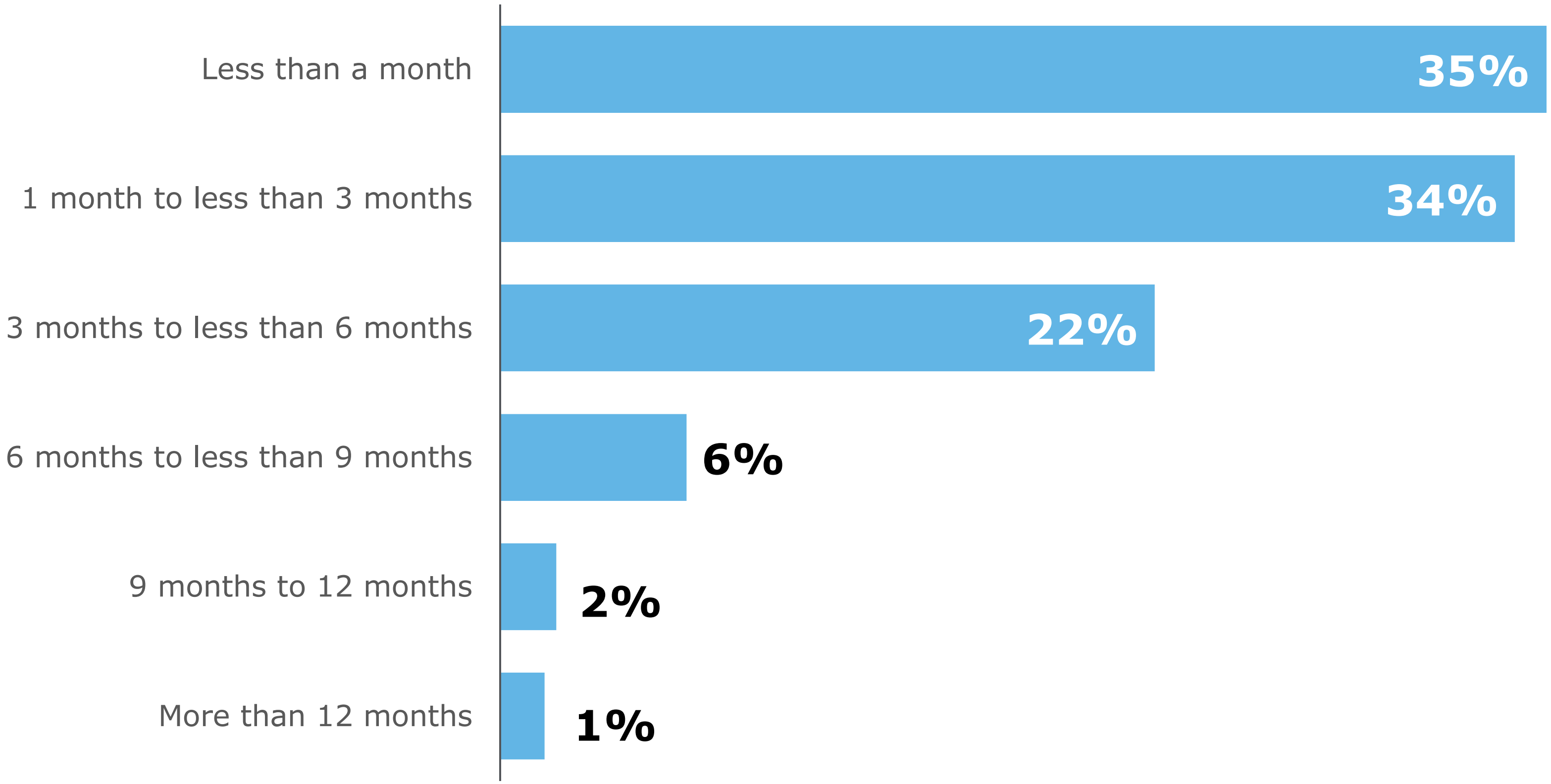
Sample size: n=1,287

How do consumers research a vehicle purchase?

Most consumers start researching 3 months before purchase

Vehicle brands don't really have a lot of time to intersect, connect and influence a vehicle purchase decision

Duration of doing research before deciding to acquire current vehicle



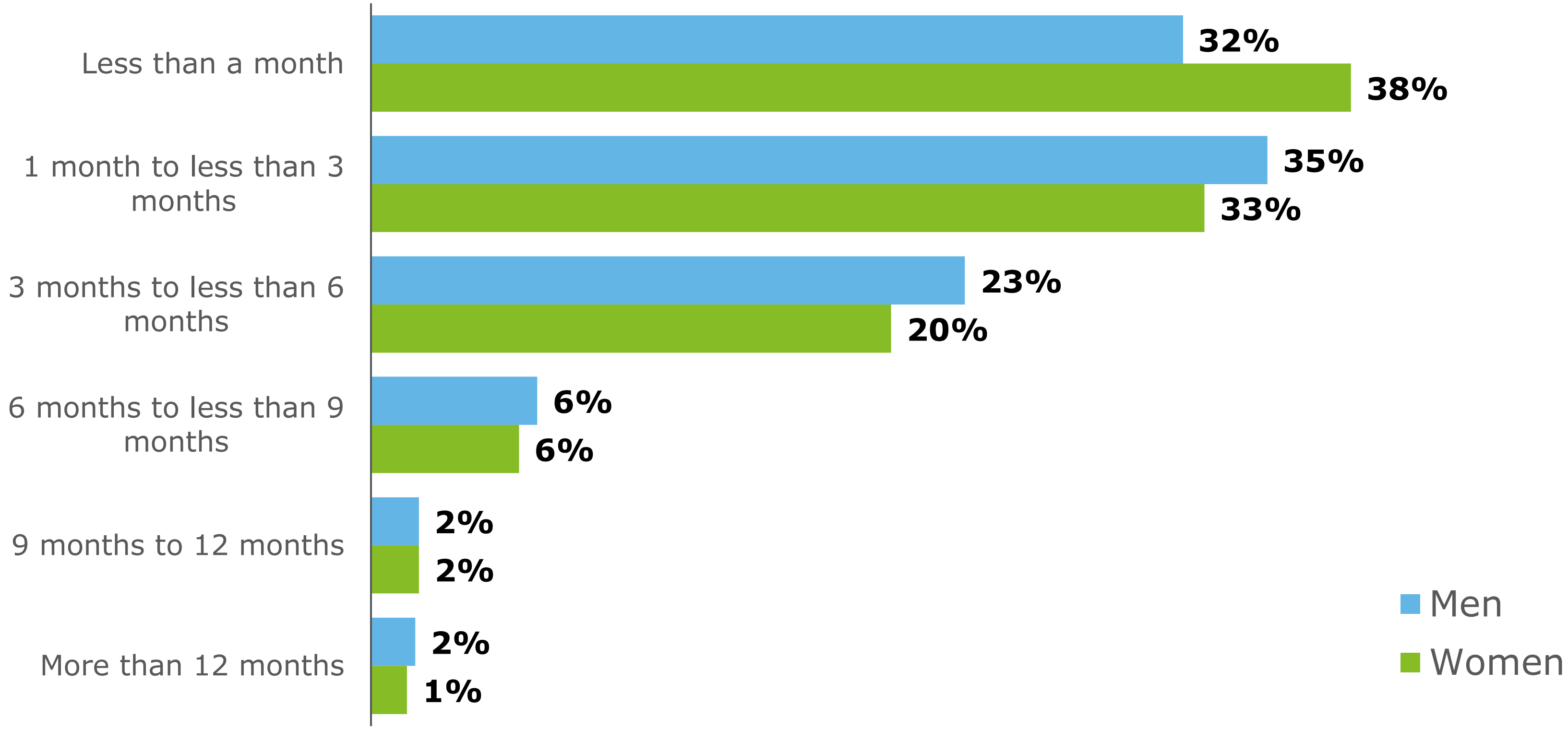
Q10. How long before you made the decision to acquire did you start researching your current vehicle?

Sample size: n=1,336

Men take longer than women to research a vehicle purchase

38% of women started researching less than a month before acquiring their current vehicle

Duration of doing research before deciding to acquire current vehicle (men vs. women)



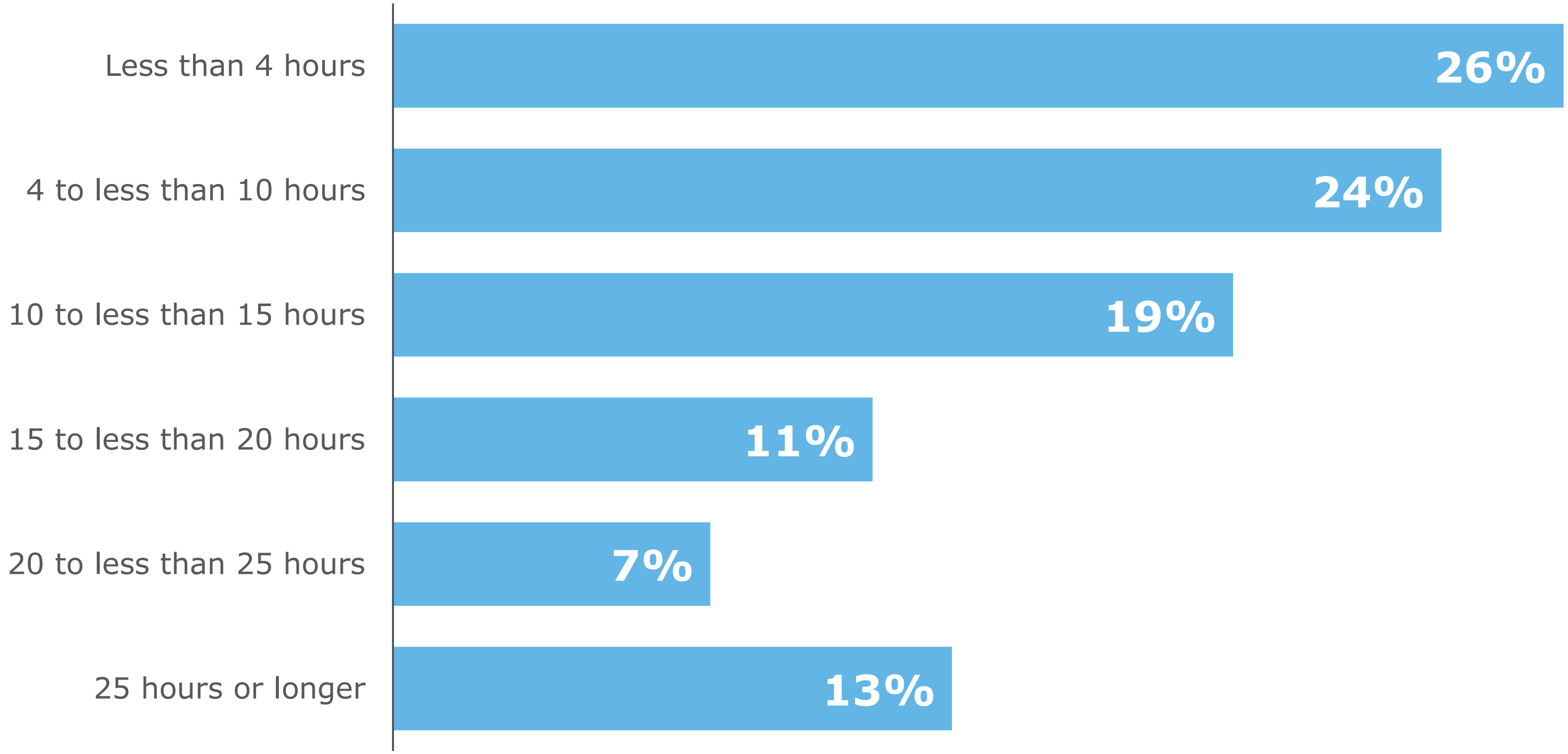
Q10. How long before you made the decision to acquire did you start researching your current vehicle?

Sample size: n=1.336; M=695; W=641

Over a quarter of consumers spend less than 4hrs on research

In fact, half of German consumers spend less than 10 hours researching vehicles before they make a decision to buy

Time spent by consumers researching vehicles

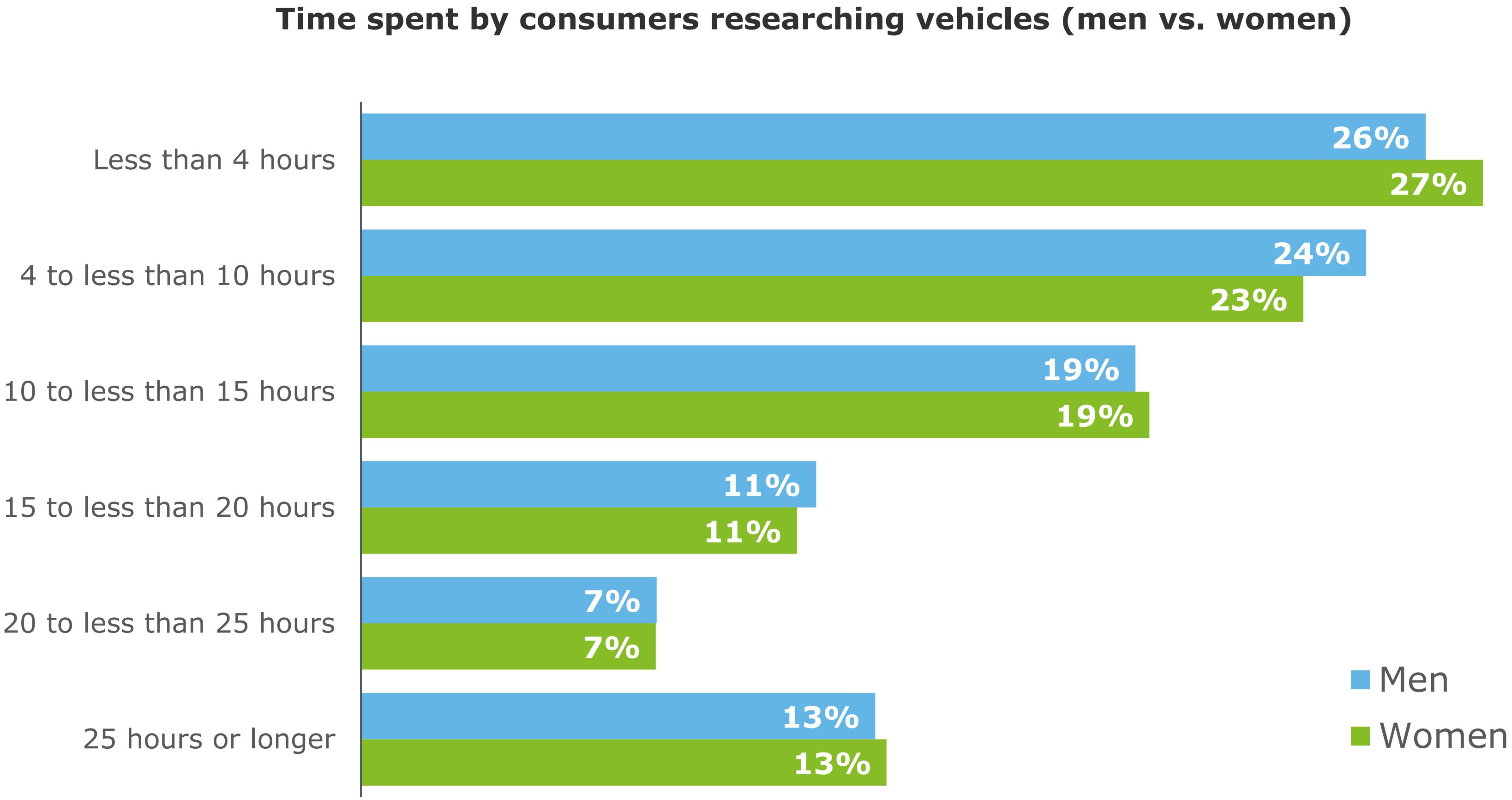


Q13. When considering the acquisition of your current vehicle, how many hours in total would you estimate you spent researching possible vehicles (e.g., through the Internet, consumer publications, automotive magazines, etc.)?

