High performance. Delivered.

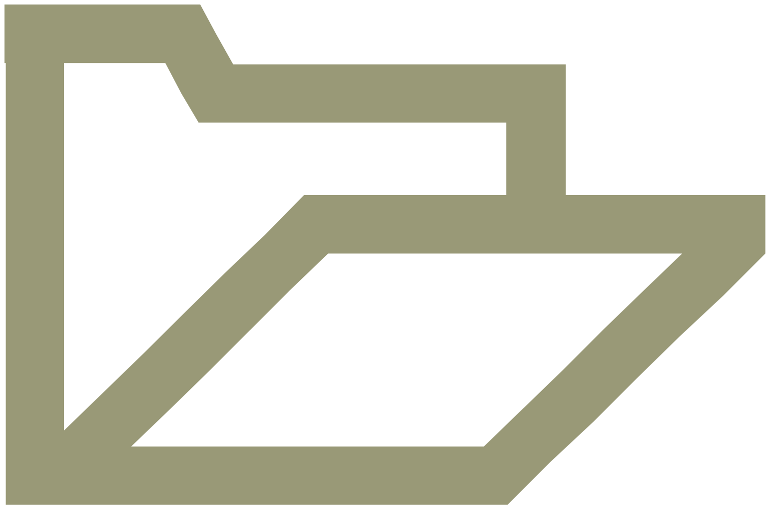
Embedded Software Consumer Pulse Survey

Overall survey results presentation

Accenture Research, January 2011

Agenda

- **Research methodology**
- Key findings
- Detailed survey results
- Appendix



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Survey Methodology

- **2006** individuals in **2 countries** surveyed during November and December 2010
- Quantitative survey with a sample representative of the general population in every country
- Approx. 15 minutes survey, conducted online in English
- Data collection completed for Accenture by an external market research agency
- The report is presenting the overall results of the survey with some indication in the notes when there are differences by age. Country results are presented in a separate report.

Interviews by country

COUNTRIES	
US	1005
UK	1001
Total sample	2006

Repartition by gender, age, income

AGE	Total sample	US	UK
18-24 years	12%	13%	11%
25-34 years	17%	18%	17%
35-44 years	20%	20%	20%
45-54 years	18%	19%	17%
> 55 years	33%	30%	36%

GENDER	Total sample	US	UK
Men	49%	49%	48%
Women	51%	51%	52%

INCOME	Total sample	US	UK
Low	53%	54%	53%
High	47%	46%	47%

Accenture Consumer pulse survey on embedded software, 2010

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Key findings

- **Consumers in the US and UK are experiencing embedded software related frustrations with devices/appliances/machines they use frequently**
  – Overall, half of the respondents experienced some frustration with at least one of their more frequently used device/appliance/machine in the last 6 months
  – Device crashing (i.e. device freezing, not responding, and needing to be restarted) is by far the most important cause of frustration across devices for 39% of respondents (that is twice as much as other causes) and 49% of 18-24 years. Among those who experienced device crashing, the majority (58%) indicated they faced this situation frequently in the last 6 months
  – Over one quarter of respondents feel frustrated when using their mobile phone applications (whish it could do more things automatically)

- **Consumers in the US and UK are experiencing frustrations in their every day life that could be eased with innovative solutions**
  – A large share of respondents are experiencing frustrations in their every day life:
    - They feel they pay too much for electricity compared to their consumption (76% completely/somewhat agree)
    - They feel that what they pay for car insurance could be optimized compared to how and when they drive every month (73% completely/somewhat agree)
    - They are frustrated by public transportation lack of information about traffic and potential delays (62% completely/somewhat agree)
    - They feel unsafe or stressed while driving on the road when they are tired (56% completely/somewhat agree)
    - They feel that whenever they need maintenance or repair services for their household appliances, it’s too late and the appliances cannot be repaired (e.g. TV, washing machine) (48% completely/somewhat agree)

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Key findings

- **Consumers in the US and UK are looking for simple, smarter devices**
  - If they could give some advice to engineers who designed their devices/appliances/machines, a large proportion of consumers would ask them to keep it simple (53%) with a limited number of useful functionalities/applications in their devices (43%).
  - However, a large proportion of respondents would just wait for the next great generation of device (53%), especially younger generations (59% of 18-24 and 57% of 25-34)

- **In uncertain times, consumers in the US and UK are showing appetite in using new innovative solutions with tangible benefits (such as cost saving)**
  - There is a high interest in using innovative solutions such as :
    - Energy efficiency solutions: would allow electricity utility to regulate/limit the use of some major appliances at specific time of the day to help pay less for electricity (73% of very/somewhat interested to use, with 31% of very interested)
    - Smart home appliances : e.g. washing machine/TV set than can be diagnosed remotely and periodically to prevent maintenance and repair with a field technician (66% of very/somewhat interested to use)
    - A car sensor that would record the distance travelled during the month and driving quality to optimize car insurance premium (63% of very/somewhat interested to use)
    - A car sensor/device able to monitor one's level of concentration and to automatically take evasive action when accidents are about to happen (62% of very/somewhat interested to use)
  - Almost half of the respondents indicated they would be comfortable using a driverless car (i.e. autonomous computer-driven vehicles where you just get in, say your destination and the vehicle gets you there without any other action needed from you).

- **Half of respondents would be ready to pay extra to get smarter devices/appliances/machines i.e. which could do more things automatically & autonomously**
    - On average, 20% of respondents would be ready to pay up to 5% and 17% up to 10% of the price to get smarter devices/appliances/machines

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- Key findings
- **Detailed survey results**
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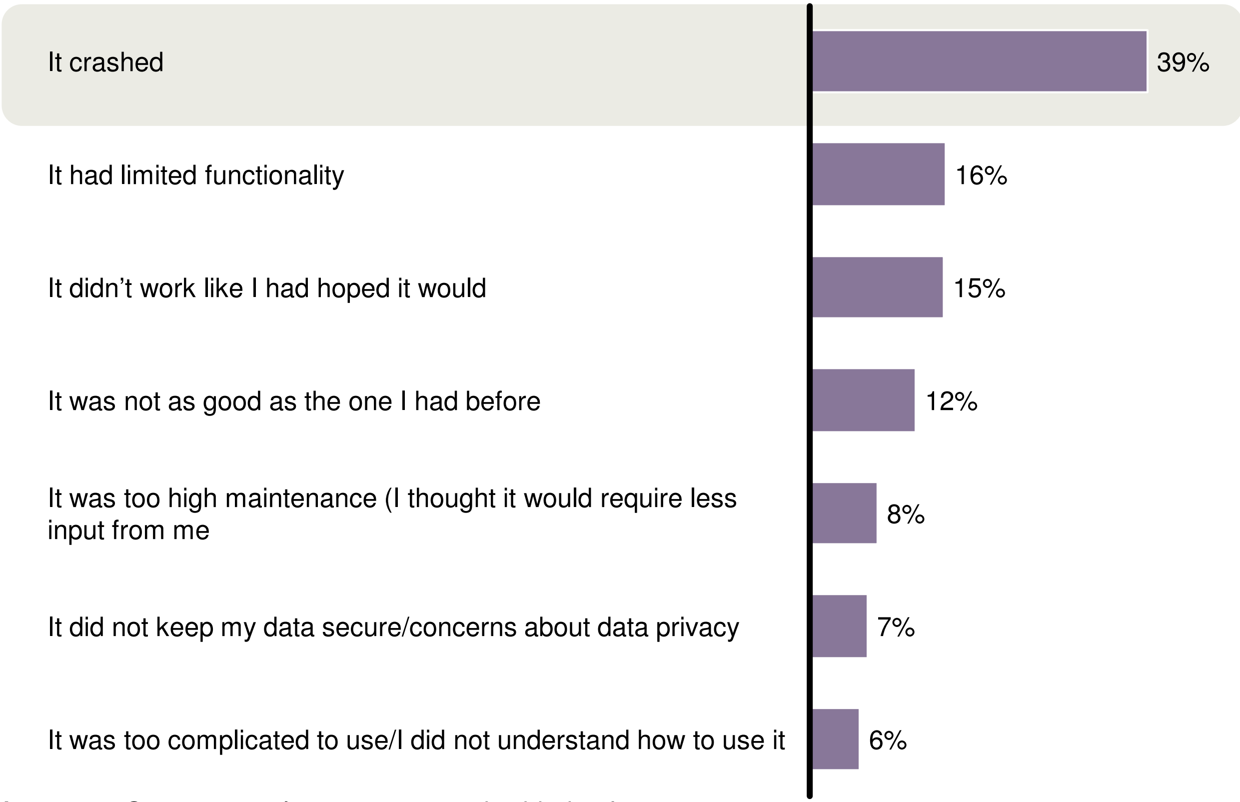
Overall, half of the respondents experienced some frustration with at least one of their more frequently used device/appliance/machine in the last 6 months, mainly due to device crashing

Overall results

What main frustration/problem have you encountered while using these devices/appliances/machines in the last 6 months? Multiple answers

Main frustrations encountered across more frequently used devices in the last 6 months



51% of respondents experienced some frustration with at least one of their more frequently used device/appliance/machine in the last 6 months

Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q2

Sample Base: Total Sample

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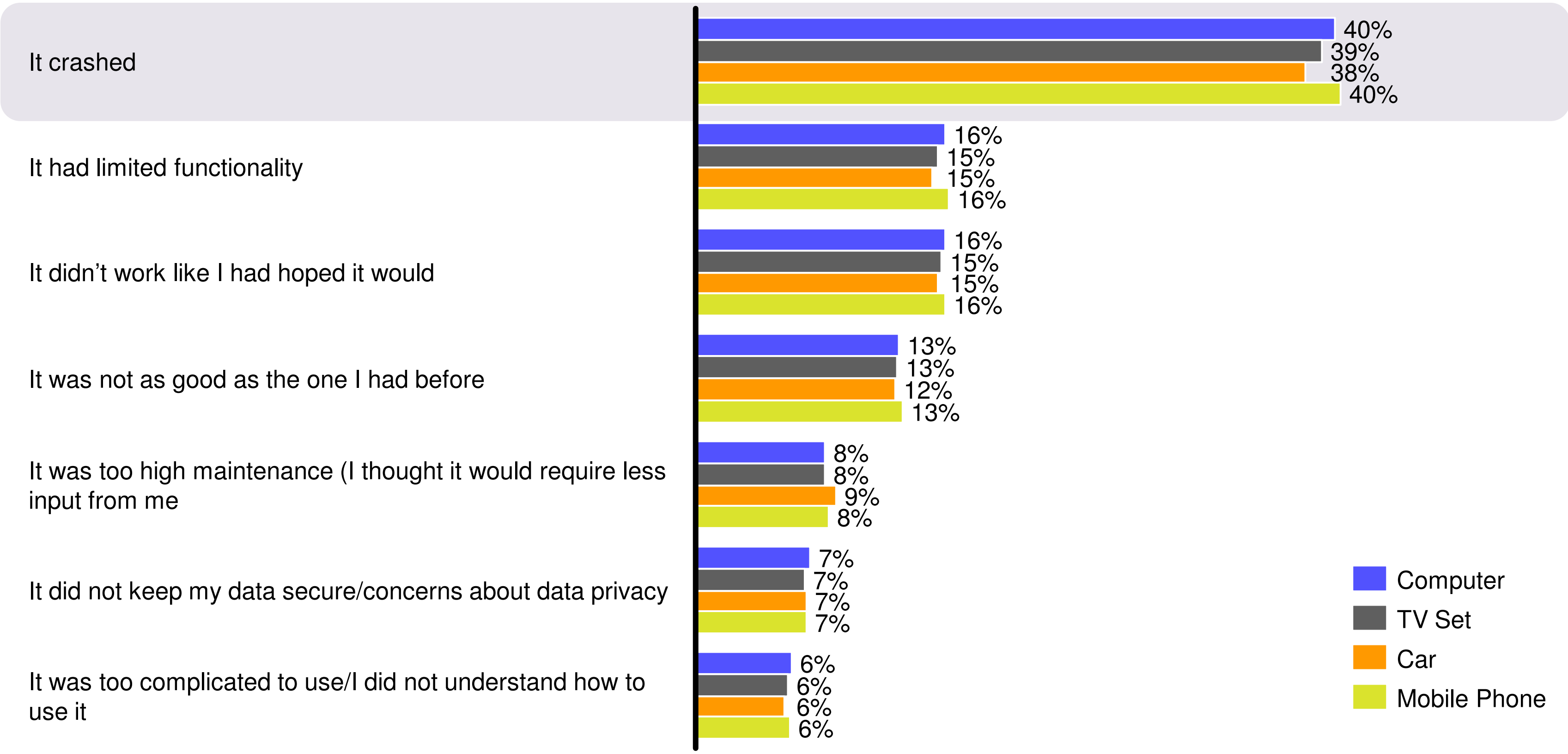
A closer look by more frequently used device shows that crashing is the main frustration experienced across the board

Focus on more frequently used devices

What main frustration/problem have you encountered while using these devices/appliances/machines in the last 6 months? Multiple answers across devices

Main frustrations encountered across 3 more frequently used devices in the last 6 months



Accenture Consumer pulse survey on embedded software, 2010

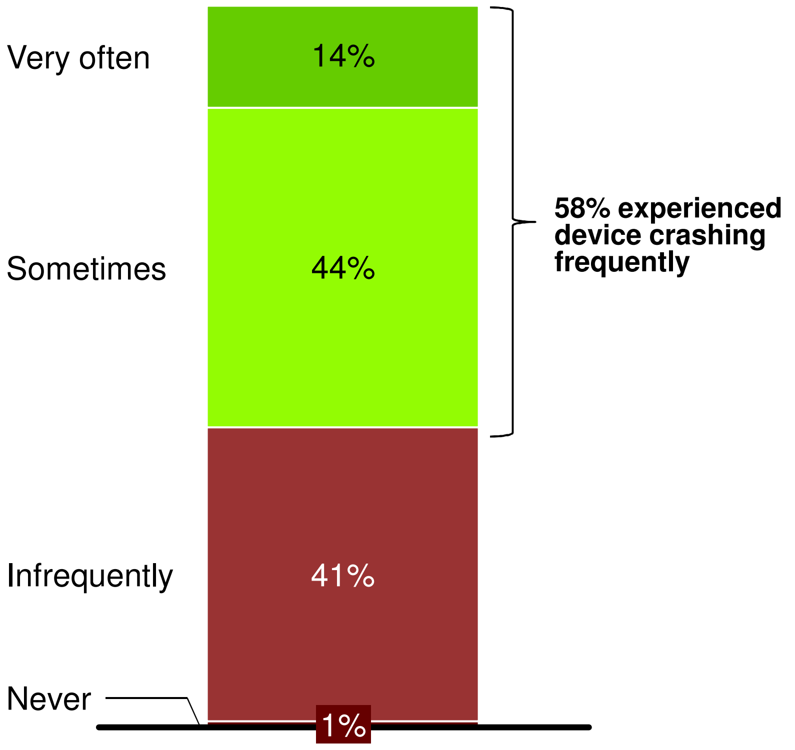
Embedded Software: Q2

Sample Base: Total Sample

Among respondents who experienced device crashing, the majority indicated they faced this situation frequently in the last 6 months

Overall results

How many times have you faced a situation where some of your devices/appliances/machines have "crashed" (i.e. device froze, stopped responding, and needed restarting) in the last 6 months?



Accenture Consumer pulse survey on embedded software, 2010

Sample Base all respondents who experienced a crash with at least one device n=781

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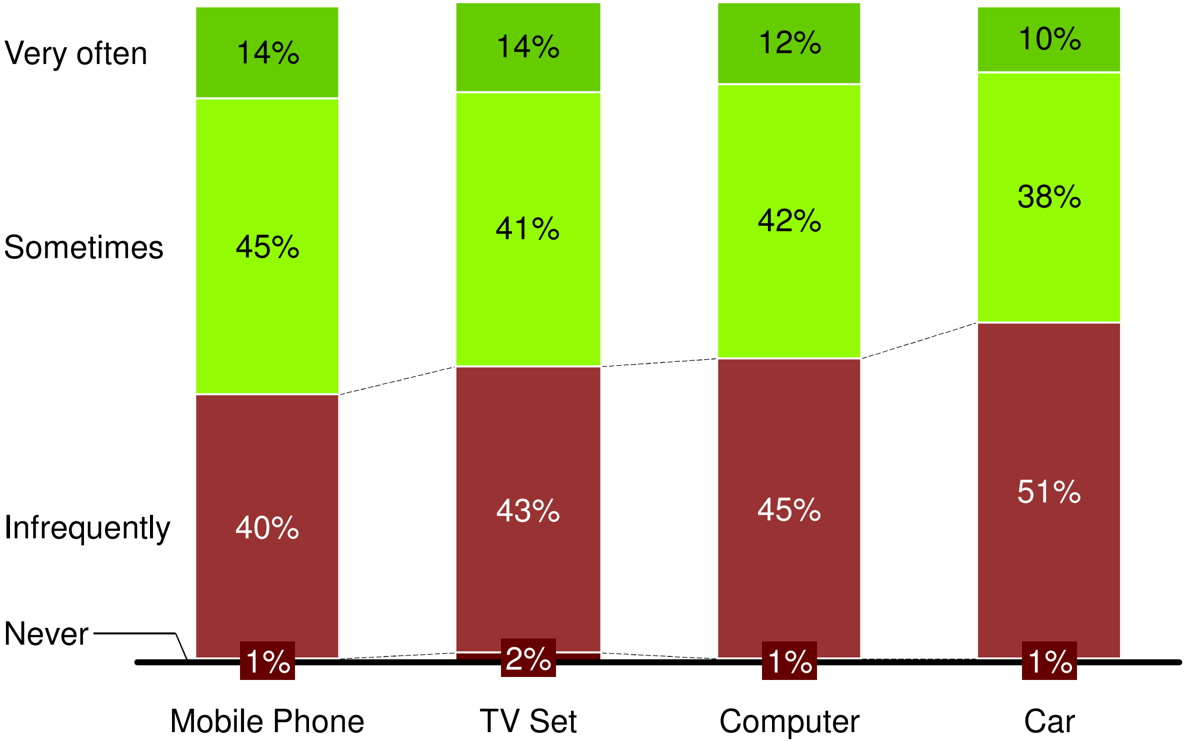
Respondents experienced device crashing more often with mobile phones when compared to TV, computers and cars

Focus on more frequently used devices

How many times have you faced a situation where some of your devices/appliances/machines have "crashed" (i.e. device froze, stopped responding, and needed restarting) in the last 6 months?



