

User perspectives on mobile privacy

Summary of research findings

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Background and Objectives

Background

- The GSMA represents the interests of the worldwide mobile communications industry. Spanning 219 countries, the GSMA unites nearly 800 of the world's mobile operators, as well as more than 200 companies in the broader mobile ecosystem, including handset makers, software companies, equipment providers, Internet companies, and media and entertainment organisations
- The GSMA launched a mobile privacy initiative in January 2011 that includes exploring ways to provide users with contextually relevant mobile friendly ways to manage their privacy and information on mobile devices

Objectives

- This research was commissioned to help understand what, if any, privacy concerns users of mobile devices have and how these influence attitudes towards and the take up of, mobile internet services and applications
- The research will help shape the development of policy and help support the development of effective and consistent privacy experiences that help users become familiar with ways to manage their privacy from mobile devices

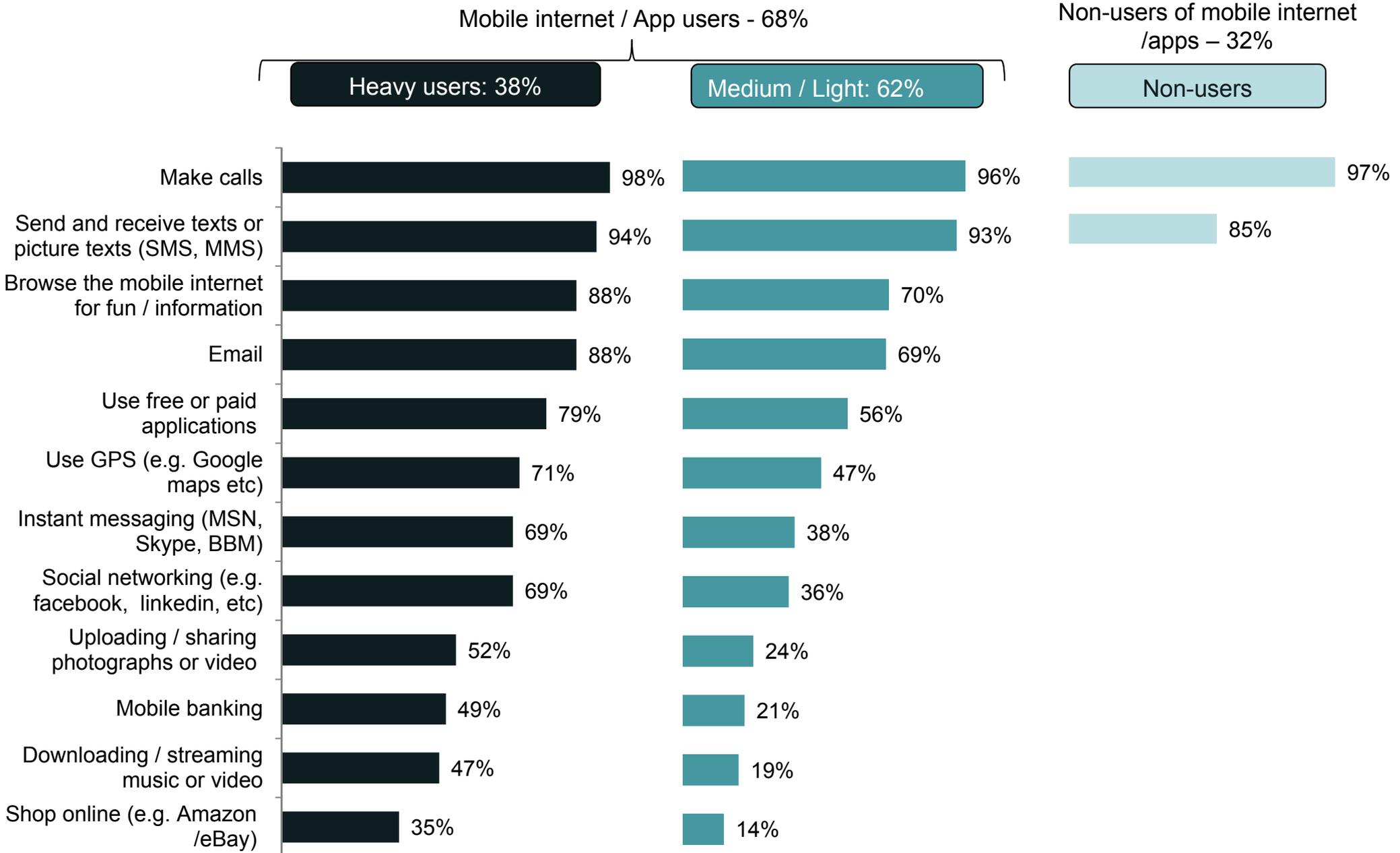
Methodology

- The project was conducted in the UK, Singapore and Spain among over 4,000 mobile consumers
- The research was conducted in 3 phases
 - **Initial small scale in depth interviews** (n=10 per country) to understand how people respond to privacy issues and to assist with developing the online questionnaire
 - **Online quantitative survey** with a total sample of 4,121 mobile users
 -  **UK:** n=2,022
 -  **Spain:** n=1,094
 -  **Singapore:** n=1,005
 - **Small scale telephone interviews** (n=25 in each country) to add qualitative diagnostics to the quantitative results
- Futuresight conducted the research from April – June 2011



1. Executive summary

People use their Smartphones to:



Base: All respondents , all countries: n=4,121

Q3 Please tell us which of the following you currently do on your mobile phone? (If you have a tablet with a mobile connection (i.e. 3G), then please include your tablet usage with your mobile phone usage)

Privacy Concerns

Privacy is a significant concern for the majority of mobile users:

- One in two respondents expressed concerns over sharing their personal information while using the mobile internet or apps
- 81% of all mobile users felt that safeguarding their personal information was very important
- 76% said they were very selective about who they gave their information to because of their concerns