Sample size: n=1,336

There is little gender difference in time taken to research

Just over a quarter of men and women spent less than four hours researching possible vehicles when shopping for their current car

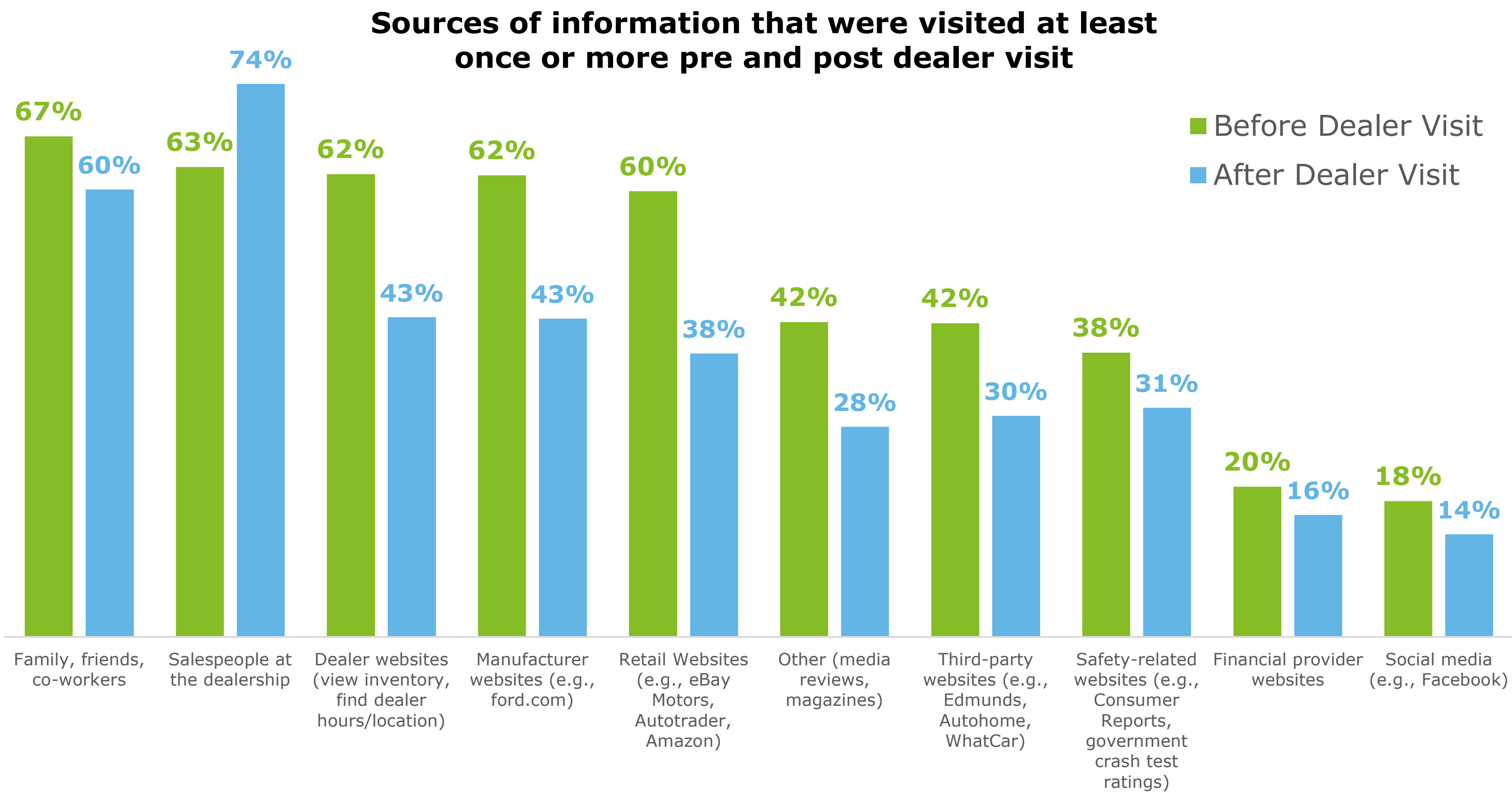


Q13. When considering the acquisition of your current vehicle, how many hours in total would you estimate you spent researching possible vehicles (e.g., through the Internet, consumer publications, automotive magazines, etc.)?

Sample size: n=1,336; M=695; W=641

Dealer visit helps strengthen trust with the salesperson

After the dealer visit, consumer reliance on dealer sales staff increases, with all other sources being utilized less often

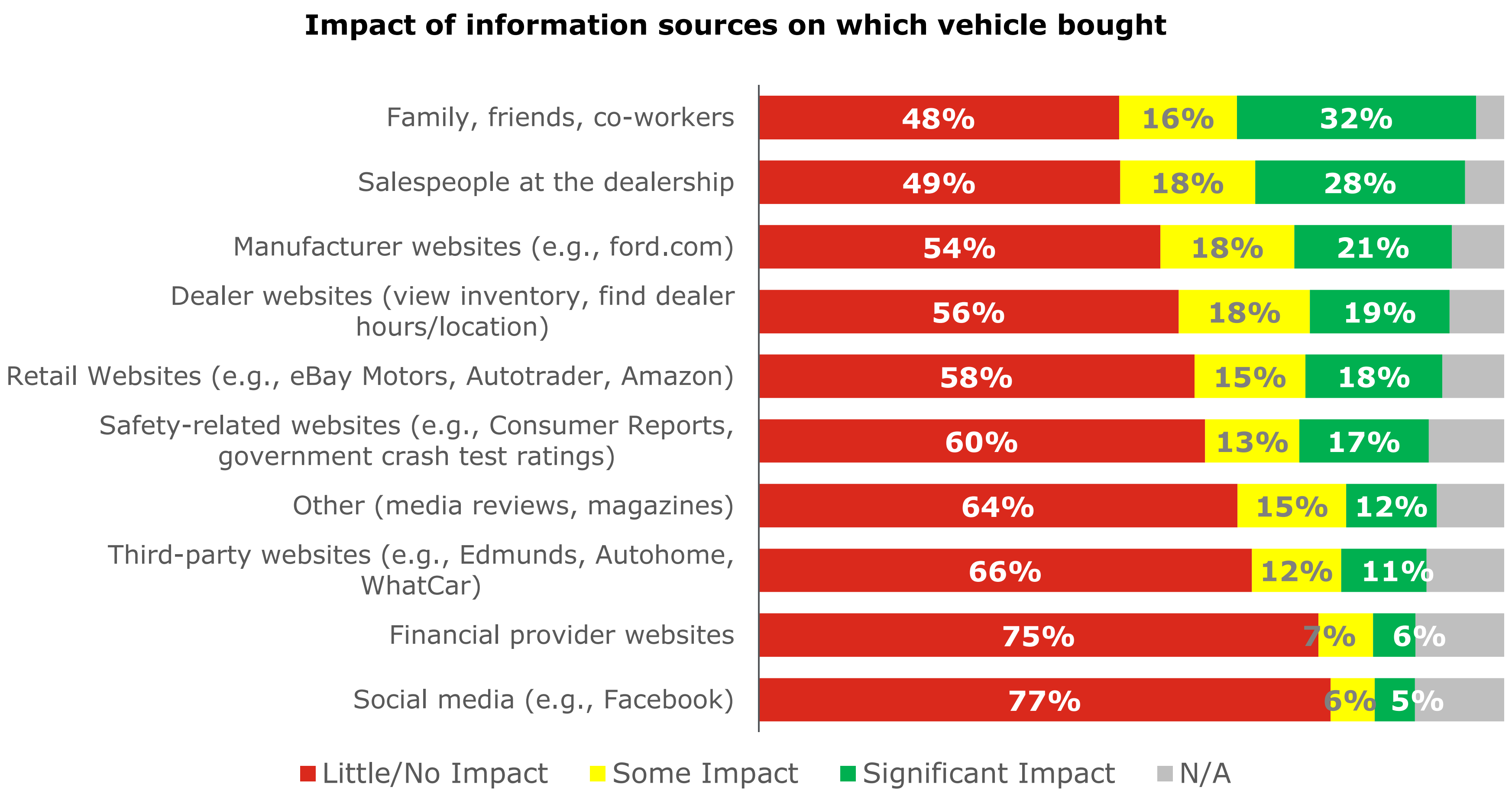


Q11. Before you made the decision to acquire, how many times do you think you accessed each of the following information sources when shopping for your current vehicle?; Q20. After you started visiting dealerships, how many times do you think you accessed each of the following information sources to aid in the shopping process for your current vehicle?

Sample size: n=1,336; 1,086

Family/friends still has significant impact on purchase decision

More than a quarter of consumers rated family/friends and the dealer salesperson as having a major impact on their purchase decision



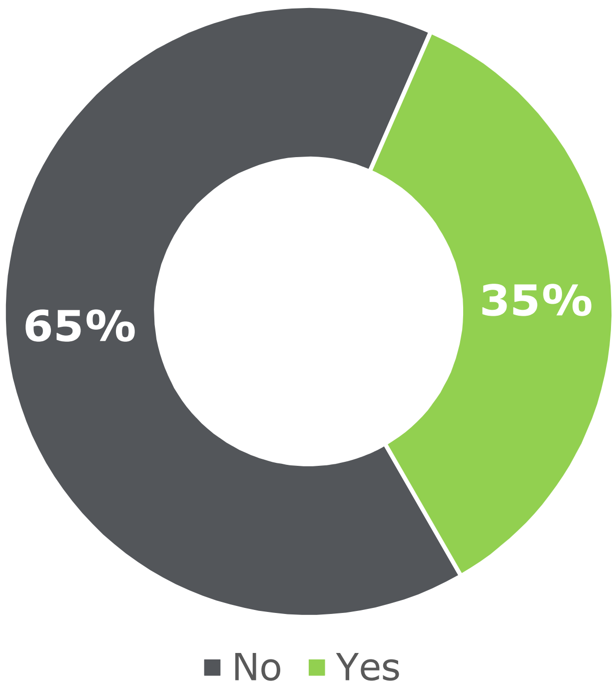
Q12. When considering purchasing or leasing your current vehicle, how much of an impact did information from each of the following sources have on your ultimate decision of which vehicle you chose?

Sample size: n=1336

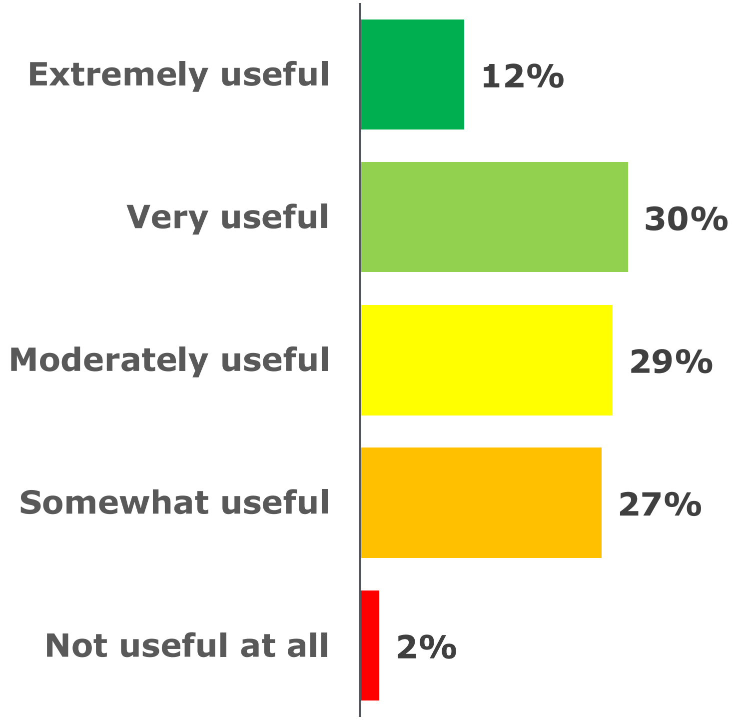
One third of German consumers use a third-party pricing service

Among them, 42% found the service either very or extremely useful

Percentage of consumers using third-party, vehicle pricing support services to purchase vehicle



Percentage of consumers who liked the support received while purchasing vehicle



Q14. Did you use a third-party, vehicle pricing support service (e.g., TrueCar, Edmunds, BitAuto, CarTrade, etc.) in the process of acquiring your current vehicle?

Sample size: n=1,336

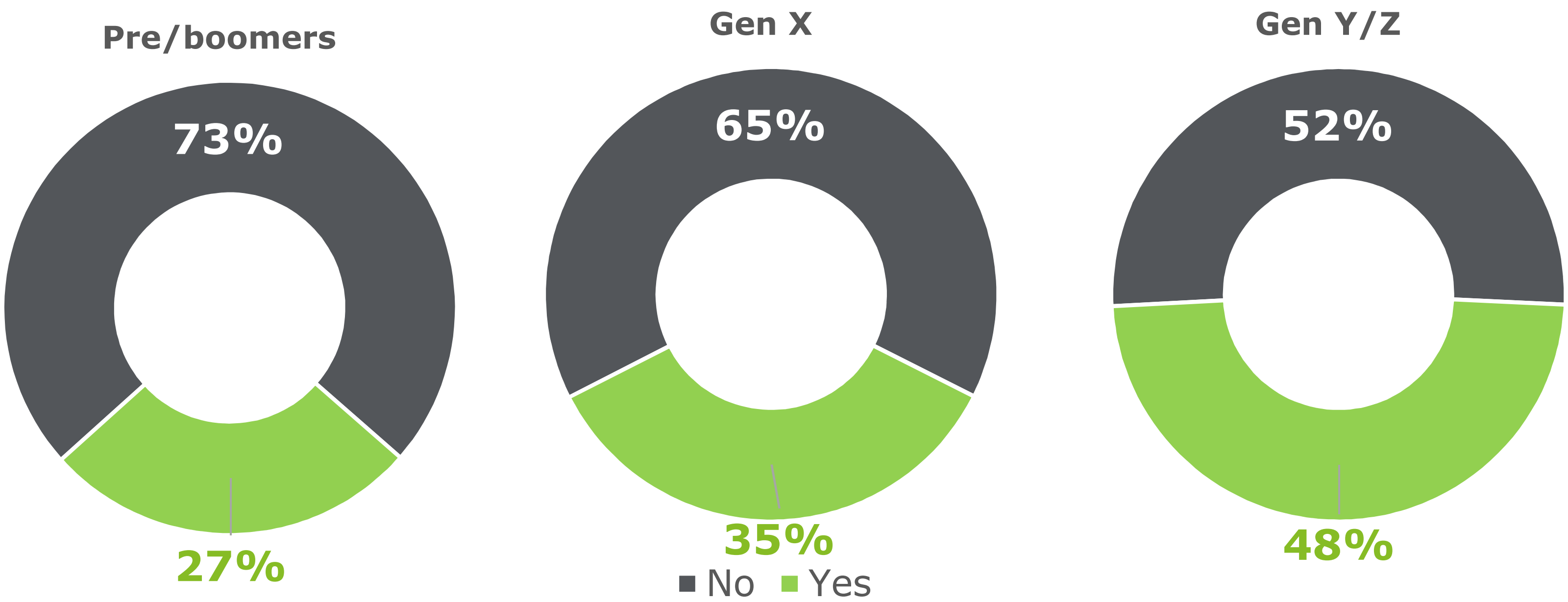
Q15. How useful did you find the vehicle pricing support you received?