Accenture Consumer pulse survey on embedded software, 2010

Sample Base all respondents who experienced a crash

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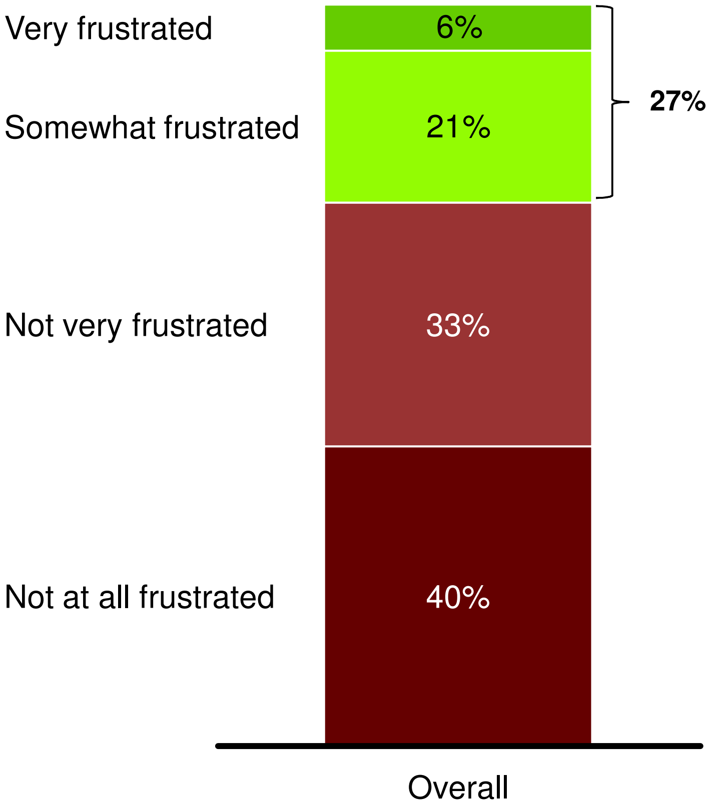
Over one quarter of respondents feel frustrated when using their mobile phone applications (i.e. wish they could do more things automatically)

Overall results

More specifically about your mobile phone, how frustrated do you feel in using applications? (i.e. you wish it could do more things automatically)



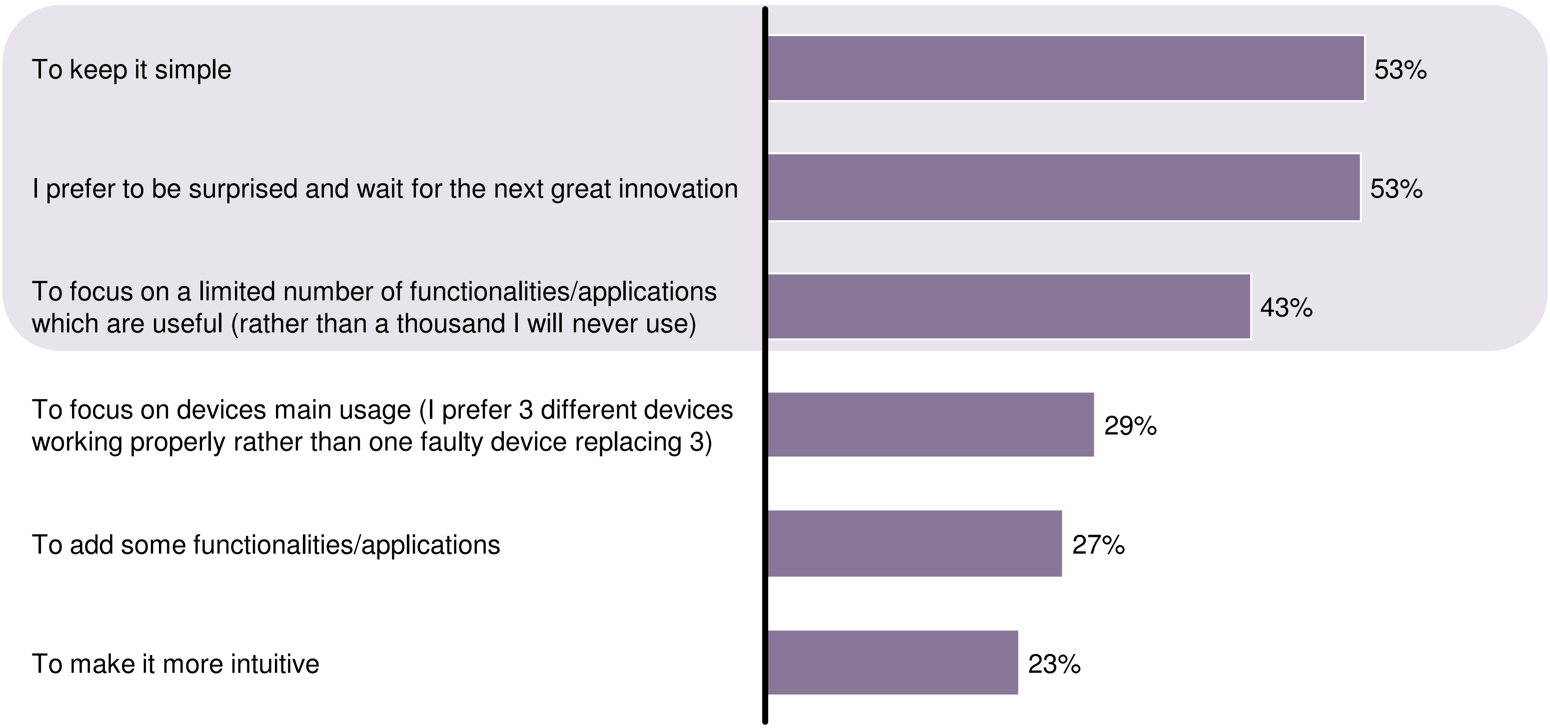
Accenture Consumer pulse survey on embedded software, 2010

The majority of consumers are asking for simplicity and a limited number of useful functionalities/applications in their devices. Respondents are also open for the next great generation of device

Overall results

What would be the top 3 advices you would give to engineers who designed your devices/appliances/machines if you could? *Select for each of the following devices what you would tell them*

Top 3 advices across three more frequently used devices in the last 6 months



Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q5

Sample Base: Total Sample

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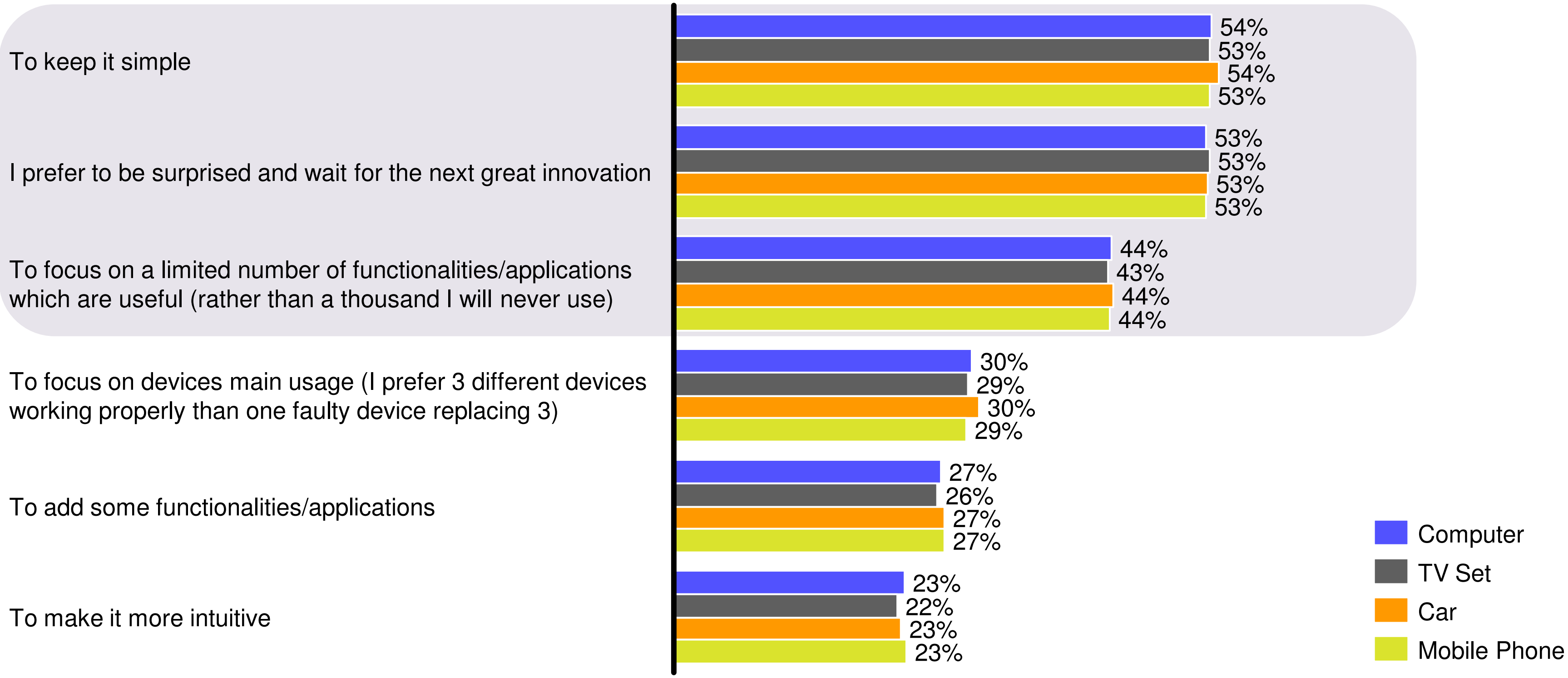
This is also true across more frequently used devices, appliances and machines

