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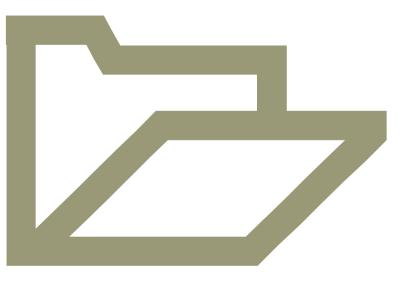
Embedded Software Consumer Pulse Survey Detailed US and UK survey results

Accenture Research, January 2011

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Agenda

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





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 detailed survey results for each country. Overall results are presented in a separate report.

Interviews by country

1005

1001

2006

COUNTRIES

US

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%

Repartition by gender, age, income

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%

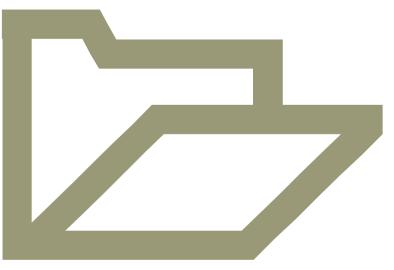
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Key findings

- 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

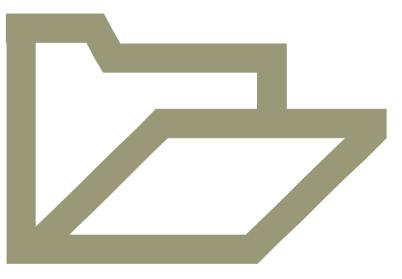
- · Consumers in the US and UK are looking for simple, smarter devices
 - If they could give some advice to engineers who designed their devices/appliances/machines, a large proportion of consumers would ask them to keep it simple (53%) with a limited number of useful functionalities/applications in 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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This is also true across more frequently used devices

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

US UK 35% 44% 34% 35% 43% It crashed 44% 42% 36% 13% 17% 17% 14% It didn't work like I had hoped it would 17% 13% 13% 17% 18% 14% 17% 13% It had limited functionality 18% 14% 18% 12% 14% 11% 14% 11% It was not as good as the one I had before 14% 11% 11% 15% 10% 6% It was too high maintenance (I thought it would require less 11% 6% Computer Computer 10% 6% input from me Car 11% 6% TV Set 9% TV Set 6% Mobile Phone 9% 8% 5% It did not keep my data secure/concerns about data privacy Mobile phone Car 5% 9% 5% 6% 6% It was too complicated to use/I did not understand how to 6% 6% 6% use it 6% 5% 6% Based on number responses averaged

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Embedded Software: Q2



Sample Base: US n=1005 8 UK n=1001

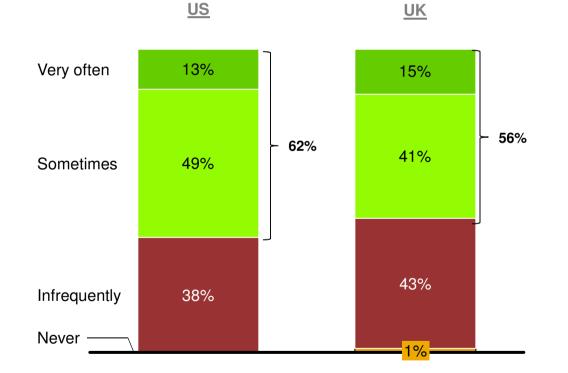
Intelligence. Insight. Impact.

Generally, US respondents have indicated slightly higher instances where devices crashed very often, when compared to the UK respondents



US & UK 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?



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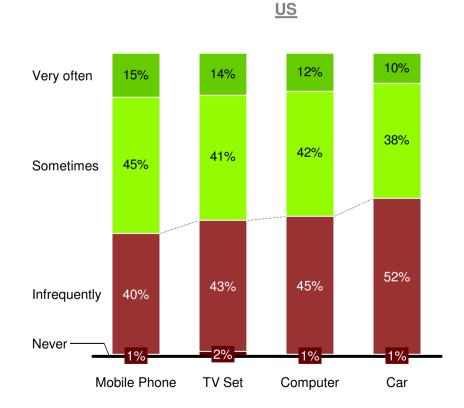
Embedded Software: Q3