Sample size: n=469

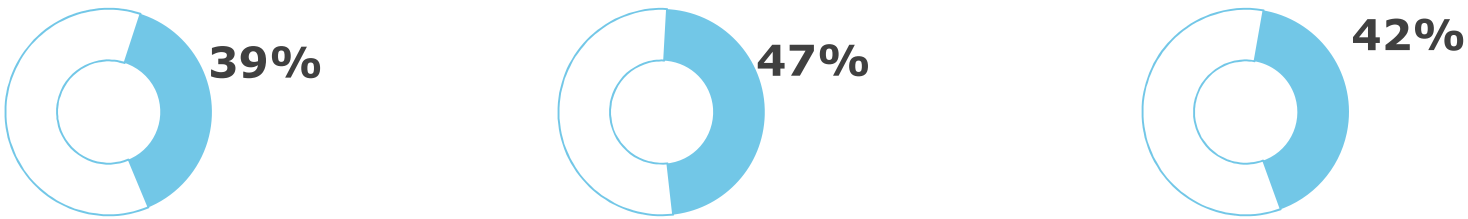
Younger consumers more comfortable with pricing services

40 percent or more of consumers found the services useful

Percentage of consumers using third-party, vehicle pricing support services to purchase vehicle



Percentage of consumers who found third-party pricing service extremely/very useful



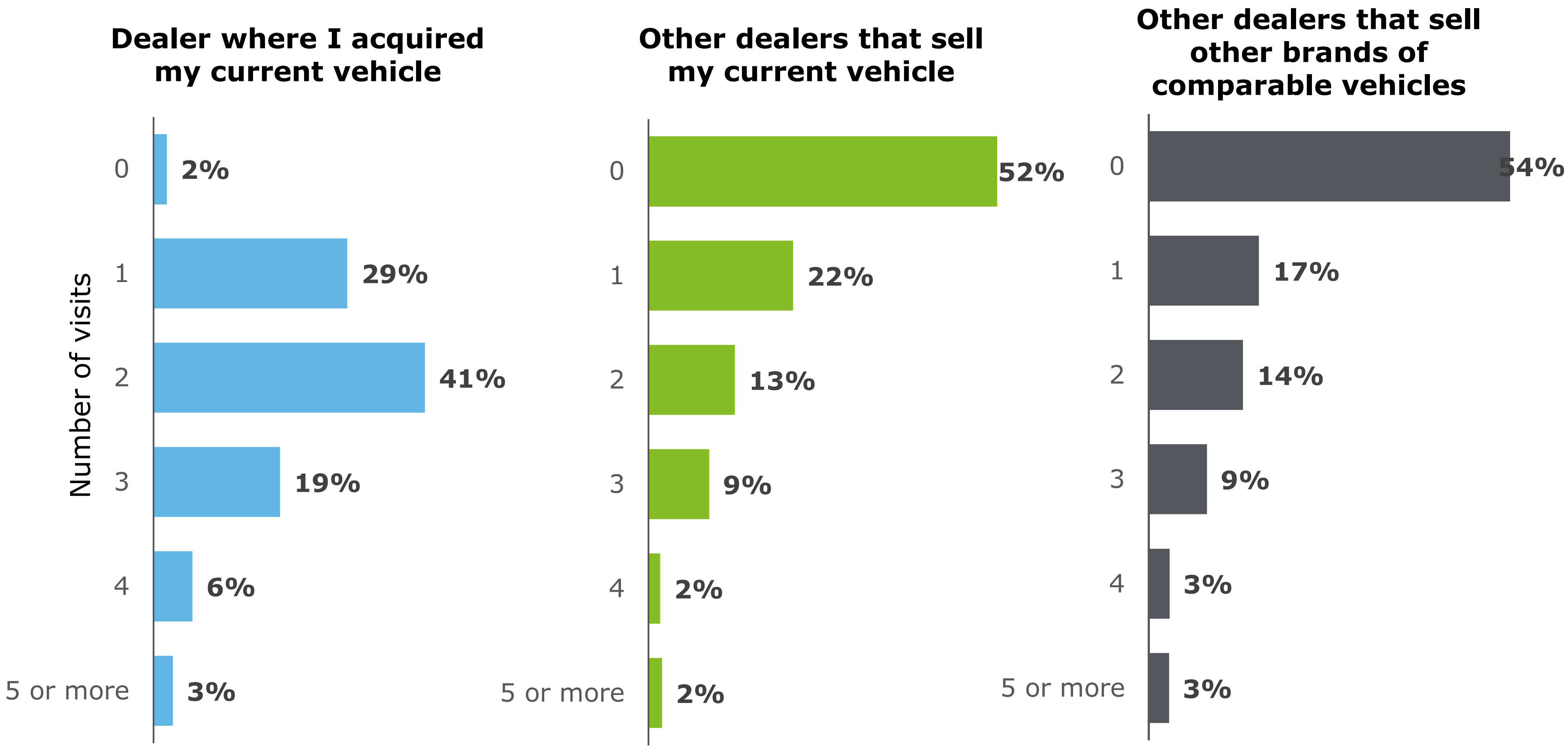
Q14. Did you use a third-party, vehicle pricing support service (e.g., TrueCar, Edmunds, BitAuto, CarTrade, etc.) in the process of acquiring your current vehicle?

Sample sizes - [Pre/boomers, N= 402; Gen X, N= 248; Gen Y/Z, N= 319]

In-dealer consumer experience

69% of consumers visited their selling dealer more than once

Half of consumers do not visit any other dealerships apart from the one where they acquired their current vehicle

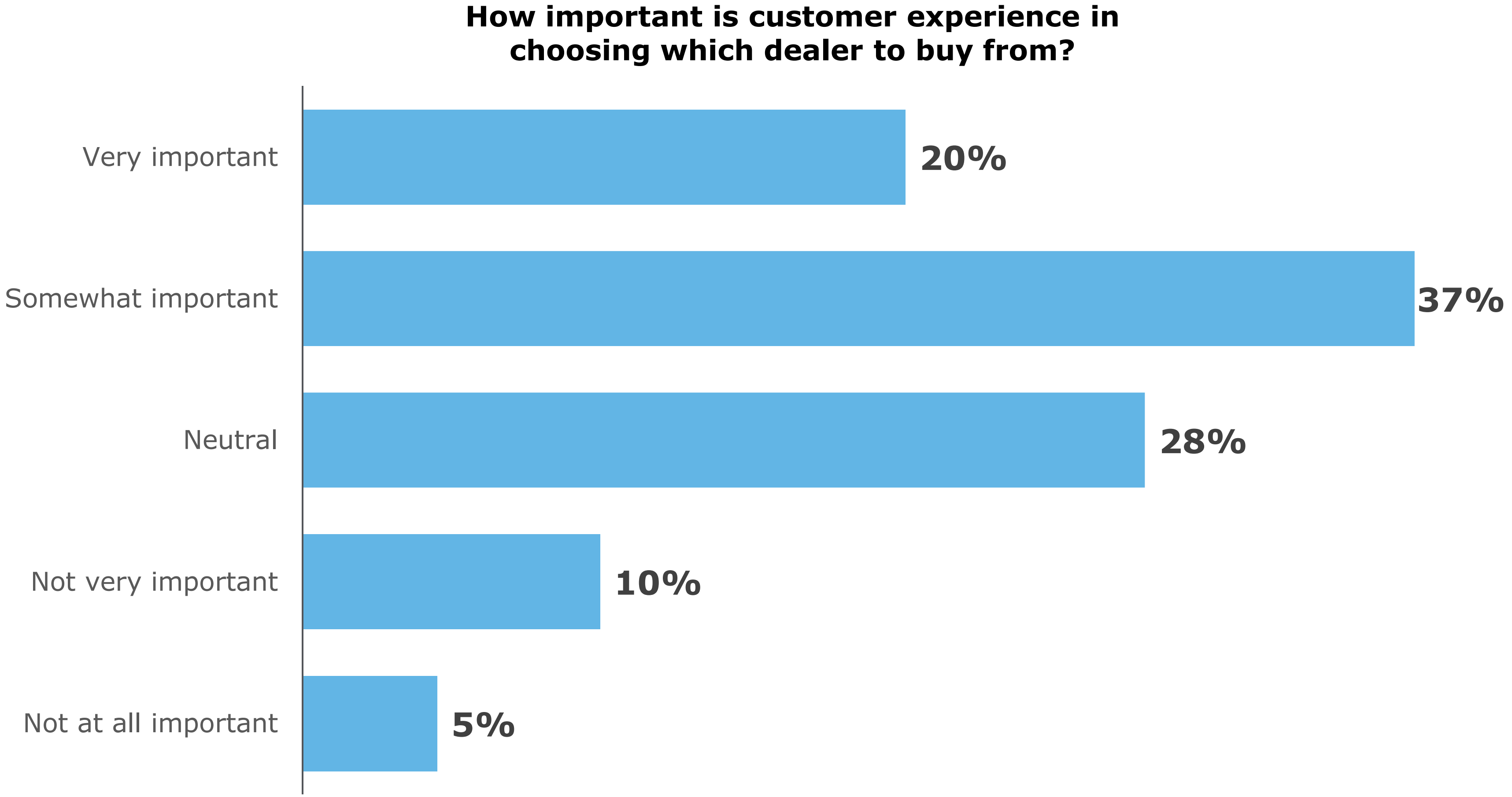


Note: For 5 or more visits, we have considered the no. of visits as 5 for calculating **Average # of visits**

Q17. How many dealer visits did you conduct during the buying process for your current vehicle?
Sample size: n=1,086

Customer experience is clearly not dead...

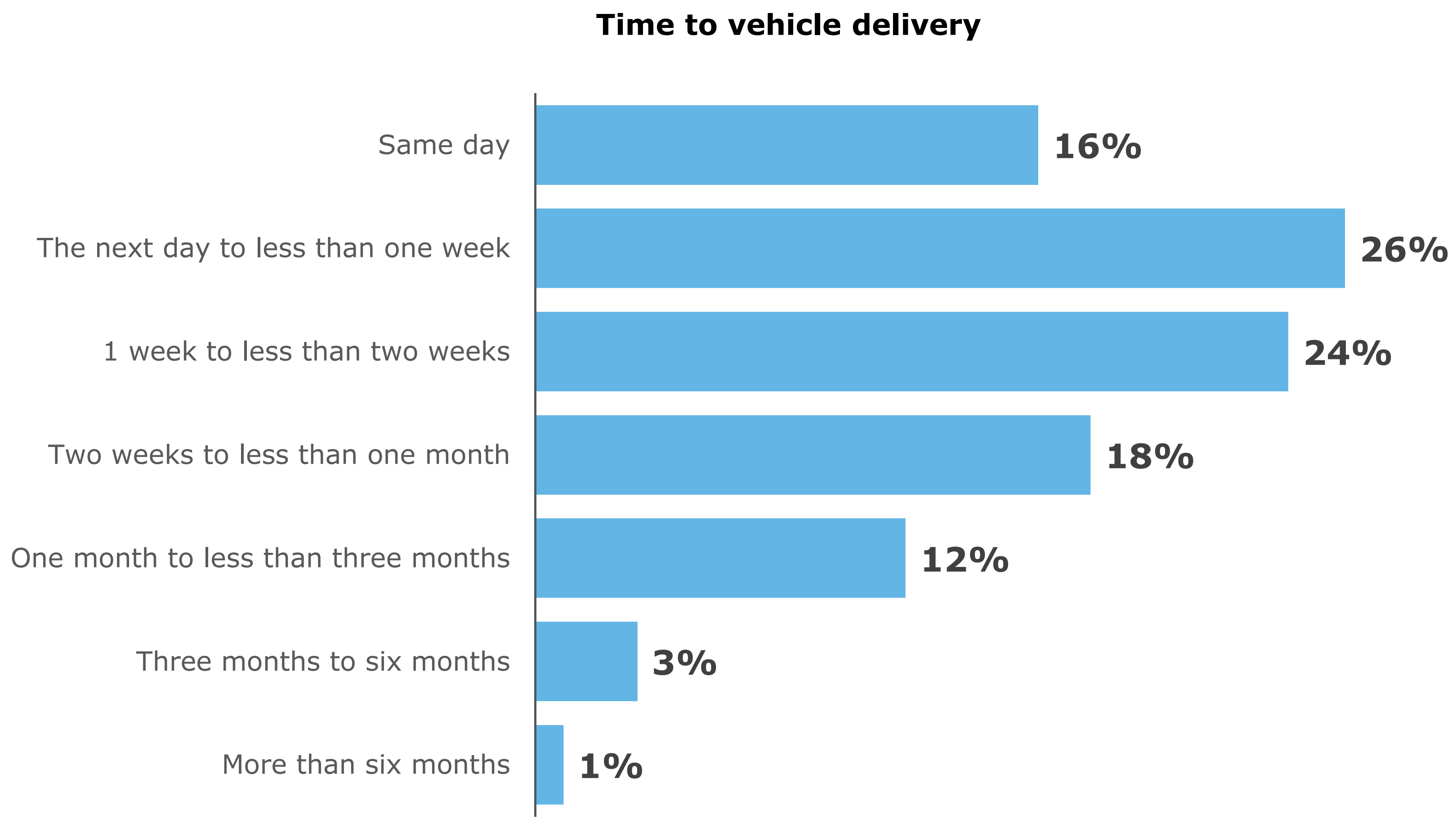
57% of the consumers rate customer experience as either a somewhat or very important factor in choosing where to buy a vehicle



Q18. Thinking about the dealer where you acquired your current vehicle, how important was the customer experience in making the choice to buy there?
Sample size: n=1,086

16% of consumers buy a vehicle the day they go shopping

In fact, 42% of consumers acquired their current vehicle within a week after they started visiting dealerships