Focus on more frequently used devices

What would be the top 3 advices you would give to engineers who designed your devices/appliances/machines if you could? *Select for each of the following devices what you would tell them*

Top 3 advices by type of device



Accenture Consumer pulse survey on embedded software, 2010

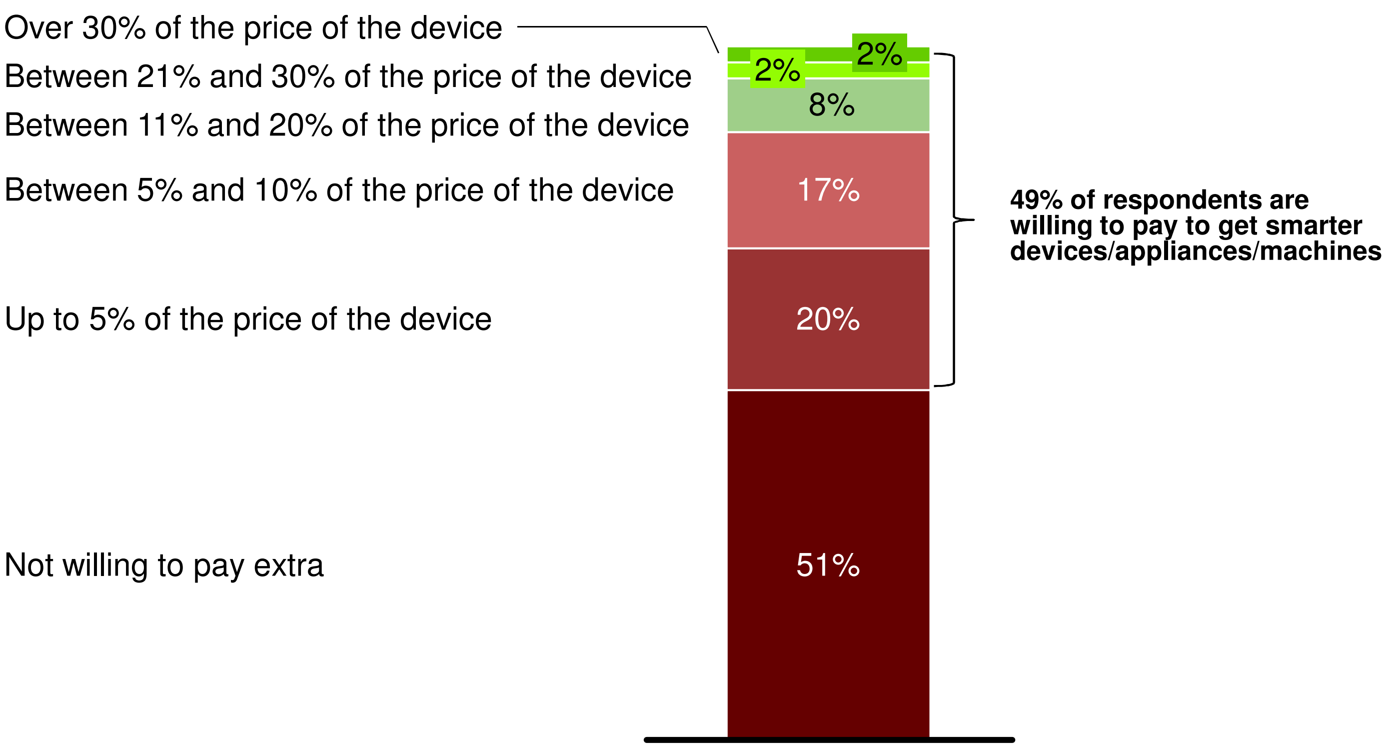
Embedded Software: Q5

Sample Base: Total Sample

Overall, half of respondents would be ready to pay extra to get smarter devices/appliances/machines (i.e. which could do more things automatically & autonomously)

Overall results

How much would you be willing to pay to get smarter devices/appliances/machines
(i.e. which could do more things automatically & autonomously)?



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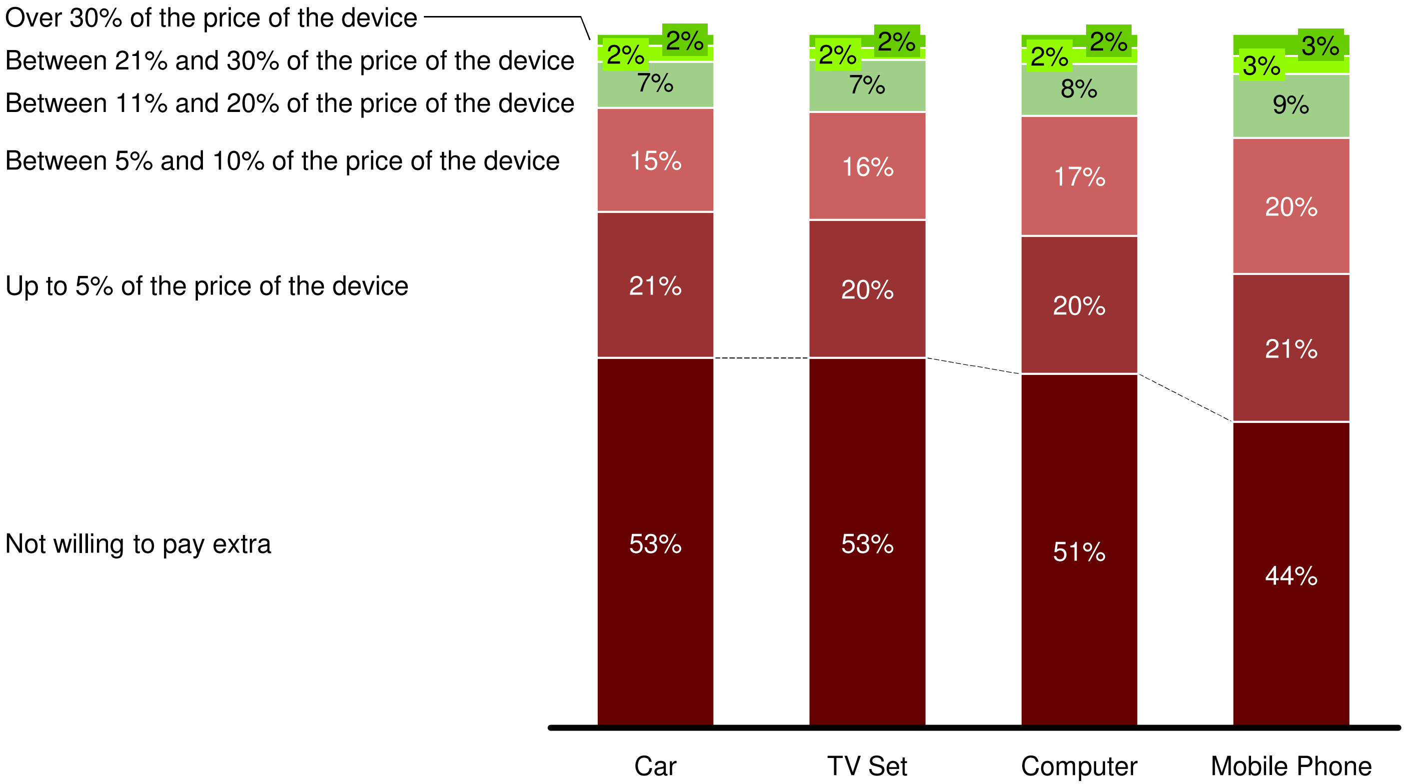
20% of respondents would be ready to pay up to 5% of the price to get a smarter car, TV, computer or mobile phone

Focus on more frequently used devices

How much would you be willing to pay to get smarter devices/appliances/machines
(i.e. which could do more things automatically & autonomously)?