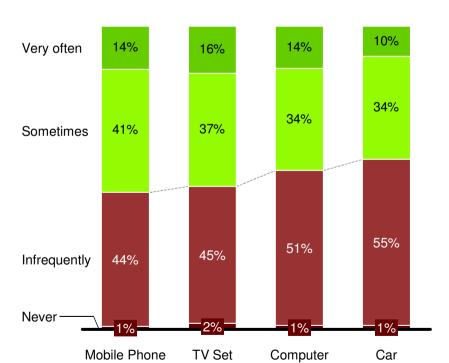
Sample Base: all respondents who experienced a crash with at least one device US n=349 UK n=432 9

Accenture Research Intelligence. Insight. Impact.

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

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?





UK

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Sample Base: all respondents who experienced a crash

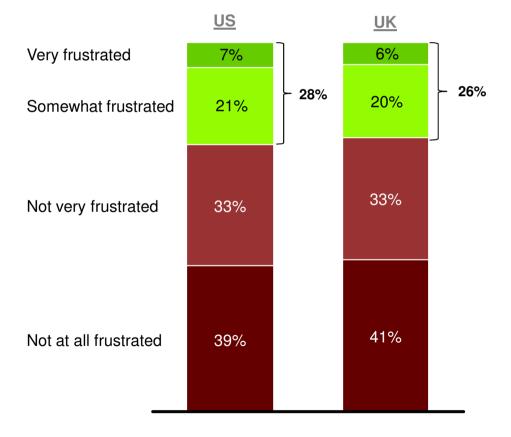


Intelligence. Insight. Impact.

Around one quarter of respondents in the US and UK are feeling frustrated when using their mobile phone applications (i.e. wish they could do more things automatically)

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

US & UK results



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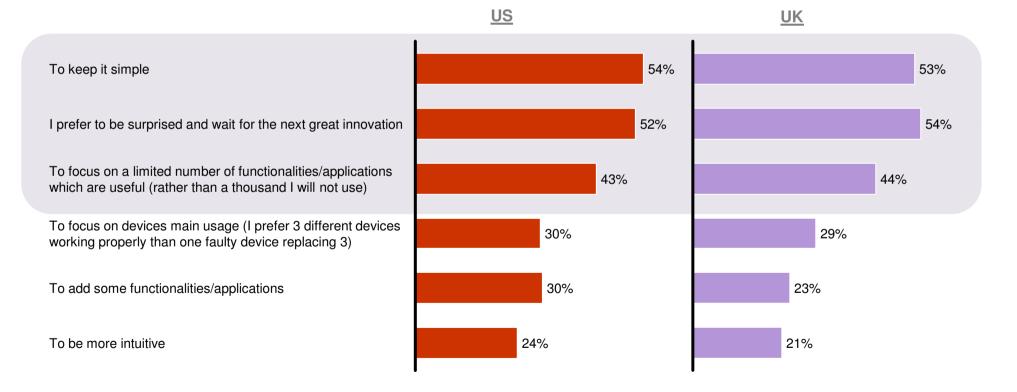
Embedded Software: Q4

Sample Base: All mobile users US n=851 UK n=955

Intelligence. Insight. Impact.