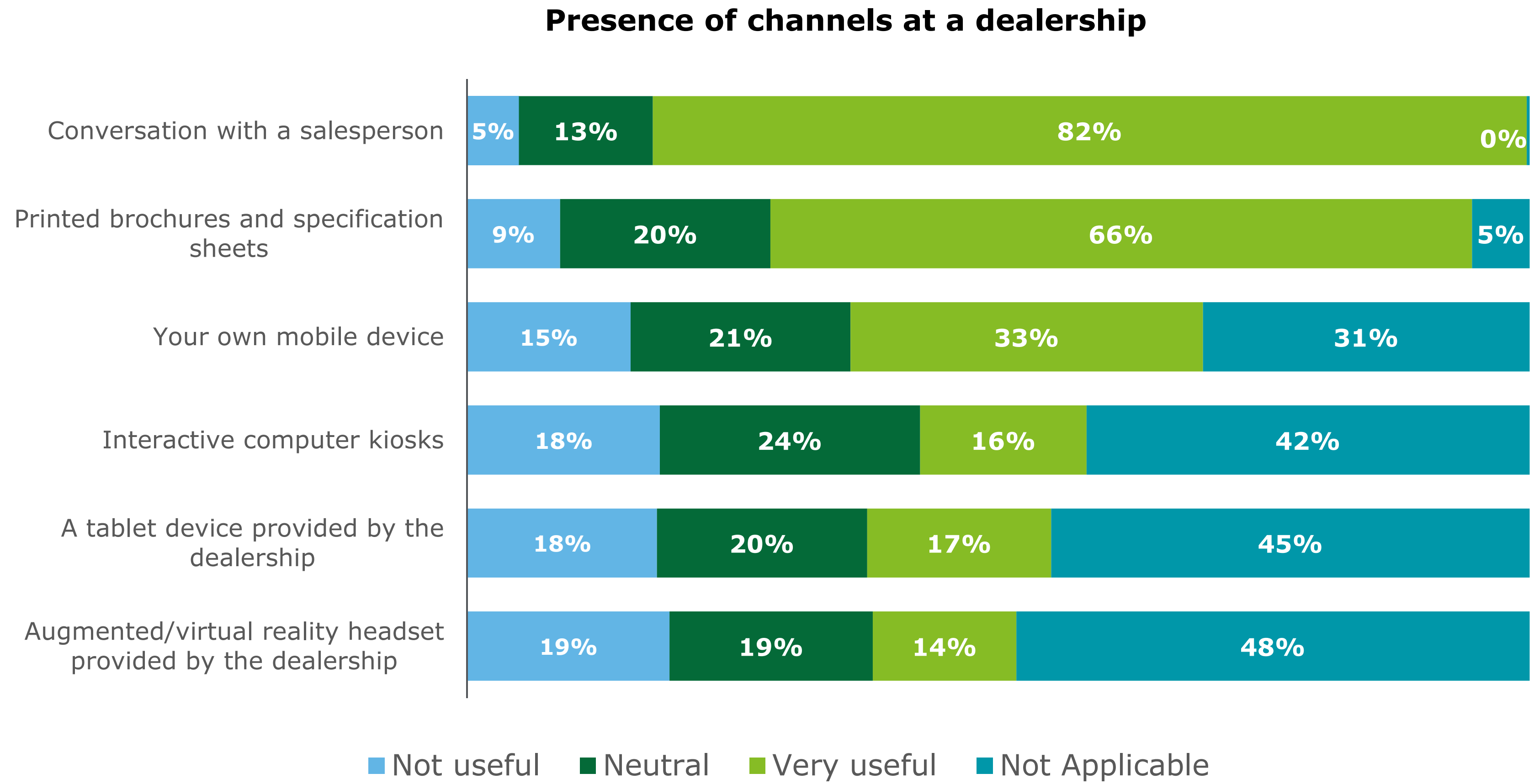


Q19. Once you started visiting dealerships, how long was it before you acquired your current vehicle?

Sample size: n=1,086

Salesperson and printed brochures considered most useful

Two-thirds of consumers still find printed brochures and spec sheets very useful in gathering information at the dealership



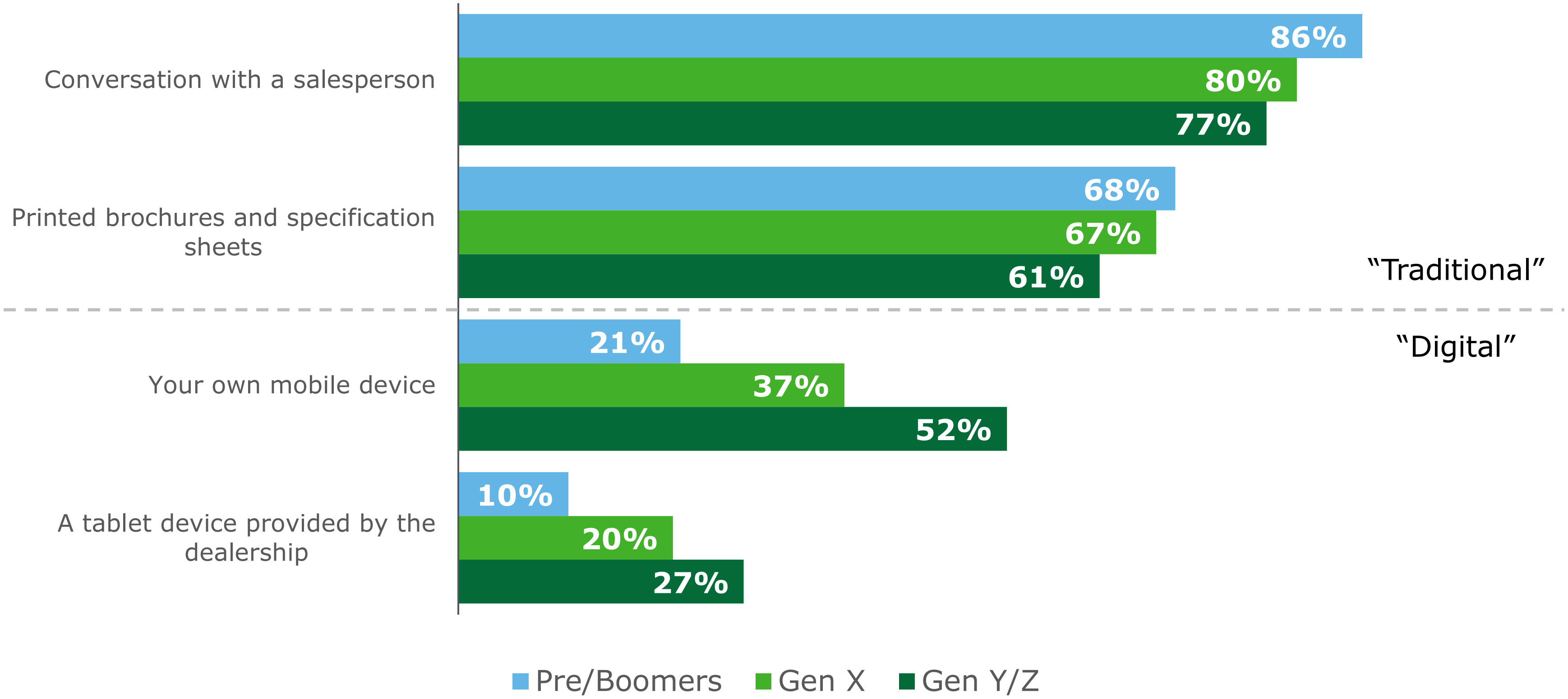
Q23. How useful are each of the following channels in helping you gather information while at a dealership?

Sample size: n=1,086

Usefulness of digital info key for younger customers

Traditional information sources useful regardless of age group, but digital becomes much more important for Gen Y/Z

Usefulness of information channels at a dealership (% somewhat/very useful)



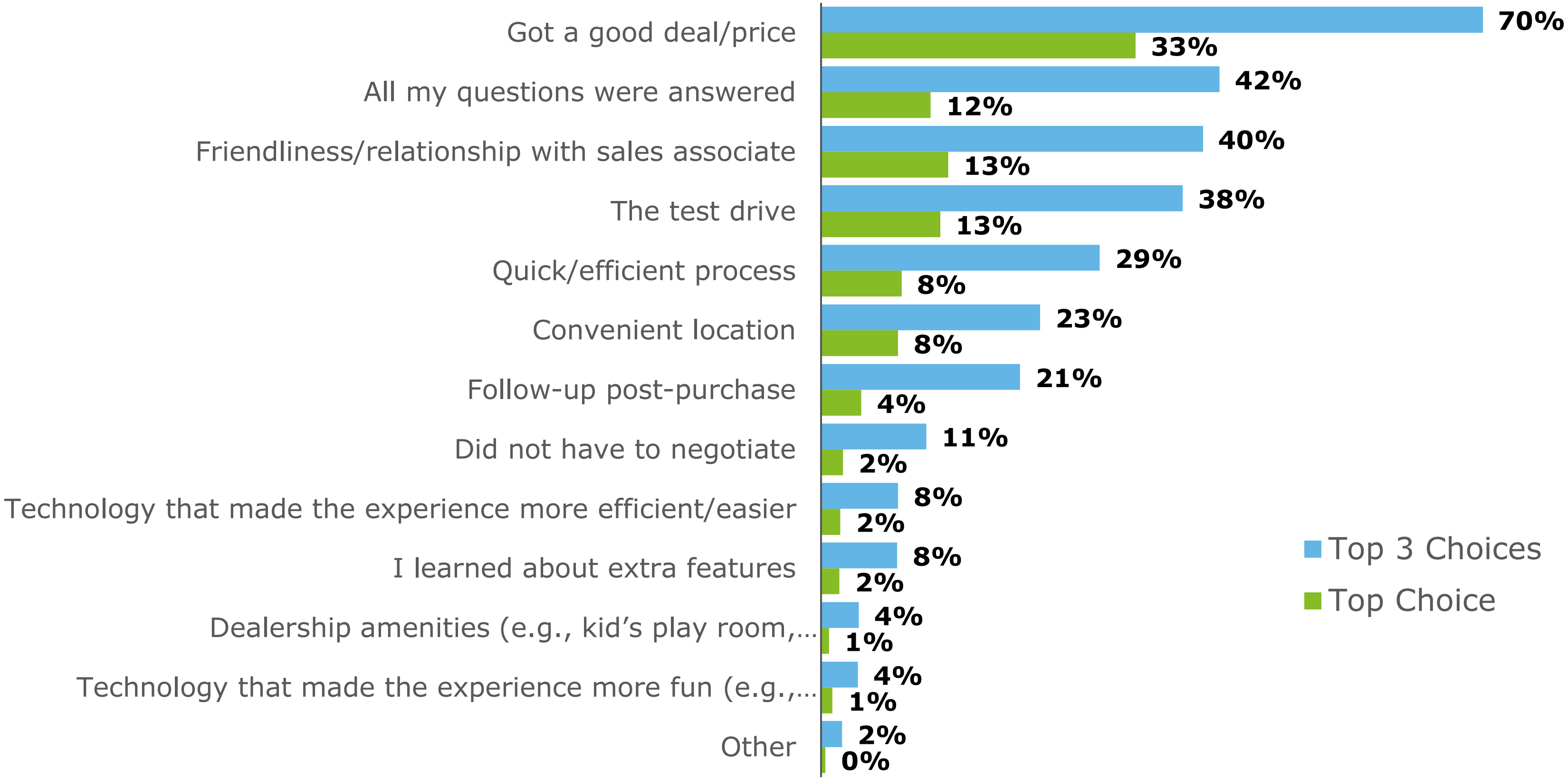
Q23. How useful are each of the following channels in helping you gather information while at a dealership?

Sample sizes - [Pre/boomers, N= 534; Gen X, N= 269; Gen Y/Z, N= 283]

Clearly, consumers are most concerned with getting a good deal

Also, the power of the sales associate to effectively build a relationship with the customer cannot be underestimated

The most enjoyable aspects of the dealer experience are…

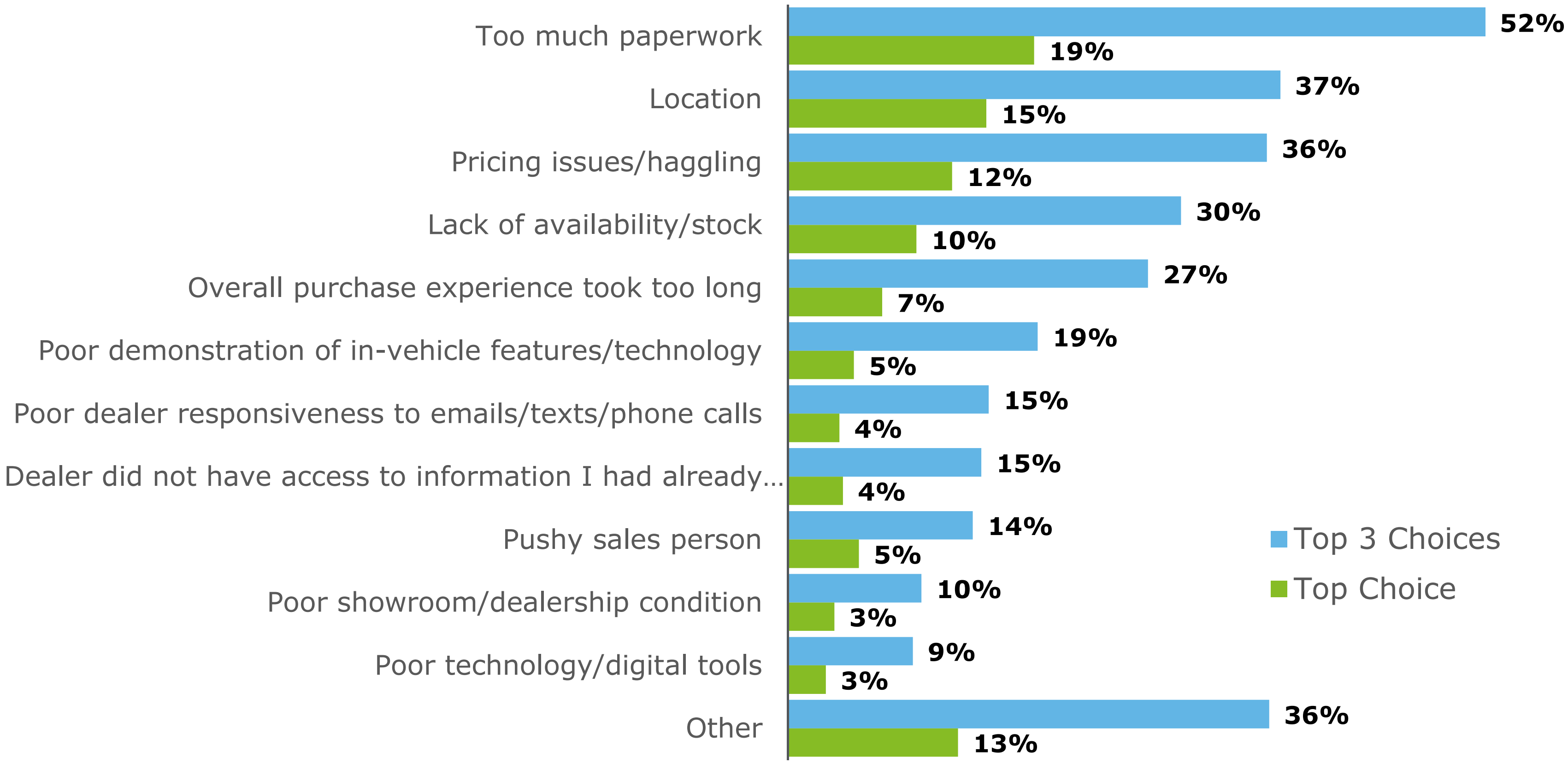


Q24. What are the three aspects of the dealer experience you enjoyed most when you acquired your current vehicle?
Sample size: n=1,086