A higher proportion of respondents are willing to pay to get a smarter mobile phone

Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q6

Sample Base: Total Sample

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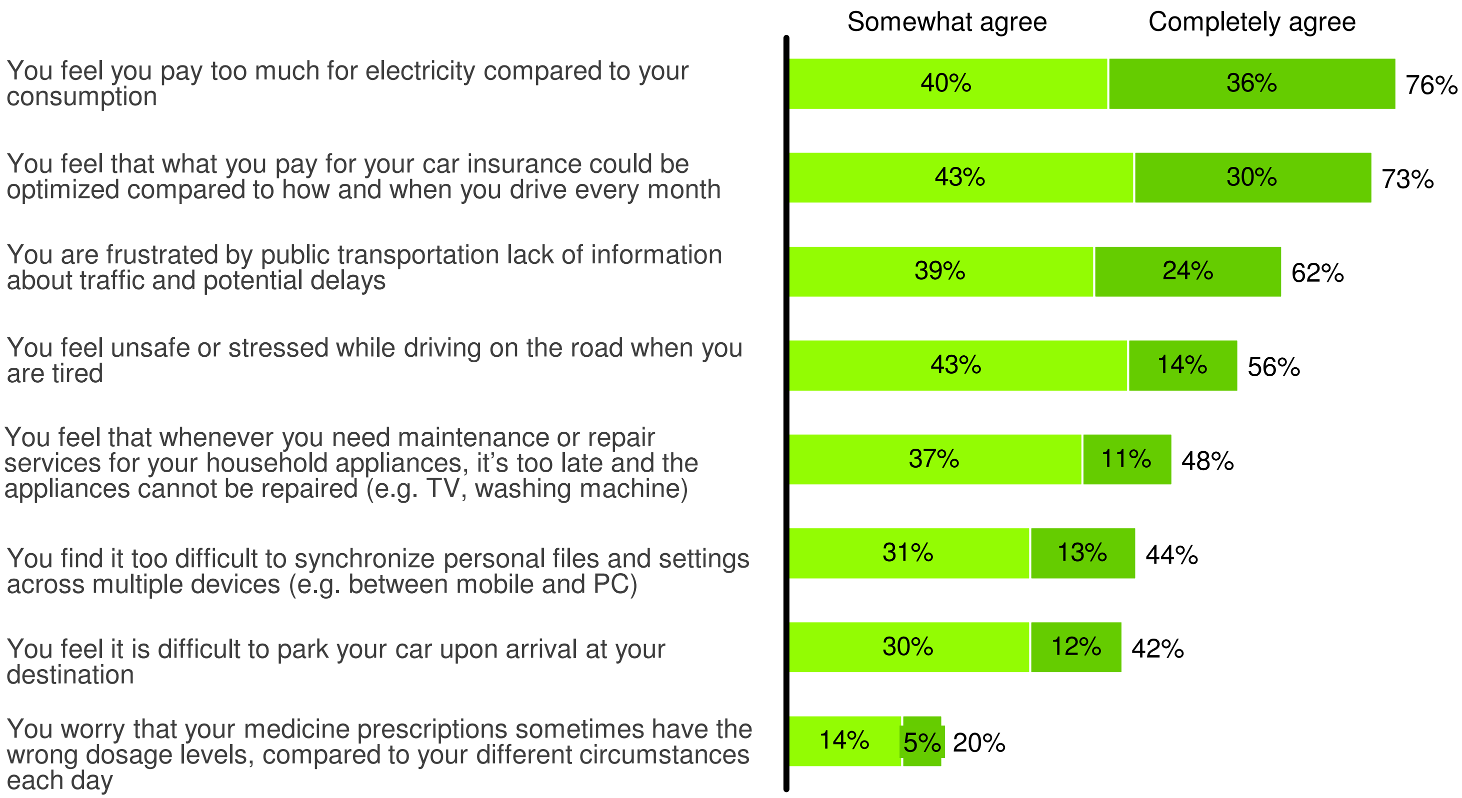
A large share of respondents are experiencing frustrations in their every day life regarding electricity bill, motor insurance, public transportation or homes appliances

Overall results

Please indicate to what extent you agree or disagree with the following statements about your everyday life:



Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q7

Sample Base: Total Sample (removed not applicable)

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As a result, there is a high interest in using innovative solutions such as energy efficiency solutions, smart home appliances and car sensors

Overall results

Please indicate your level of interest in using each of the following innovative solutions:

An energy efficiency solution that would allow your electricity utility to regulate/limit the use of some major appliances at specific time of the day (such as at night or during workdays where you are not home) and help you pay less for electricity

Home appliances (e.g. washing machine/TV set) than can be diagnosed remotely and periodically to prevent maintenance and repair with a field technician

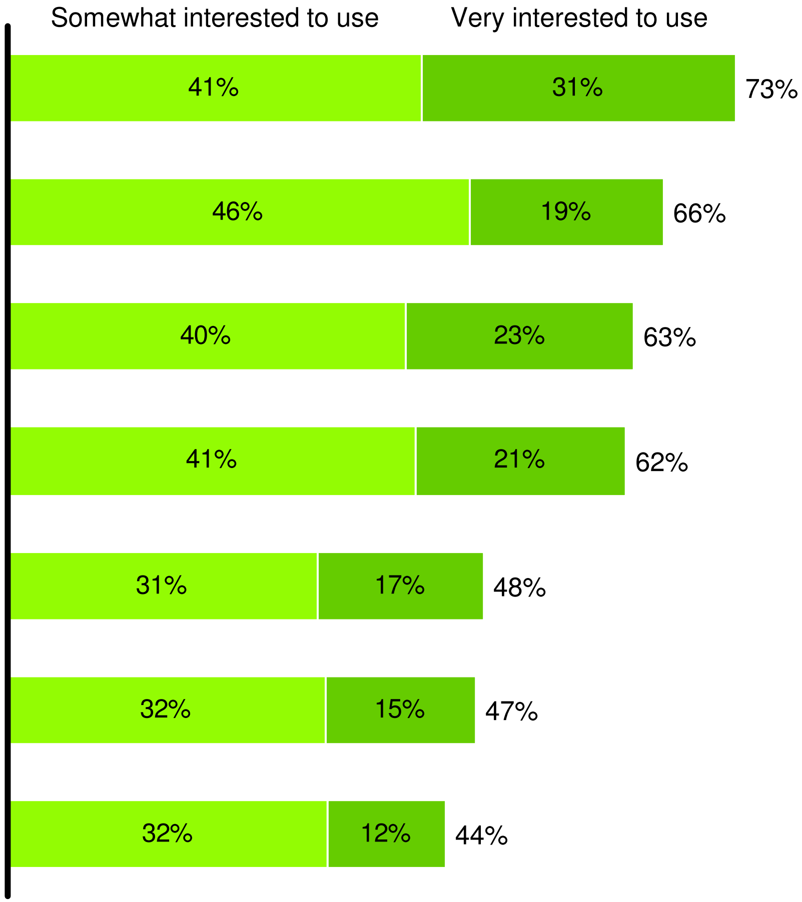
A sensor in your car that would record the distance you actually travel during the month and the quality of your driving that can be used to optimize your car insurance premium

A sensor/device in your car able to monitor your level of concentration and to automatically take evasive action when accidents are about to happen

Onboard GPS navigation in your car that would allow you to reserve a parking space while on route to your destination

Receive automatically from your public transportation some recommendation on your mobile about alternative journeys you can take when there are some anticipated delays on your traditional journey

Wear a sensor the size of a regular phone, in your pocket to continuously report changes in your health conditions to physicians (for example when coming out of a surgery), who can adjust treatments when necessary



Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q8

Sample Base: Total Sample (removed not applicable)

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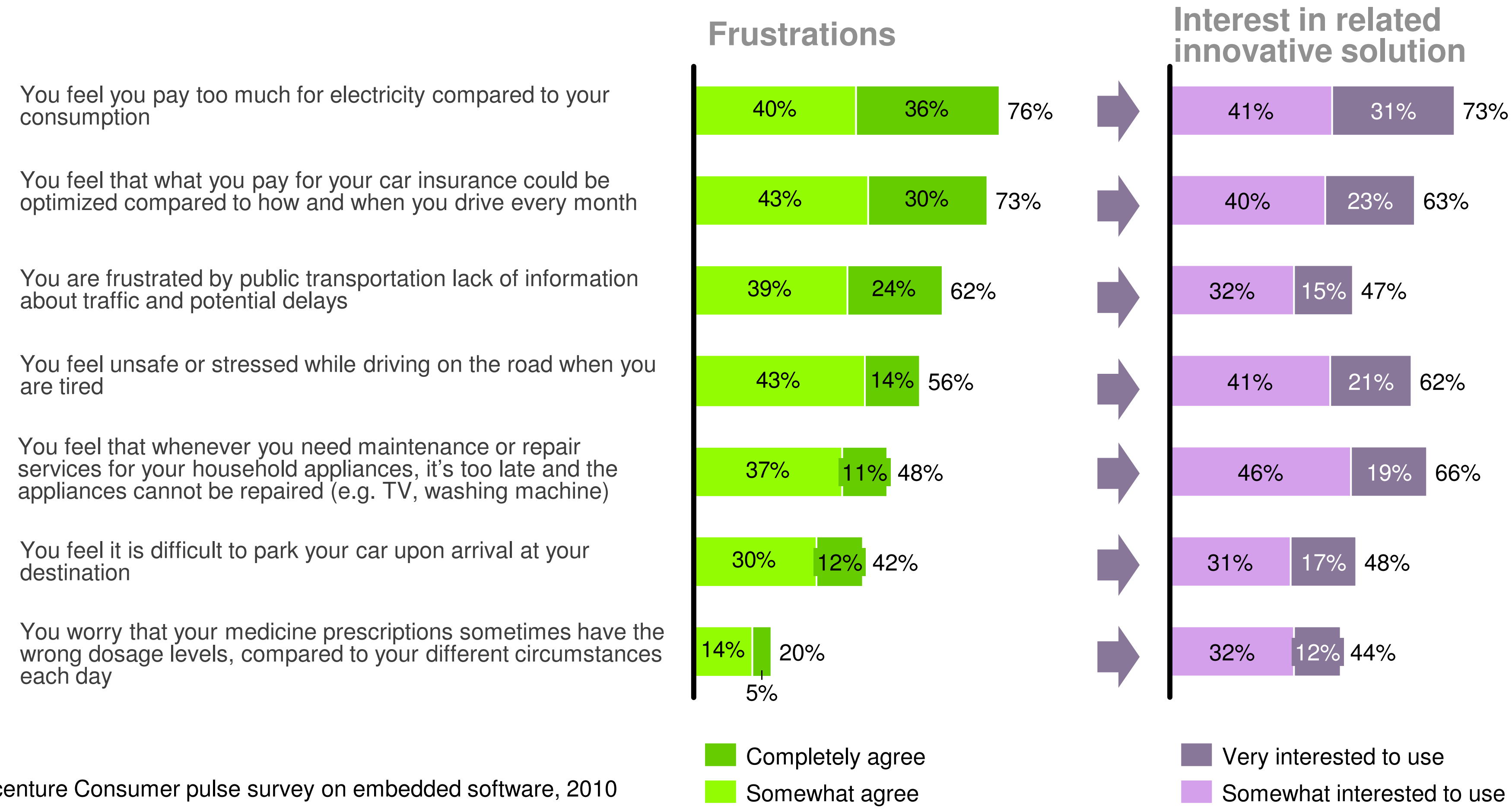
In some instances innovative solution get higher scores than the frustration itself