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

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



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Embedded Software: Q5



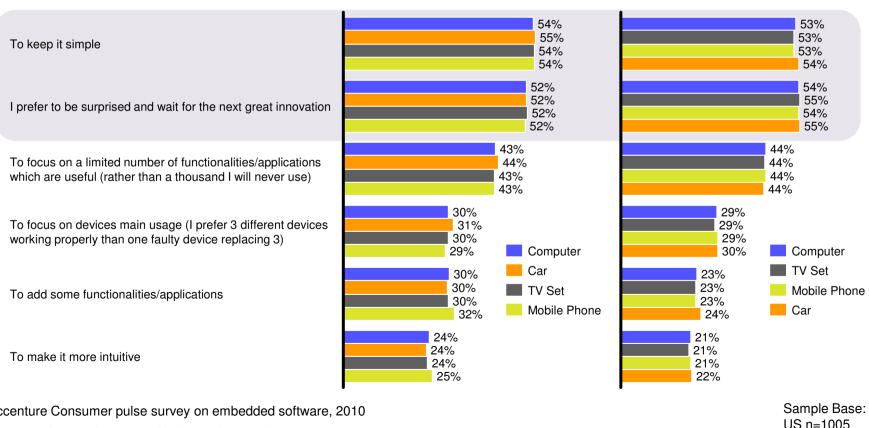
US & UK results

Sample Base: US n=1005 UK n=1001 ¹²

This is true across 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



US

UK

US & UK results

US n=1005 13 UK n=1001

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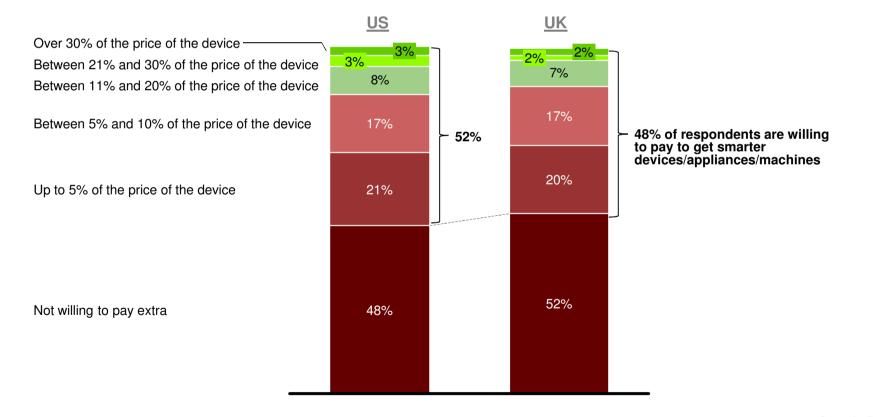
Embedded Software: Q5



Intelligence. Insight. Impact.

In general, US respondents appear slightly more wiling to pay extra to get smarter devices/appliances/machines (i.e. which could do more things automatically & autonomously)

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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Embedded Software: Q6



US & UK results

Sample Base: US n=1005 UK n=1001 ¹⁴

Accenture Research Intelligence. Insight. Impact.

This is especially true for mobile phones and computers

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

US & UK results

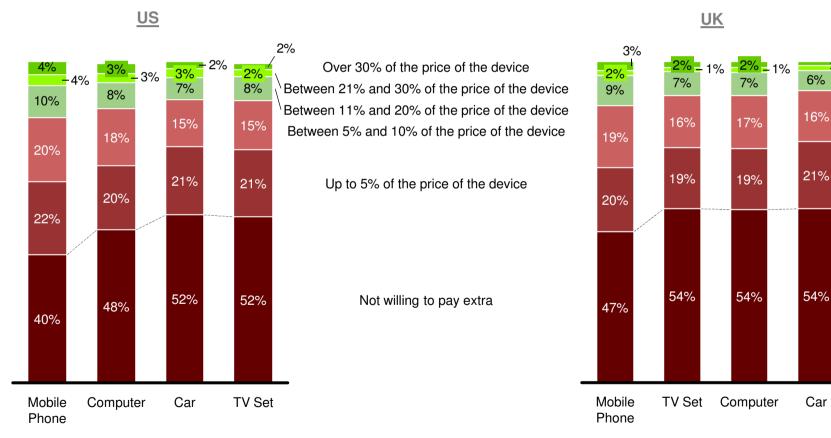
1%

2%

6%

16%

Car



Sample Base: respondents having selected these devices among the top 3 they use more frequently

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Intelligence, Insight, Impact,

Overall, a higher share of respondents in the UK are experiencing frustrations in their every day life