Consumers really don't like a lot of paperwork

Consumers place a great emphasis on location/price and whether the dealer has the right vehicle on hand

The most disliked aspects of the dealer experience are…

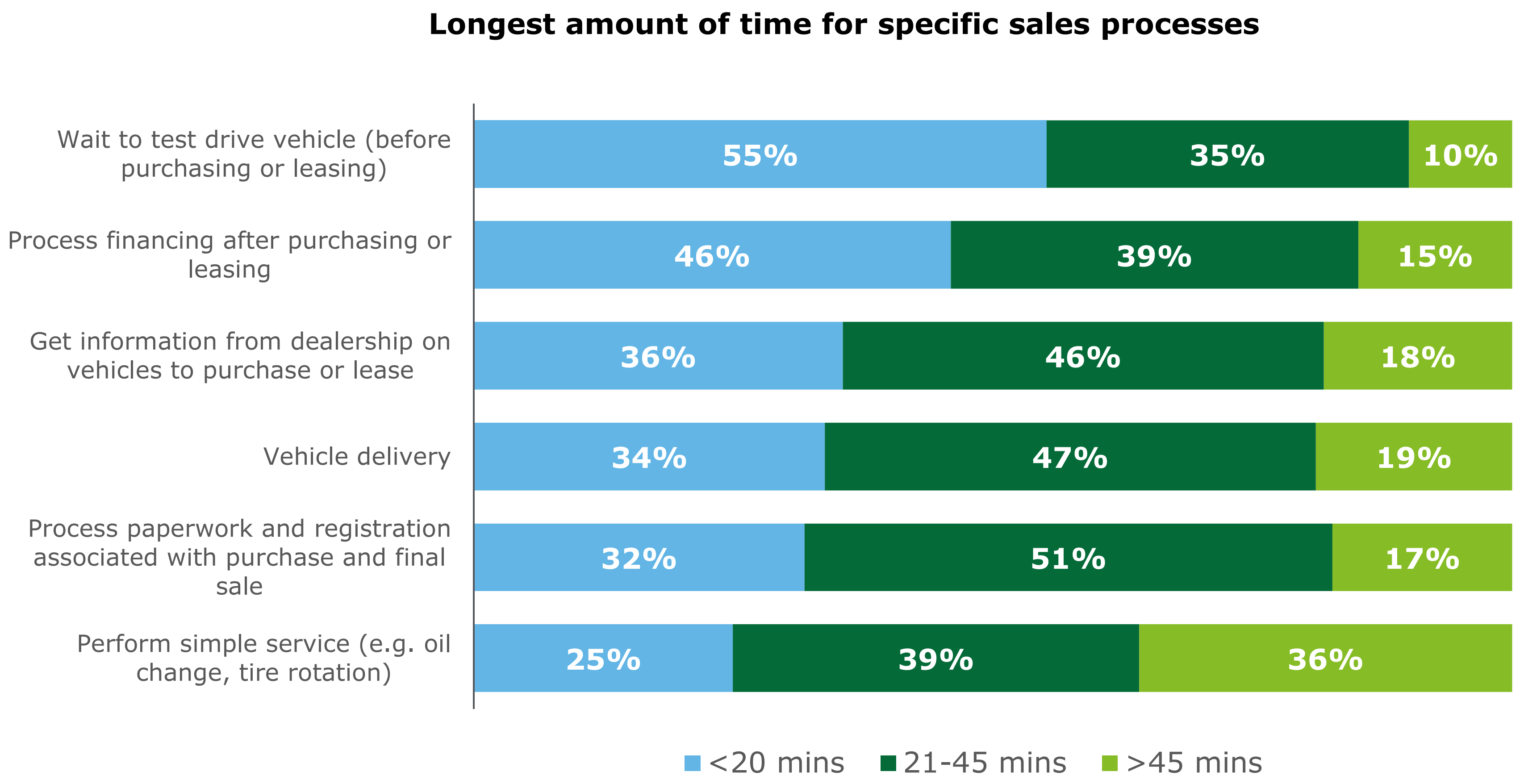


Q25. What are the top three aspects of the dealer experience you disliked most when you acquired your current vehicle?

Sample size: n=1,086

Consumers set upper limits on amount of time for key processes

Consumers expect to wait the least amount of time for a test drive and to process financing paperwork

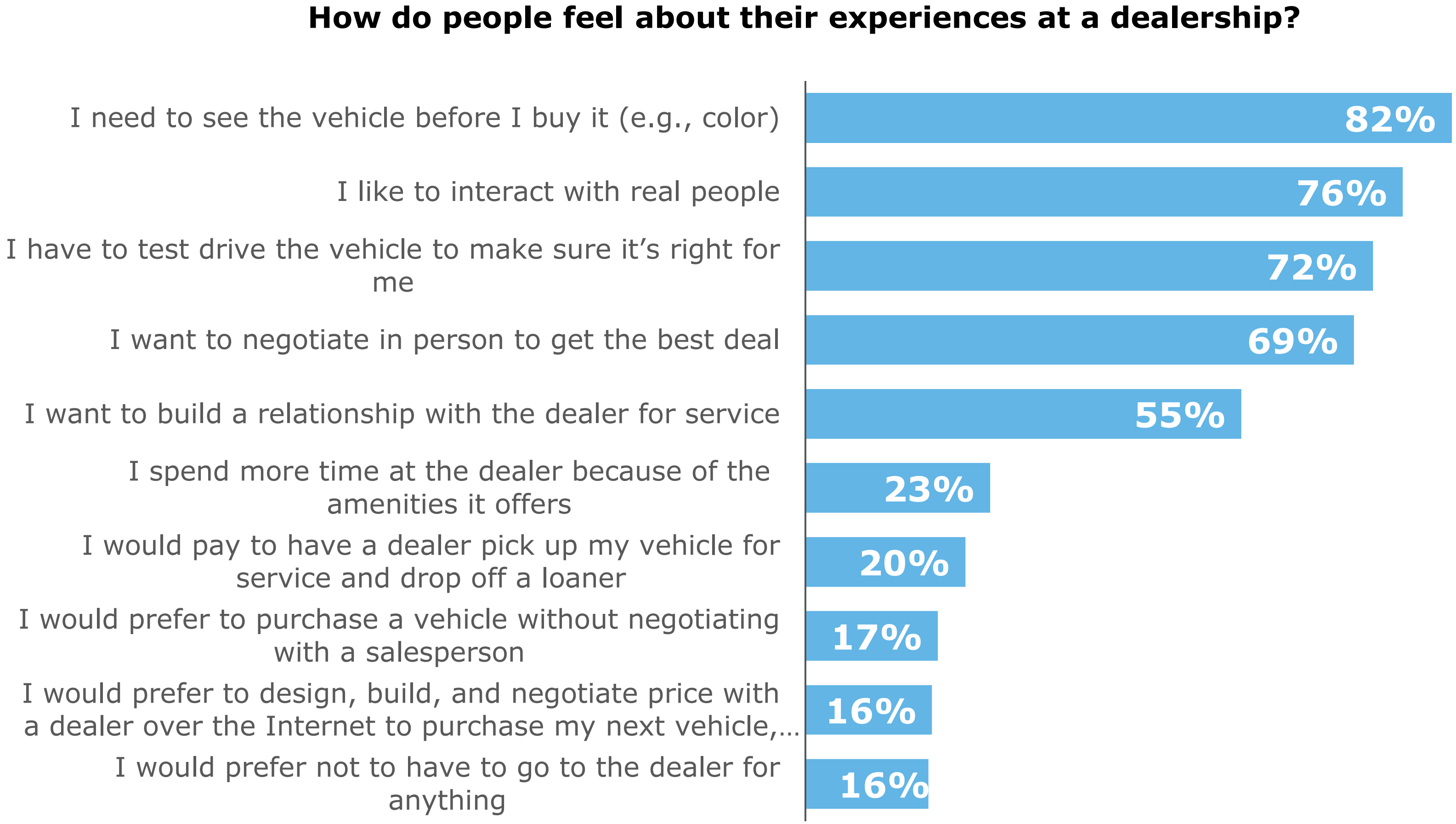


Q21. Please indicate the longest amount of time you would find acceptable to spend at a dealership on each of the following steps

Sample size: n= 1309

Majority of people need physical interaction before buying

At least three-quarters of consumers still need to see the vehicle and interact with real people before they buy it



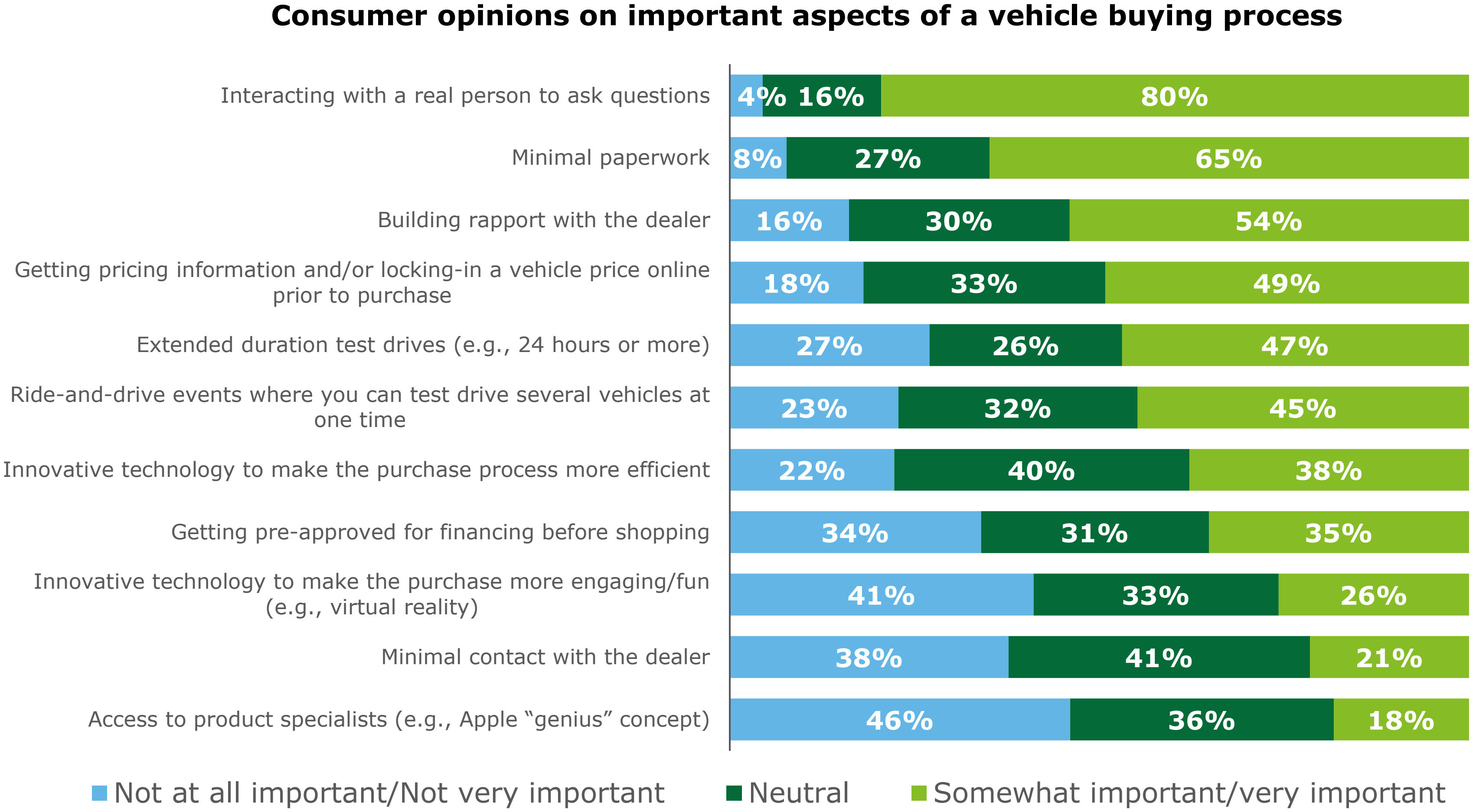
Note: Percentage of respondents who strongly agreed or agreed have been added together

Q26. Thinking about your experience with dealerships, to what extent do you agree/disagree with the following statements?

Sample size: n=1,086

Interaction with a real person most important aspect

Less paperwork, friendly relationship with dealer, and getting vehicle price online are the other important aspects for consumers



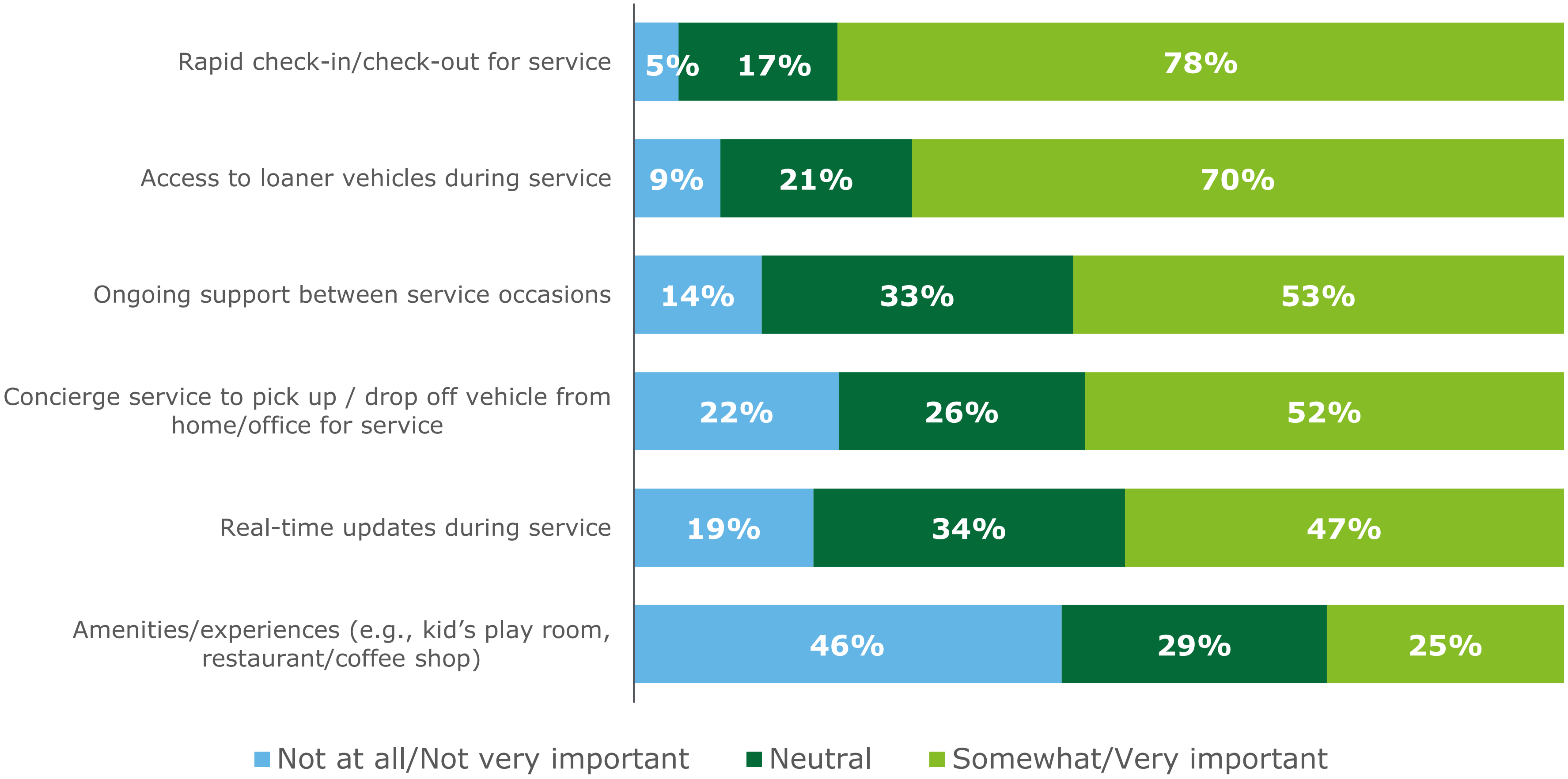
Q45. How important are each of the following items related to the vehicle buying process?