Overall results

Please indicate to what extent you agree or disagree with the following statements about your everyday life:



Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q7

Sample Base: Total Sample (removed not applicable)

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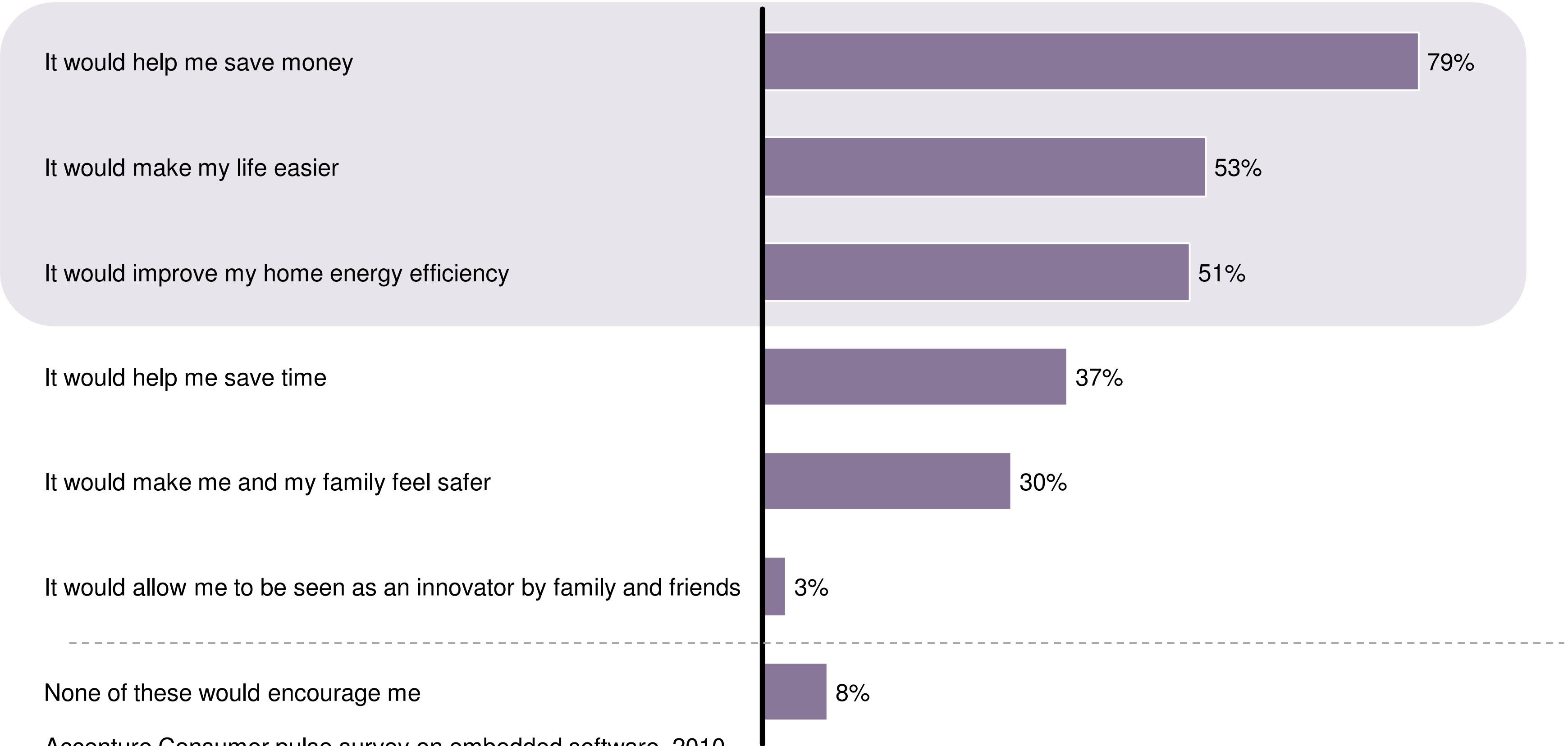
Respondents would be encouraged to use these innovations if the solutions would help them save money, make their life easier and if it would improve their home energy efficiency

Overall results

Which factor would most encourage you to get and use one or more of the innovative solutions above? *Please check the top 3 most important factors*

Top 3 most important factors encouraging the use of one or more innovative solutions



Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q9

Sample Base: Total Sample

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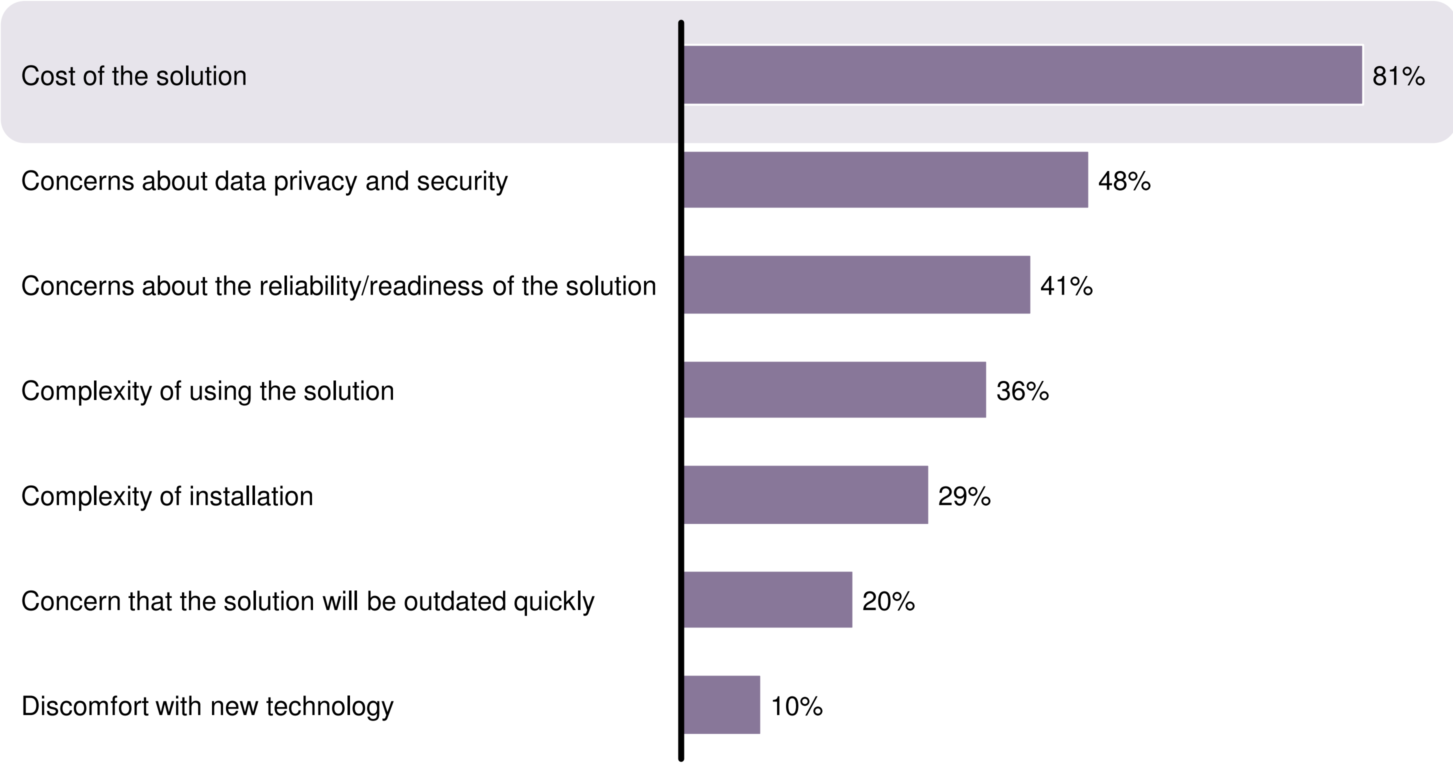
On the contrary, the cost of the solutions would be the main factor discouraging respondents from using innovative solutions followed by concerns about data privacy and security