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

US UK You feel that what you pay for your car 73% Base n=887 80%^{Base n=953} You feel you pay too much for insurance could be optimized compared 40% 41% 42% 31% electricity compared to your to how and when you drive every month consumption You feel that what you pay for your car insurance could be optimized You feel you pay too much for Base n=943 Base n=783 41% 31% 45% 28% 74% 72% electricity compared to your compared to how and when you drive consumption every month You are frustrated by public You feel unsafe or stressed while driving Base n=870 43% 16% 44% 25% 69% Base n=846 59% transportation lack of information about on the road when you are tired traffic and potential delays You are frustrated by public You feel it is difficult to park your car transportation lack of information about Base n=647 32% 21% 42% 18% 60% Base n=788 53% upon arrival at your destination traffic and potential delays You feel that whenever you need maintenance or repair services for your You feel unsafe or stressed while household appliances, it's too late and the Base n=890 42% 33% 10% 43% 11% 54% Base n=757 driving on the road when you are tired appliances cannot be repaired (e.g. TV, washing machine) You feel that whenever you need maintenance or repair services for your You find it too difficult to synchronize 31% Base n=736 household appliances, it's too late and 41% 53% 43% Base n=905 personal files and settings across multiple the appliances cannot be repaired devices You find it too difficult to synchronize You feel it is difficult to park your car upon Base n=872 personal files and settings across 20% 30% **6%** 26% 44% Base n=782 arrival at your destination multiple devices You worry that your medicine You worry that your medicine prescriptions sometimes have the **16% 5%** 21% prescriptions sometimes have the wrong Base n=731 18% 13% wrong dosage levels, compared to your Base n=688 dosage levels, compared to your different different circumstances each day circumstances each day 5% Somewhat Completely Accenture Consumer pulse survey on embedded software, 2010 agree Sample Base:

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US n=1005 16 UK n=1001

Embedded Software: Q7

Intelligence, Insight, Impact,

The level of interest in using innovative solutions is high in both countries

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

US UK An energy efficiency solution that would allow your An energy efficiency solution that would allow your electricity utility to regulate/limit the use of some electricity utility to regulate/limit the use of some 40% 32% 72% major appliances at specific time of the day (such as 43% 30% 73% major appliances at specific time of the day (such as at night or during workdays where you are not at night or during workdays where you are not home) home) and help you pay less for electricity and help you pay less for electricity Home appliances (e.g. washing machine/TV set) than A sensor/device in your car able to monitor your level 41% 24% 49% 17% 65% 66% can be diagnosed remotely and periodically to of concentration and to automatically take evasive prevent maintenance and repair with a field action when accidents are about to happen technician A sensor in your car that would record the distance A sensor/device in your car able to monitor your level 44% 21% 41% 21% 65% 62% you actually travel during the month and the guality of of concentration and to automatically take evasive action when accidents are about to happen your driving that can be used to optimize your car ínsurance premium A sensor in your car that would record the distance 38% 25% Home appliances (e.g. washing machine/TV set) than 41% 63% 17% vou actually travel during the month and the guality of 59% can be diagnosed remotely and periodically to your driving that can be used to optimize your car prevent maintenance and repair with a field Ínsurance premium technician Onboard GPS navigation in your car that would allow Receive automatically from your public transportation you to reserve a parking space while on route to your 36% 29% 17% **16%** 51% 46% some recommendation on your mobile about destination 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 Onboard GPS navigation in your car that would allow 32% 33% 16% conditions to physicians (for example when coming 43% 49% you to reserve a parking space while on route to your out of a surgery), who can adjust treatments when destination necessary Wear a sensor the size of a regular phone, in your Receive automatically from your public transportation pocket to continuously report changes in your health some recommendation on your mobile about conditions to physicians (for example when coming 28% 15% 32% 2% 42% 44% alternative journeys you can take when there are out of a surgery), who can adjust treatments when some anticipated delays on your traditional journey necessarv Somewhat interested to use Verv interested to use Accenture Consumer pulse survey on embedded software, 2010 Sample Base:

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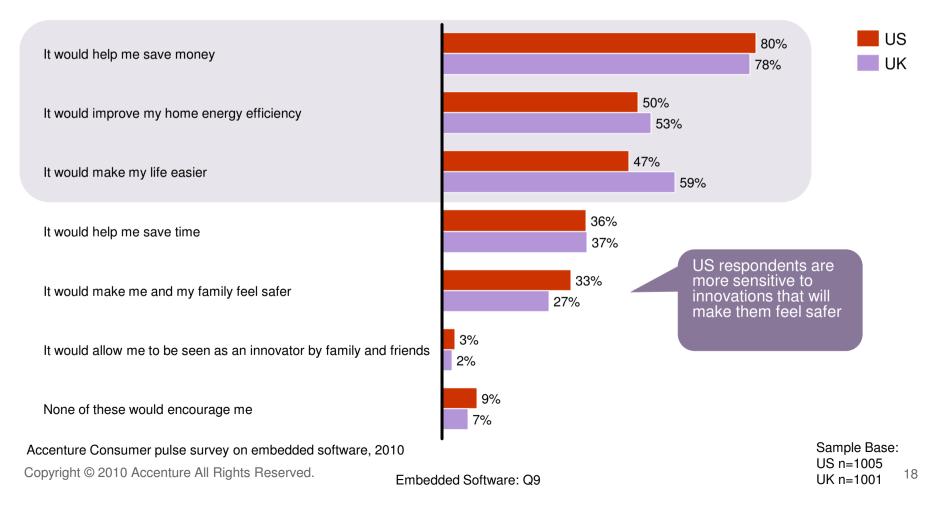
US n=1005 17 UK n=1001