Sample size: n=1,029

Service experience hinges on customer time and convenience

More than two-thirds of consumers consider rapid check-in/check-out and access to loaner vehicles the most important service aspects

Consumer opinions on important aspects of a vehicle service process

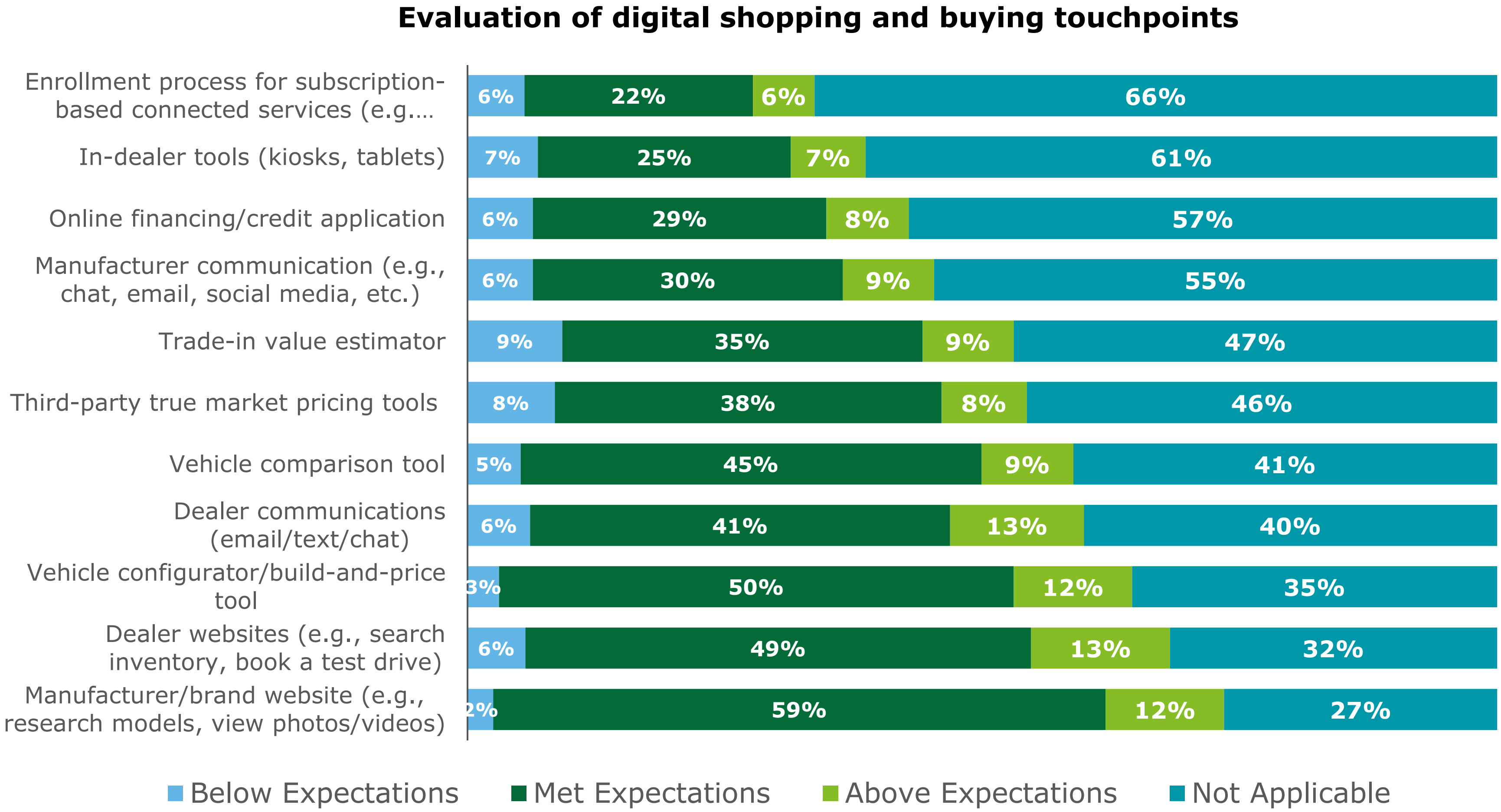


Q46. How important are each of the following items related to the vehicle service process?

Sample size: n=1,287

Majority of digital journey is merely meeting expectations

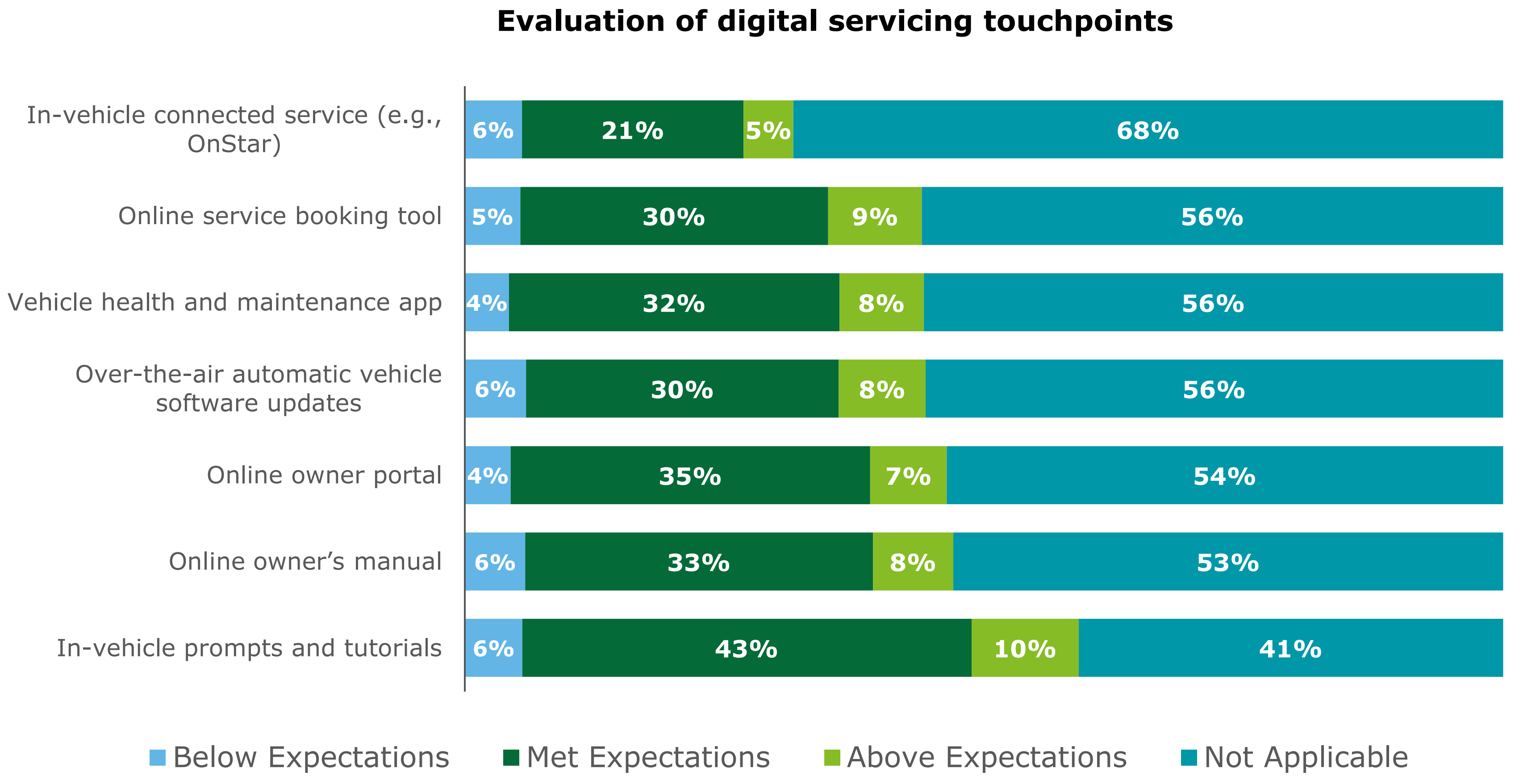
Percentage of digital touchpoints that are below expectations is quite low, but no one is really hitting a homerun either



Q30. Considering your current vehicle purchase and ownership journey, please tell us whether or not each of the following digital experiences met your expectations.
Sample size: n=1,086

And it's the same story with digital servicing touchpoints

Services such as in-vehicle connected services, and online service booking tools are not available to most consumers



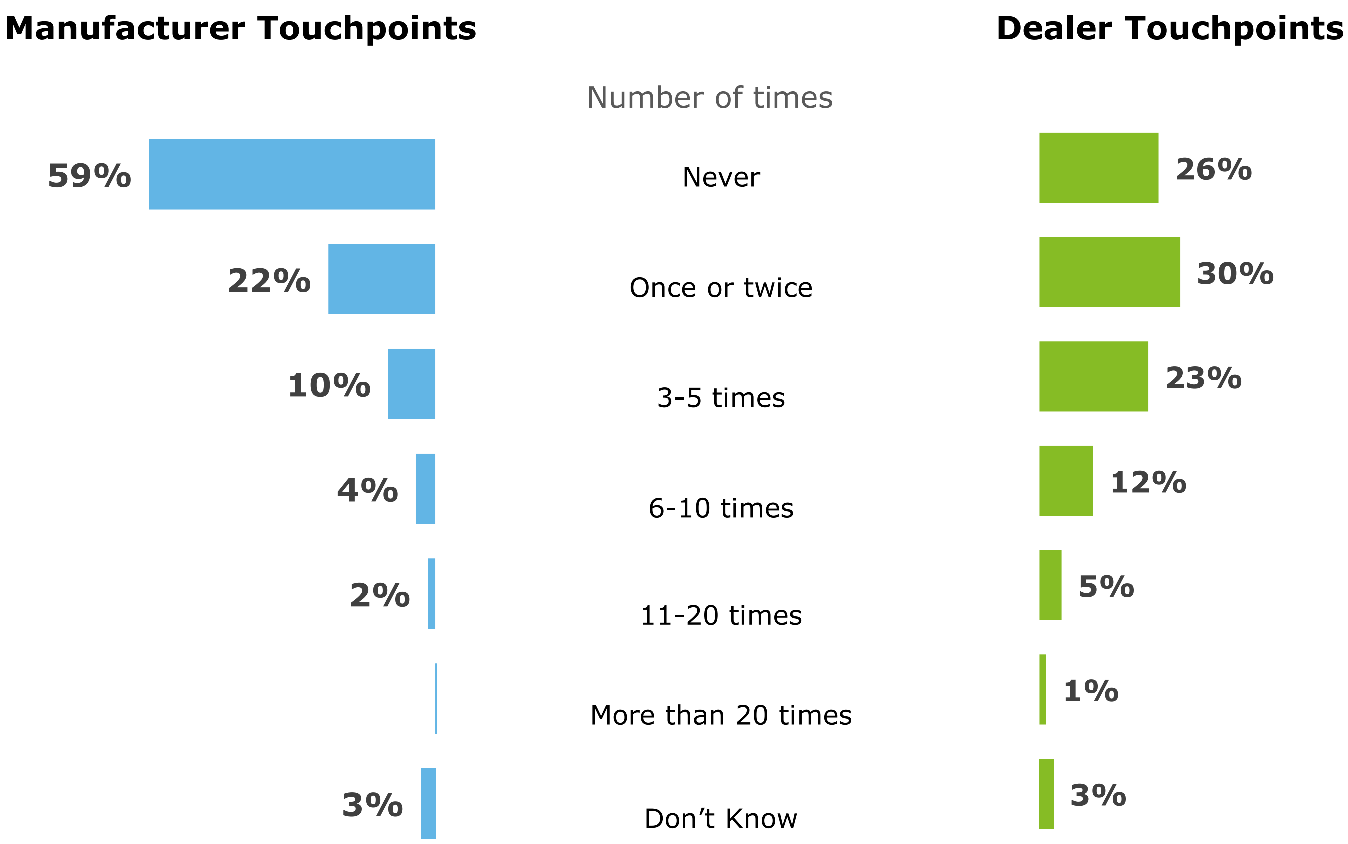
Q30. Considering your current vehicle purchase and ownership journey, please tell us whether or not each of the following digital experiences met your expectations.

Sample size: n=1,086

Communication from Dealers and Manufacturers

Both OEMs and dealers could be missing a big opportunity

59% of the consumers say they were never contacted by the manufacturer after acquiring their vehicle



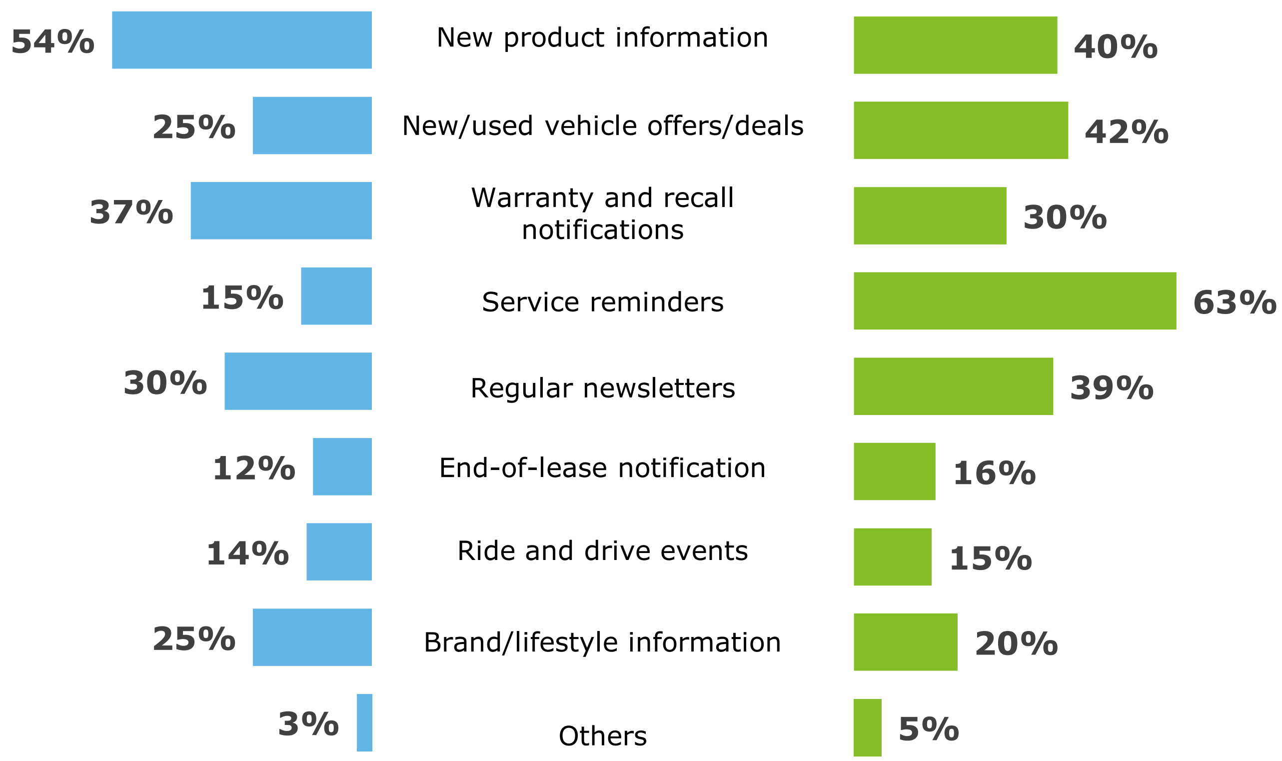
Q31. How many times has either the manufacturer or dealer contacted you (for any reason) after acquiring your current vehicle?