Overall results

Which factors would discourage you from getting and using one or more of these innovative solutions? *Please check the top 3 most important factors*

Top 3 most important factors discouraging the use of one or more innovative solutions



Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q10

Sample Base: Total Sample

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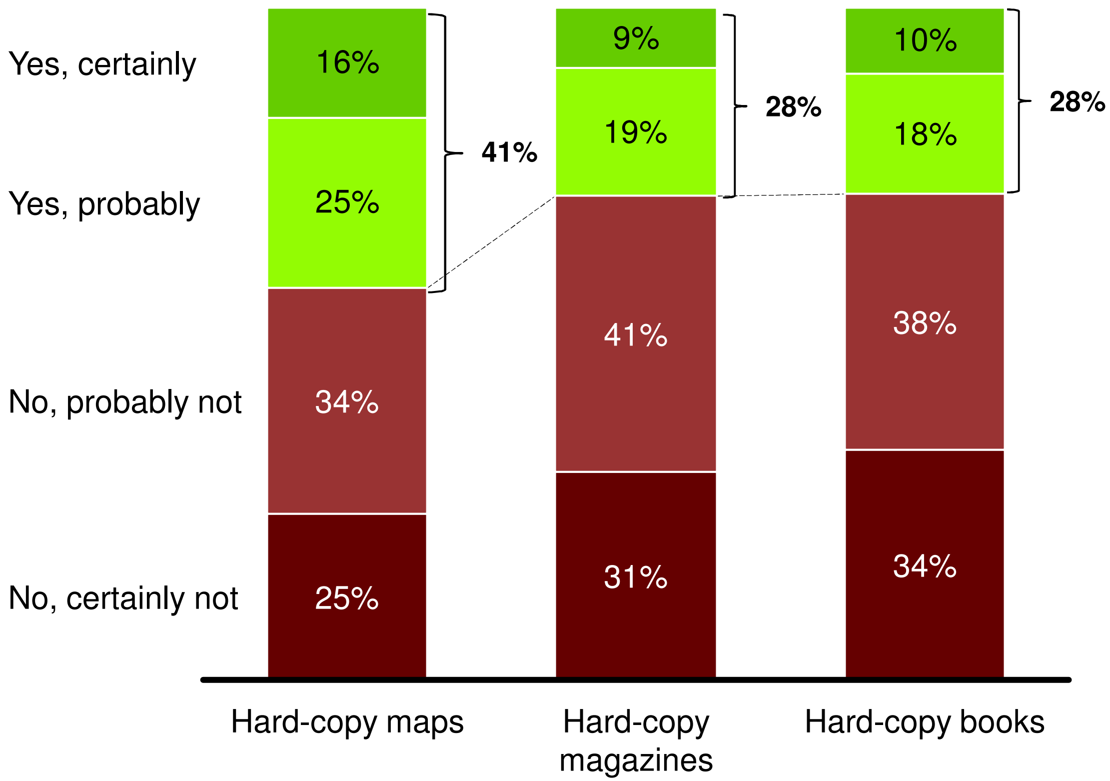
In the wake of the emergence of devices such as eBook readers or tablet PC, a higher proportion of respondents expect reading fewer hard copy maps than magazines or books in the next 2-3 years

Overall results

In the wake of the emergence of devices such as eBook readers or tablet PC (e.g iPad), do you expect reading fewer hard-copy books, magazines and maps in the next 2-3 years?



Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q11

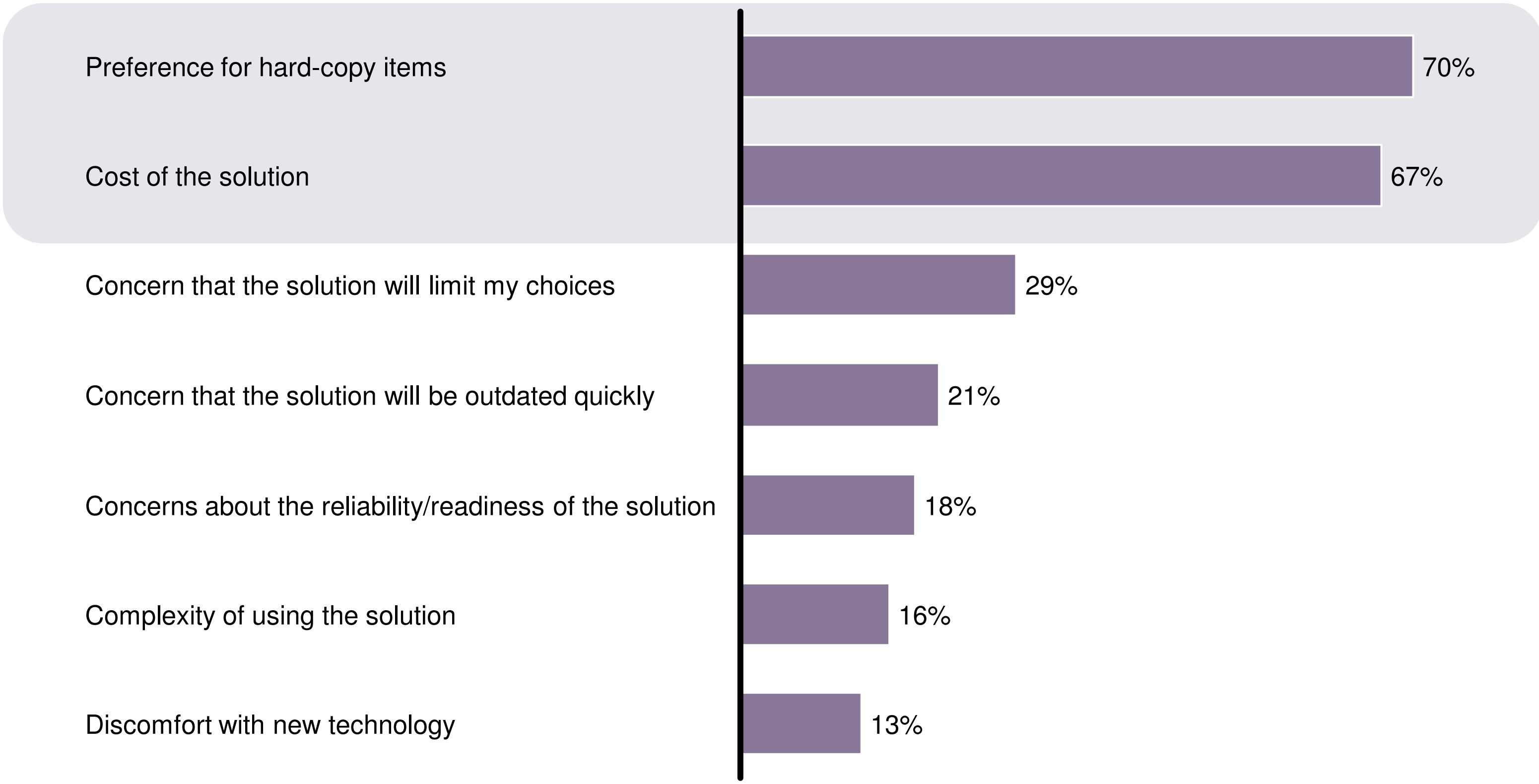
Sample Base: Total Sample

Main reasons for not using such devices to read books, magazines or maps lie in the fact that there is still a large preference for hard-copy items and that respondents feel the cost of these new devices is a barrier

Overall results

What are the top 3 reasons why you do not expect using eBook readers or Tablet PCs to read books, magazines or maps in the next 2-3 years? *Please check the top 3 reasons*

Top 3 reasons for not using eBook readers or Tablet PC to read book, magazines or maps



Accenture Consumer pulse survey on embedded software, 2010

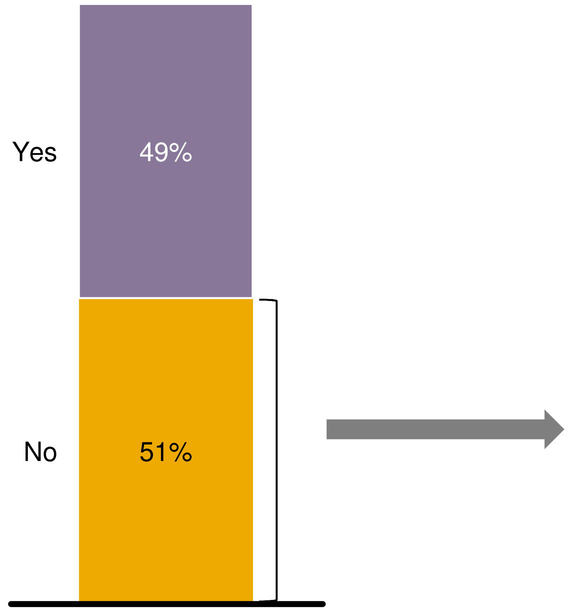
Embedded Software: Q12

Sample Base , all respondents who are not expecting to read fewer hard copies n=1682