Embedded Software: Q8

Intelligence. Insight. Impact.

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

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*

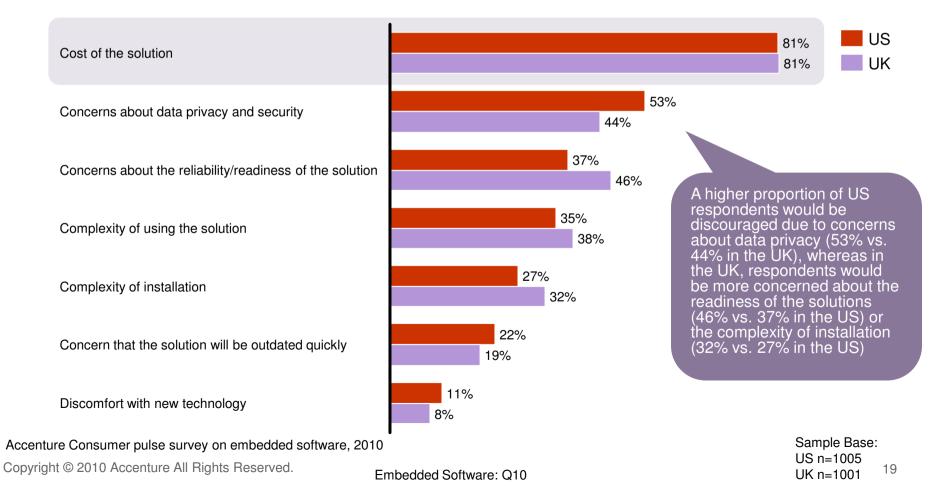


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Intelligence. Insight. Impact.

The cost of these innovative solutions is the biggest deterrent for respondents both in the US and the UK when deciding to use these solutions

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



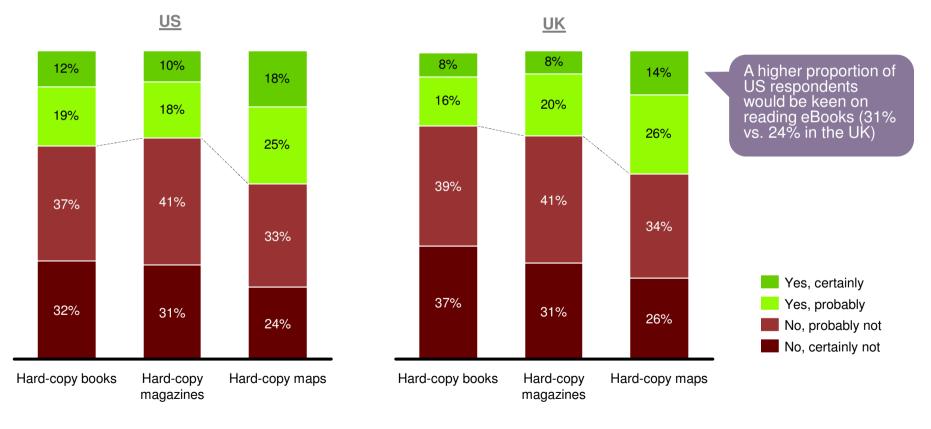


Intelligence. Insight. Impact.

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

US & UK 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?