Sample size: n=1,086

Reason for contact varies between OEMs and dealers

Dealers contact consumers mostly for service reminders while manufacturers contact for new product information

Manufacturer touchpoints related to: **Dealer touchpoints related to:**

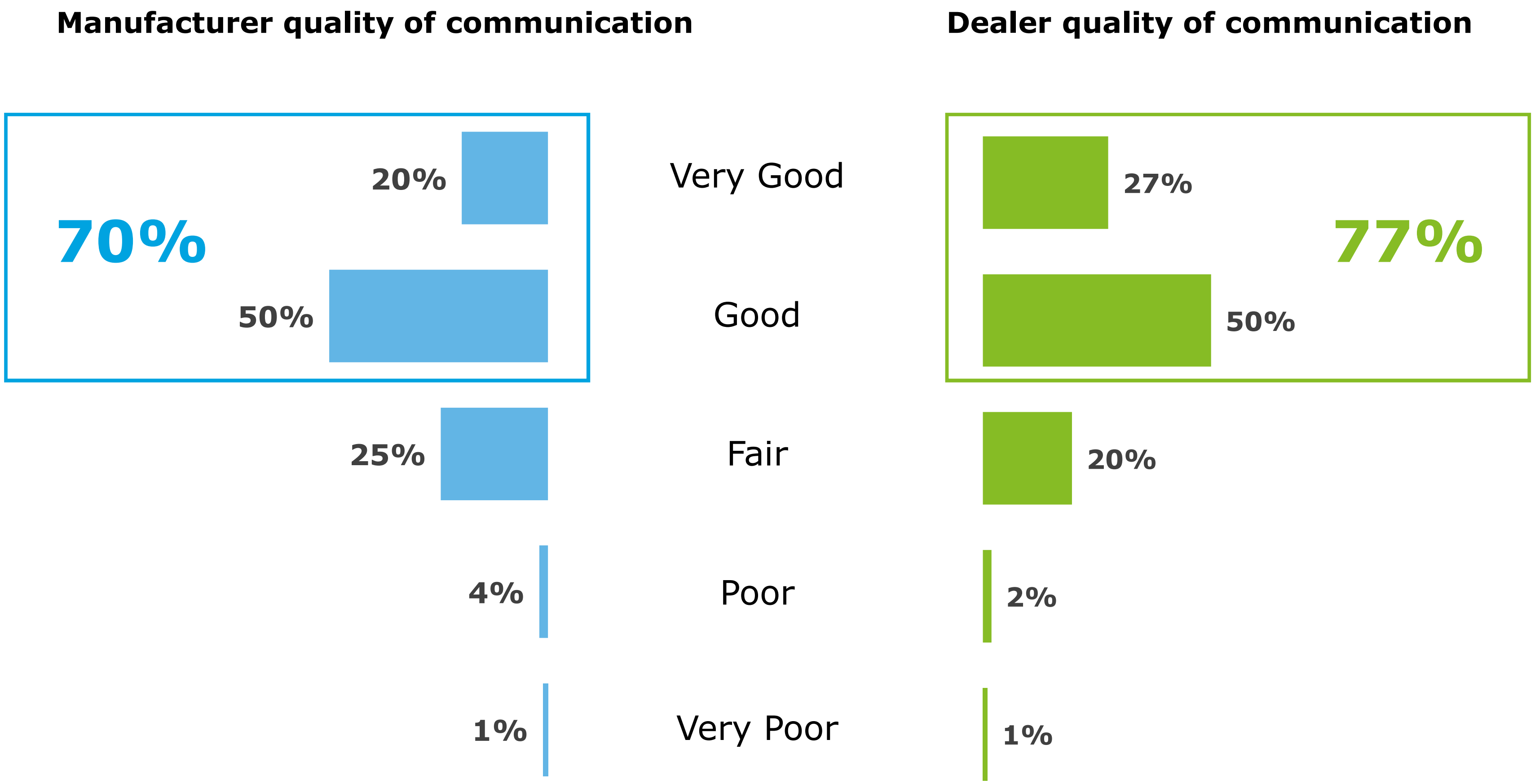


Q32. What have you been contacted about? (Select all that apply)

Sample size, average for manufacturer and dealer: n=444, 808

Dealers trump manufacturers in quality of communication..

77% of consumers said dealer communications are good/very good

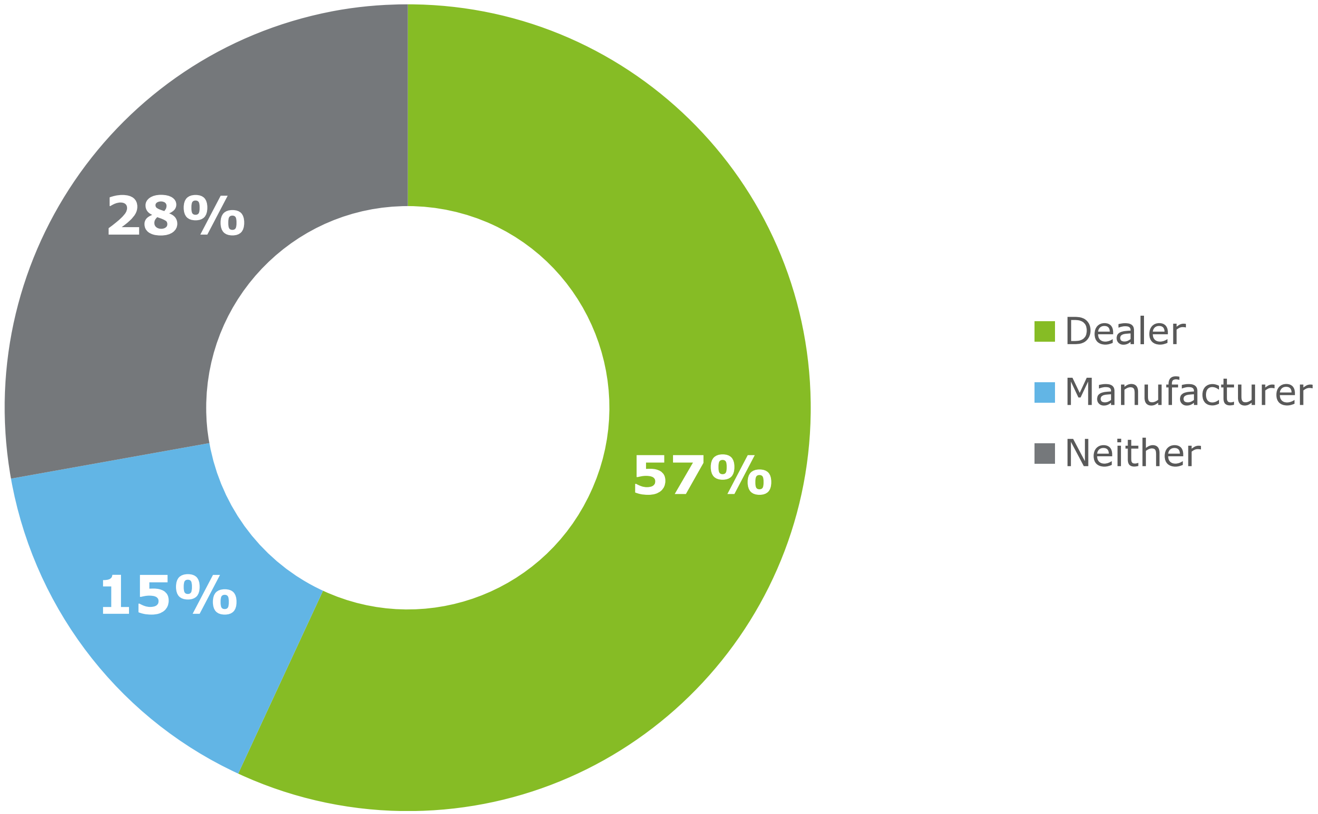


Q33. How would you rate the quality of the communication you have received from both the manufacturer and dealer since acquiring your current vehicle?
Sample size, average for manufacturer and dealer : n=414, 788

...leading to consumers preferring communication from dealers

57% of consumers prefer communication from dealers rather than the manufacturers

From whom would the consumer prefer hearing in future?



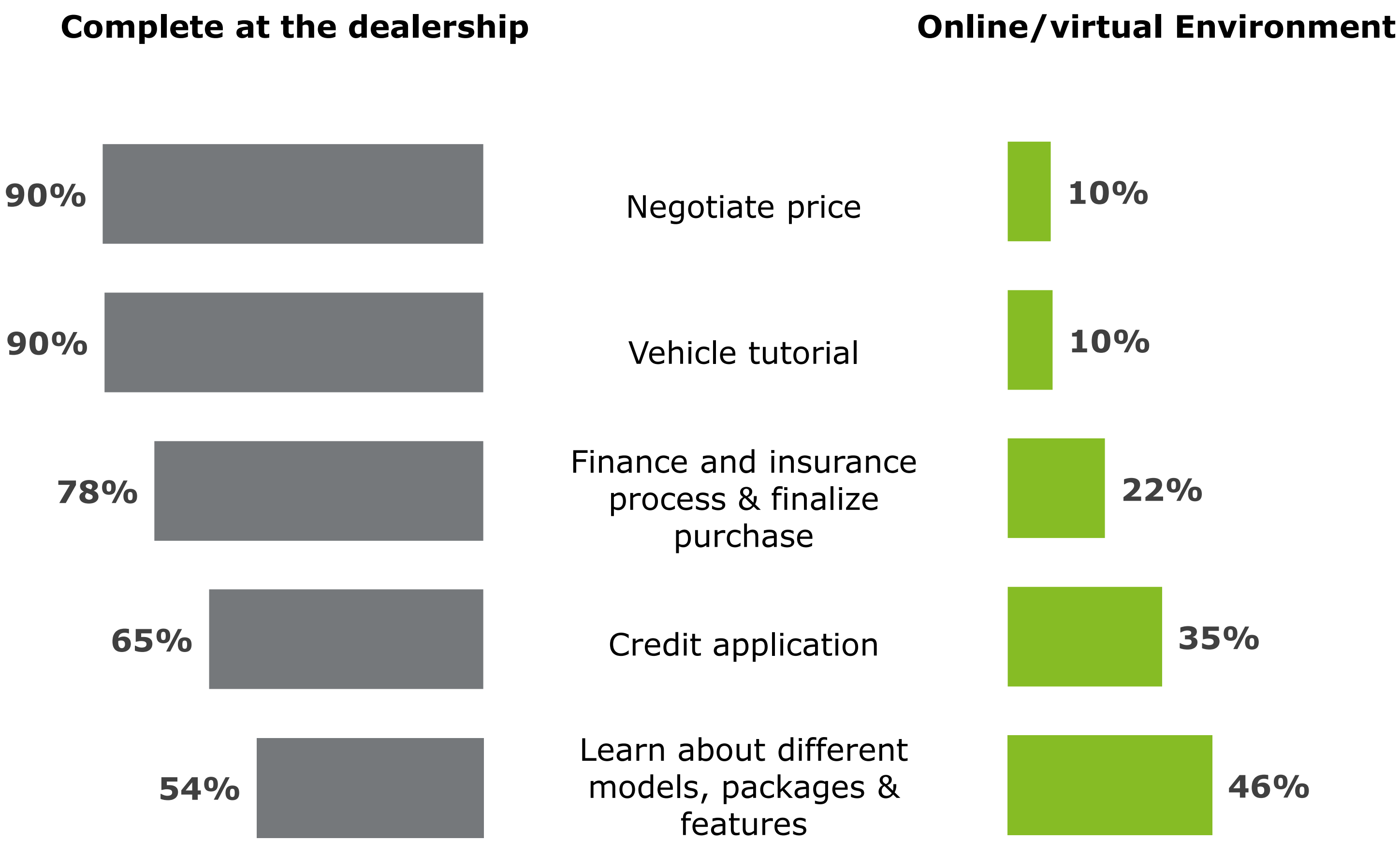
Q34. In general, who would you rather hear from going forward?

Sample size: n=1,086

Are consumers ready to leave the dealer behind?