Almost half of the respondents indicated they would be comfortable using driverless cars. The other half would more likely use this solution if they could take back control if needed

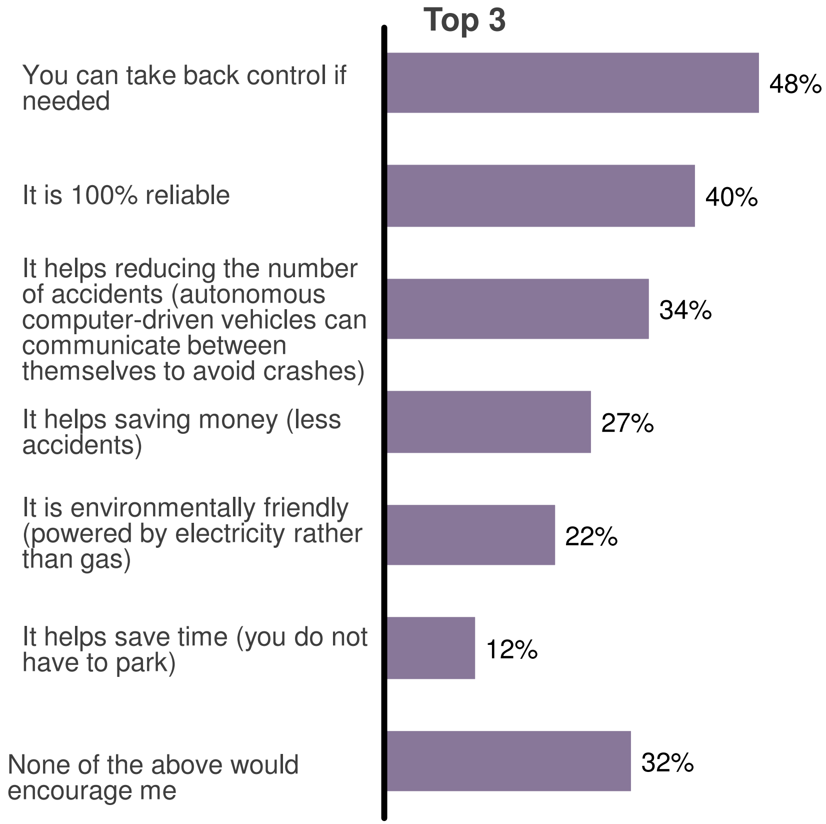
Overall results

In the near future, using driverless cars/autonomous computer-driven vehicles powered by electricity might be possible (i.e. a vehicle where you just get in, say your destination and the vehicle gets you there without any other action needed from you)**; would you be comfortable using this type of vehicle?**



Sample Base n=2006

What would encourage you using driverless cars/autonomous computer-driven vehicles powered by electricity?



Sample Base , all respondents who would not be comfortable using a driverless vehicle n=1023

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Embedded Software: Q13 & Q14

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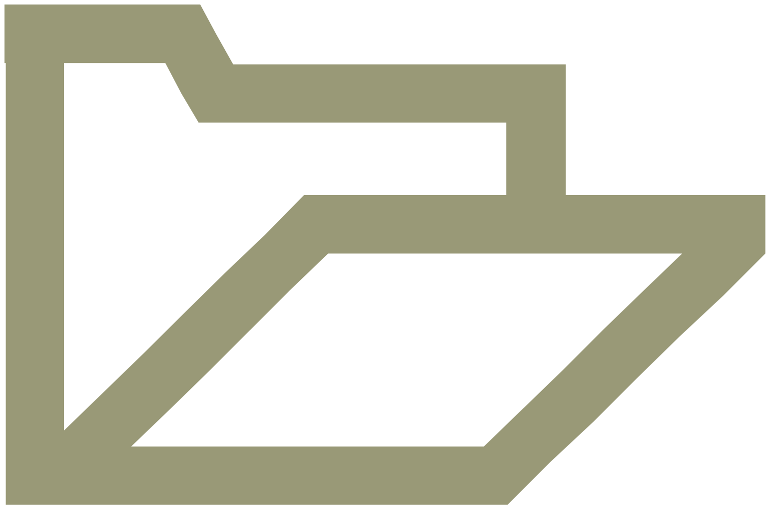
Agenda

- Research context and methodology
- Key findings
- Detailed survey results
- **Appendix**



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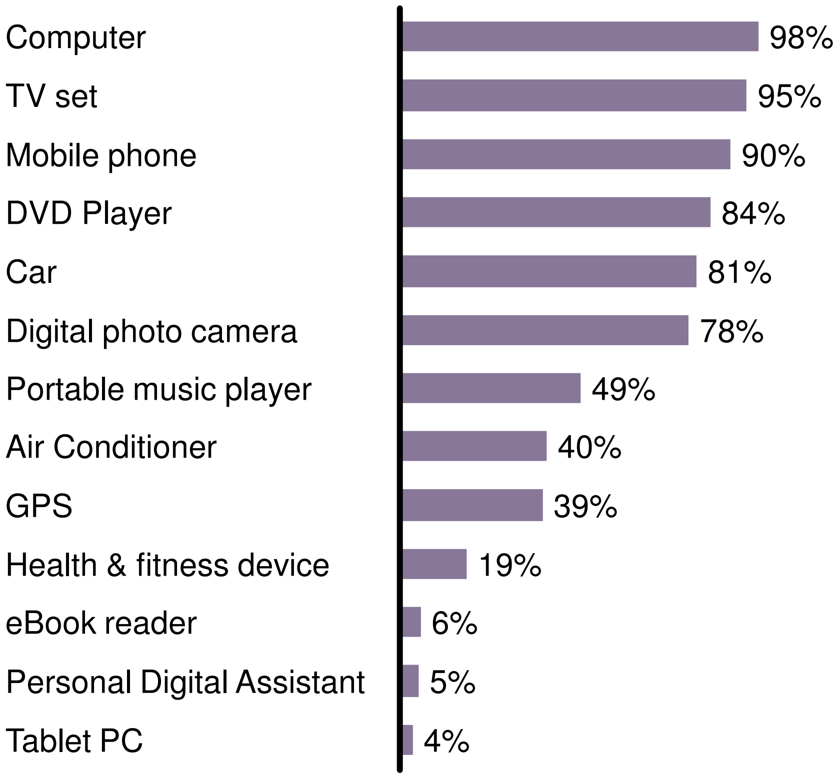
Computers, TVs, cars and mobile phones are the most currently used devices/appliances/machines

Overall results

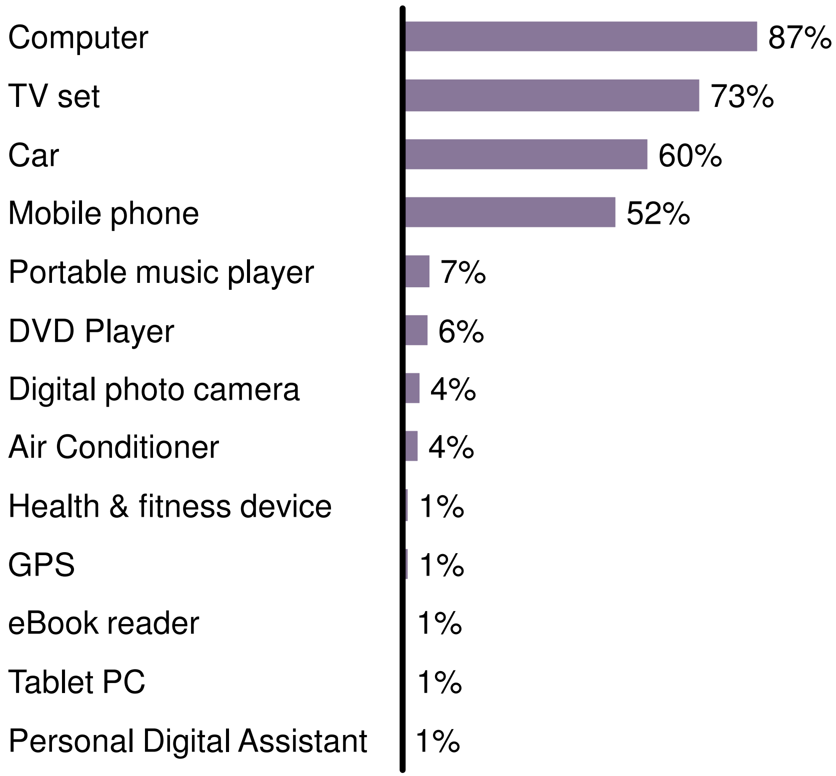
Which of these devices/appliances/machines do you currently use?

Devices usage



Please rank the Top 3 devices/appliances/machines you use more frequently (i.e. at least once a month)

Top 3 most frequently used devices



Accenture Consumer pulse survey on embedded software, 2010

Embedded Software: Q1a

Sample Base: Total Sample