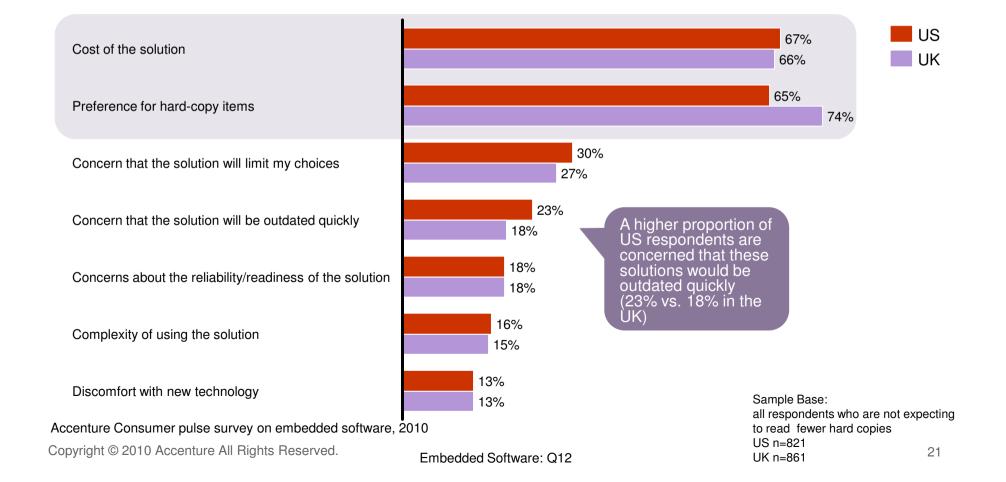
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Embedded Software: Q11

Intelligence. Insight. Impact. 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, especially in the UK, and that respondents feel the cost of these new devices is a barrier

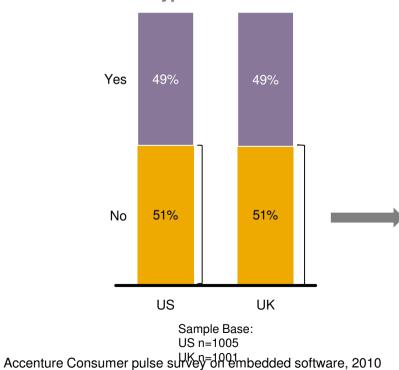
What are the top 3 reasons why you do not expect using eBook readers or Tablet PCs to read books, magazines or maps in the next 2-3 years? *Please check the top 3 reasons*



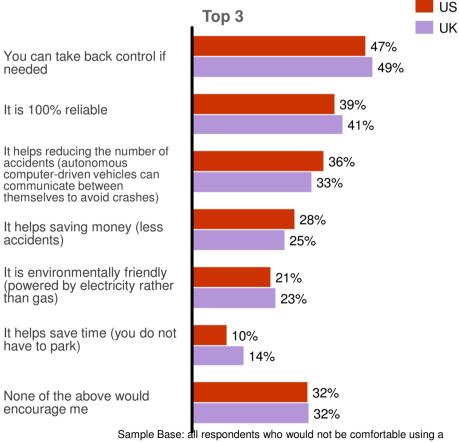
Intelligence. Insight. Impact.

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

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?



US & UK results What would encourage you using driveriess cars/autonomous computer-driven vehicles powered by electricity?



Sample Base: all respondents who would not be comfortable using a driverless vehicle US n=514

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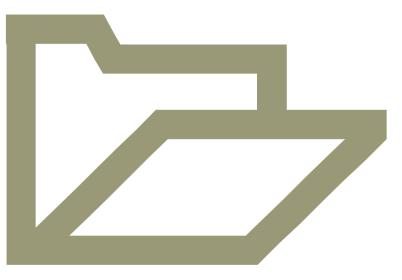
Embedded Software: Q13 & Q14