Consumers still expect price negotiation to be done at the dealer

Majority of consumers would prefer to negotiate the vehicle price and want to see the vehicle tutorial at the physical dealership



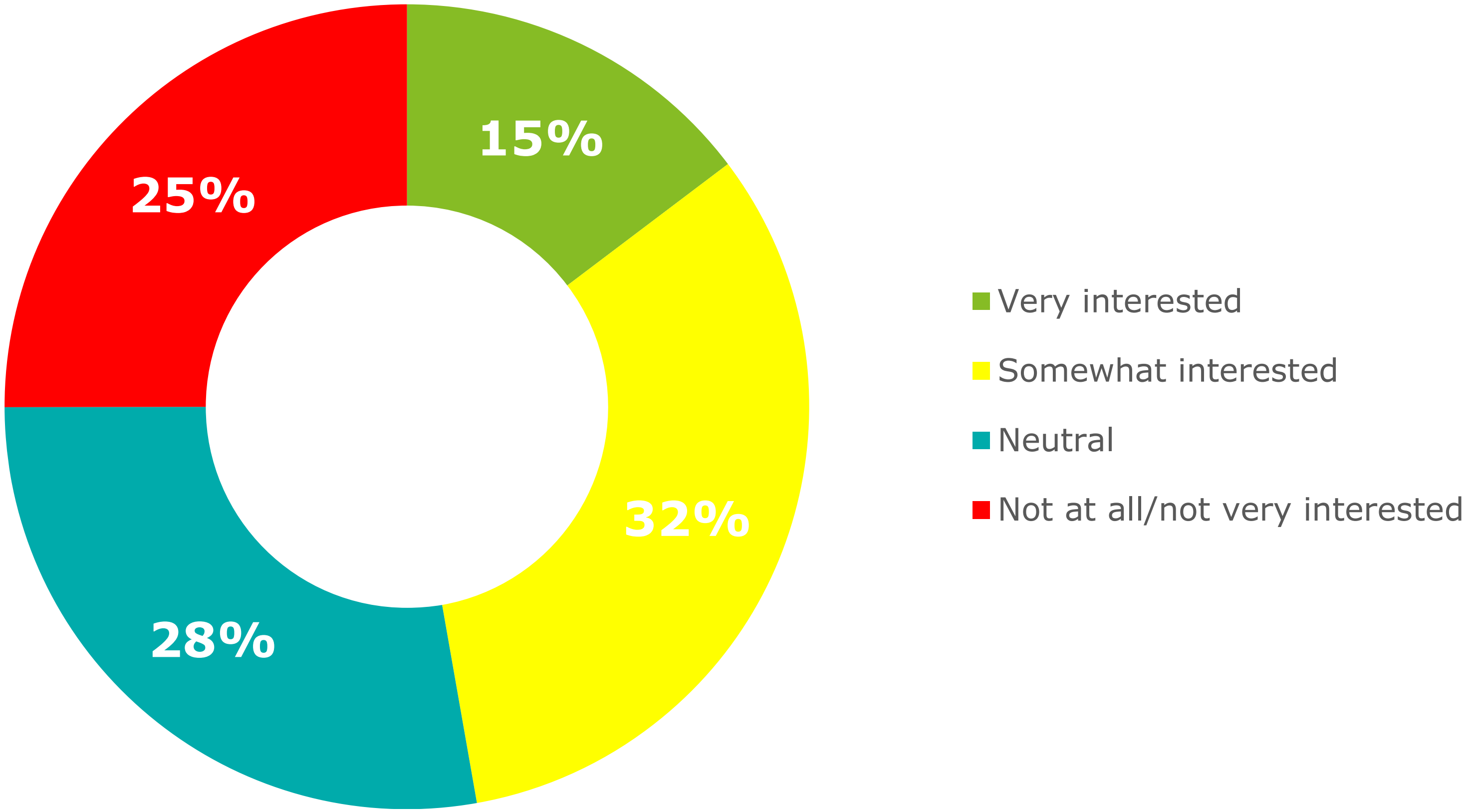
Q43. When you are ready to acquire your next vehicle, what aspects of the vehicle buying experience would you want to do at the dealership versus an online/virtual environment?

Sample size: n=1,029

Consumers are not exactly clamoring to buy direct from the OEM

Only 15% of consumers are very interested in acquiring their next vehicle directly from the manufacturer via an online process

How interested are consumers in by-passing the dealer?

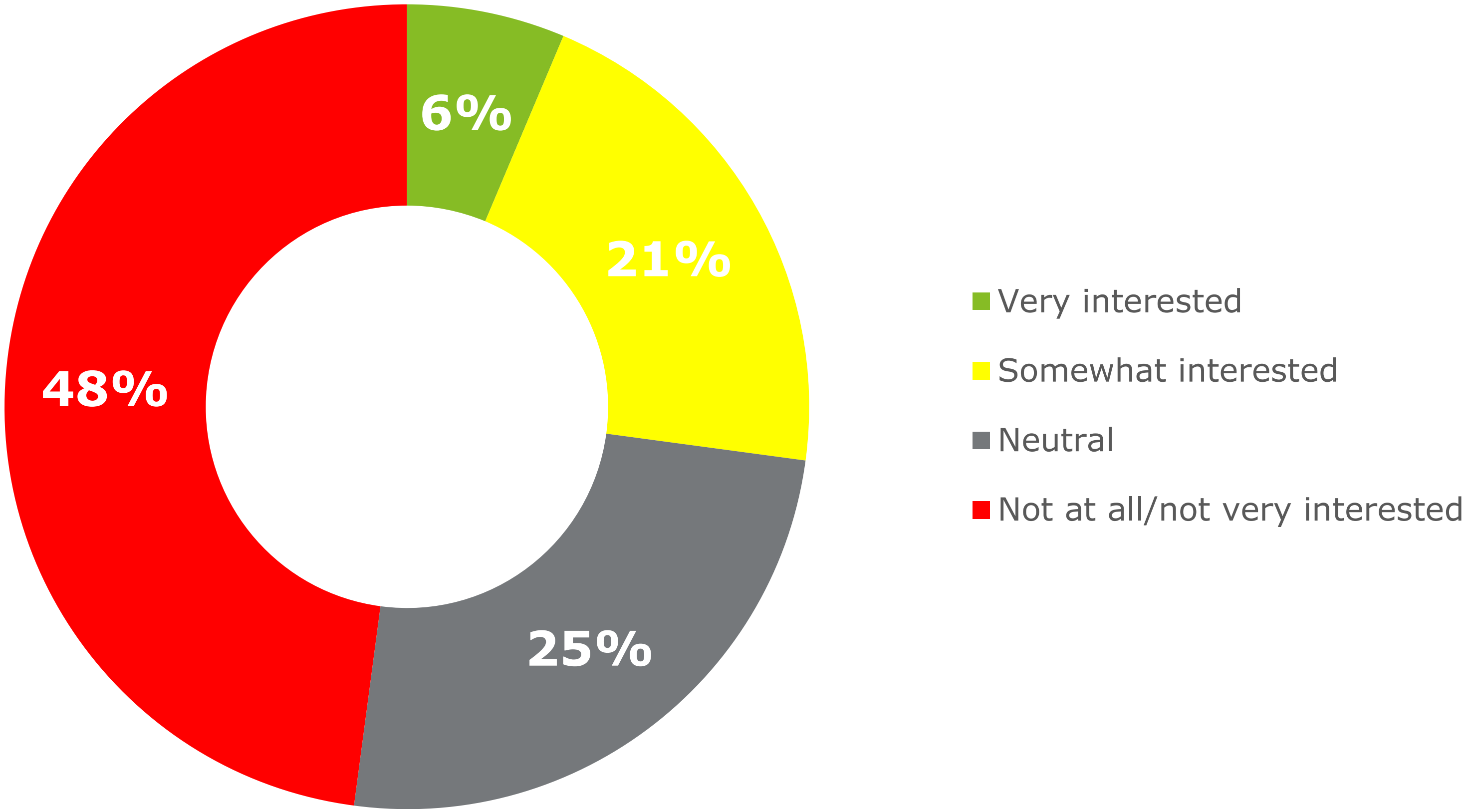


Q47. If you had the option to acquire your next vehicle directly from the manufacturer (via online process), how interested would you be?
Sample size: n=1,287

...and interest in even lower to buy from an online retail website

27% of the consumers are somewhat or very interested, but 48% are not at all interested in acquiring their next vehicle via a retail site

How interested are consumers in buying a vehicle from an online retail site?



Q48. If you had the option to acquire your next vehicle through an online retail website (e.g., Amazon), how interested would you be?

Sample size: n=1,287

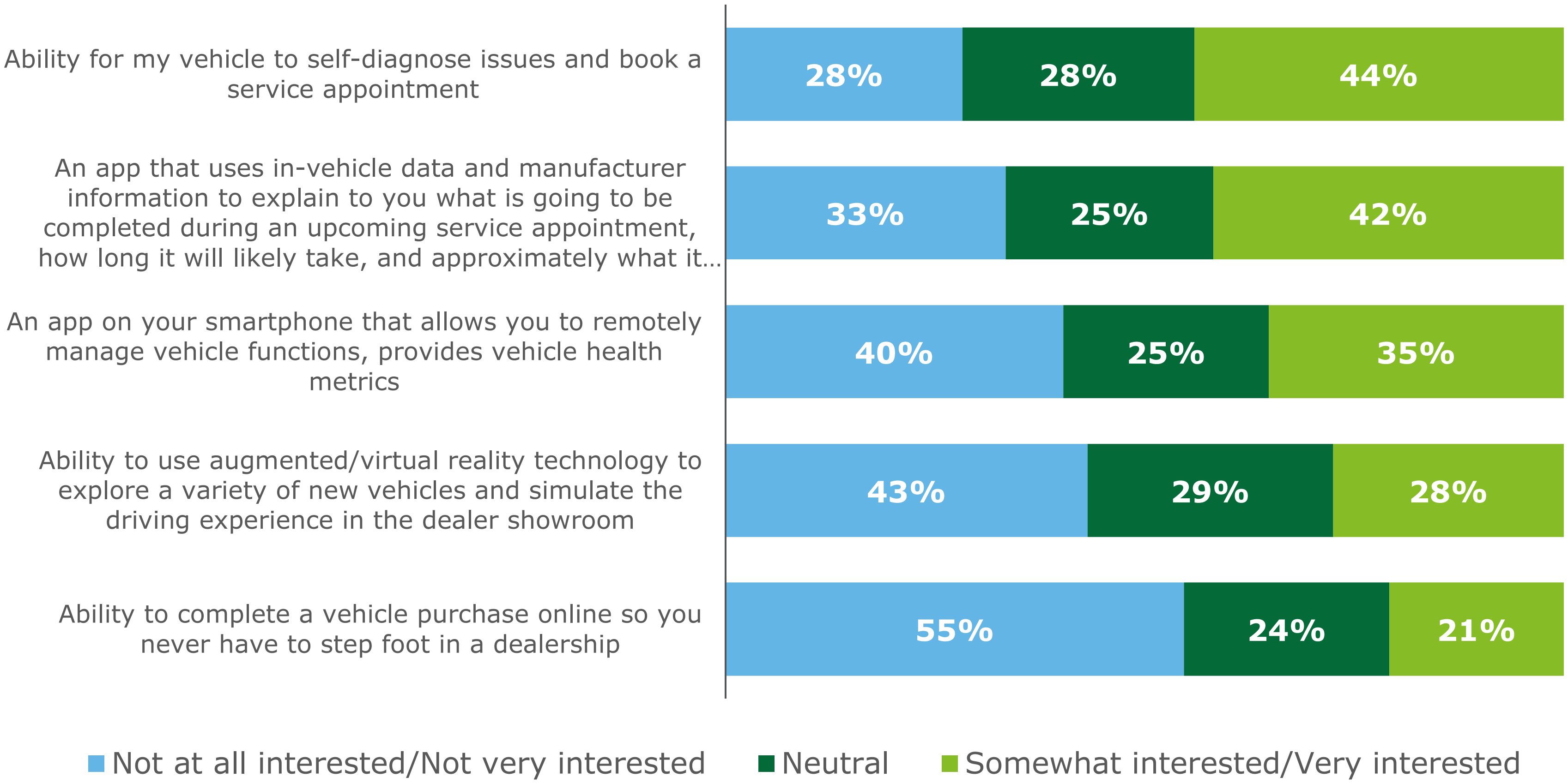
Sample size – [N= 1,513]

Testing some forward-looking tools and scenarios

Consumer desire for a hassle free service experience

More than 4 out of 10 consumers are interested in technology that makes the service experience easier

Consumer opinions on futuristic scenarios

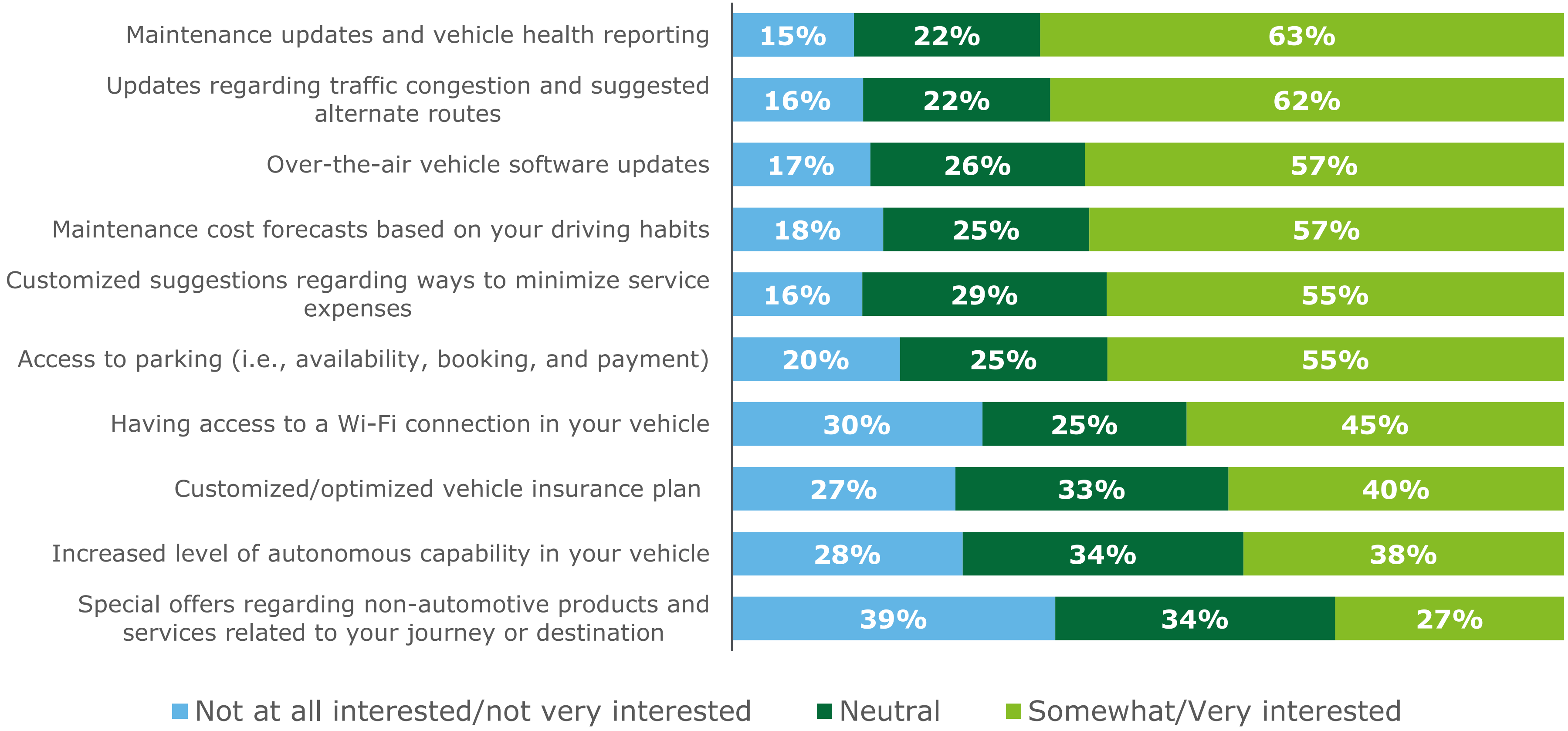


Q44. How interested would you be in each of the following scenarios?
Sample size: n=1,029

Consumers most interested in maintenance and traffic updates

At least 60% of consumers are somewhat/very interested in benefits such as maintenance and traffic updates

Consumer opinions on benefits of connected vehicles



Q50. As vehicles become more and more connected via the Internet, how interested are you in the following benefits if it meant sharing the operational data your vehicle collects with the manufacturer and/or third parties?

Sample size: n=1,287

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