UK n=509



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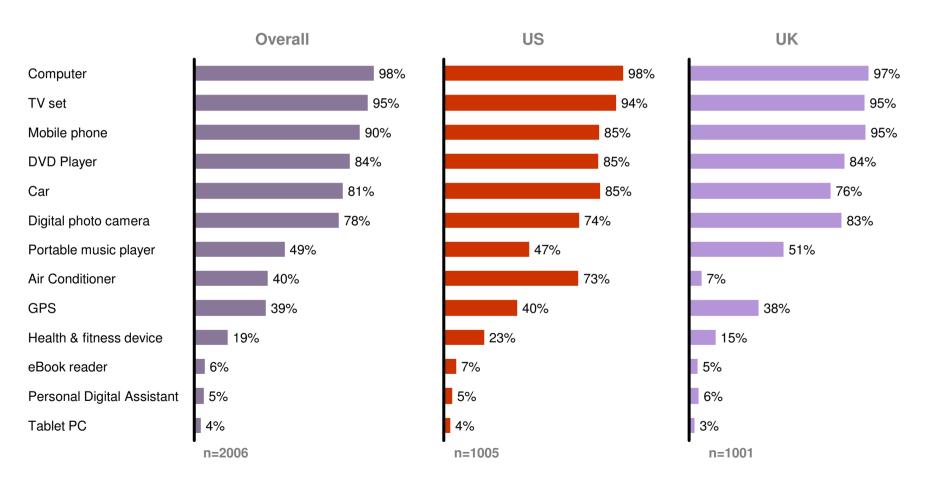






Device usage by country

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



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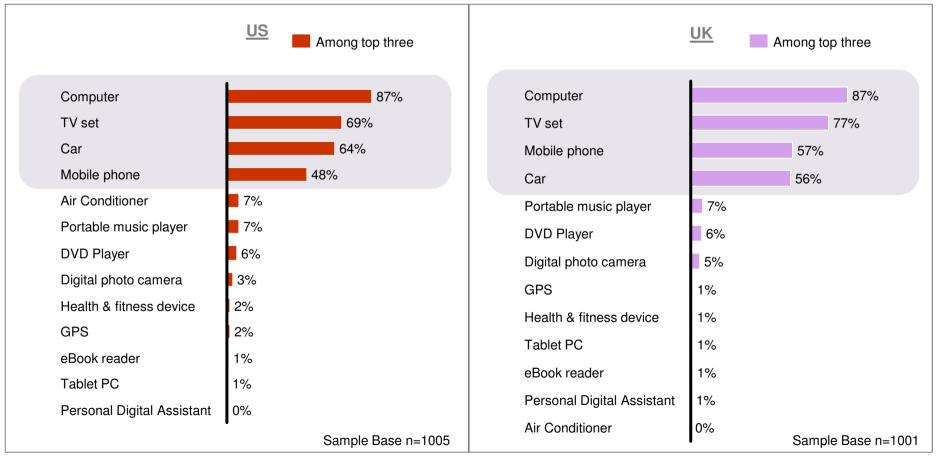
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Embedded Software: Q1a

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More frequently used devices by country

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



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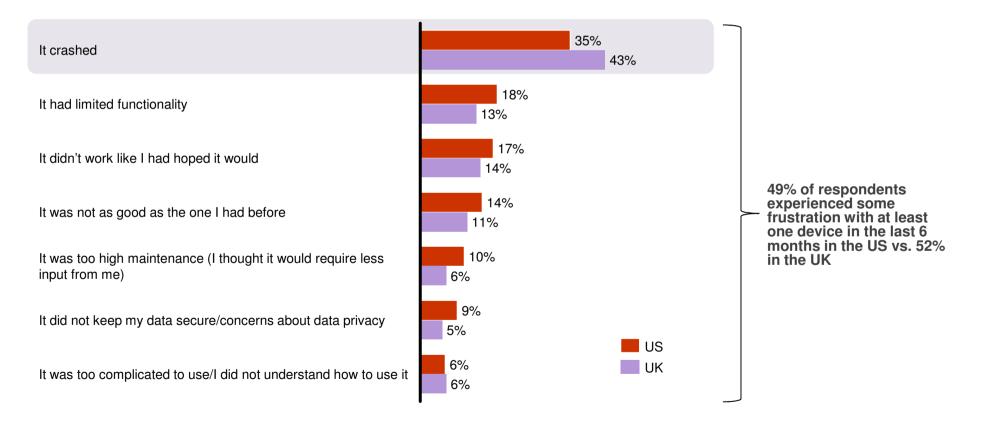


Intelligence. Insight. Impact.

Respondents in the UK generally experienced more device crashes than respondents in the US. However, US respondents felt that more of their devices had limited functionality

US & UK results

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



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Embedded Software: Q2