- 92% expressed concern about applications collecting their personal information without their consent

Users want more choice and control over their information

- 89% think it important to know when their personal information is being shared by an application and to be able to turn this off or on

Users value behavioural advertising and location based advertising but

- 81% have concerns about receiving behavioural advertising without their consent
- 84% want the choice whether to receive advertising based on their browsing behaviour and to be able to switch it on or off
- 79% want the choice whether to receive location based advertising and to be able to switch it on or off

Users value location based services but want control/consent

- 81% want to be asked for permission to share their location with an app or service



2. Privacy: Awareness, perceptions and attitudes of mobile users in relation to 'privacy'

Privacy concerns appear to rise with engagement and usage of the mobile internet and apps

- **If not asked directly about privacy, users' awareness of and concern with safeguarding personal information on their mobile appeared to be driven by two key factors**
 - Exposure and engagement with the mobile internet and applications
 - Exposure to mobile advertising (primarily SMS advertising)
- **Only the heaviest users spontaneously mentioned privacy and the importance of safeguarding their personal information on mobile**
 - Often this was driven by the amount of advertising these users received – many felt bombarded by SMS advertising and wanted to control how their personal information was shared
 - And heavy users were more attuned to notification messages about sharing information
- **Medium / Light users of mobile internet services / apps were more concerned about the security of their financial details rather than safeguarding their personal information**
 - Most felt that their level of engagement with mobile internet services or apps was not sufficiently widespread to pose a threat to their personal information
 - Their focus tended to be around whether they could translate their PC behaviour onto mobile
- **Non-users of mobile internet / apps had never considered privacy an issue on a mobile device**
 - Their concerns were more about the loss of their handset - most did not think their mobile was technically advanced enough to pose a threat to their personal information

"My mobile can't store much compared with a PC so I don't think there's much that could go wrong"

Female, 42 yrs old, UK

"I do a bit of browsing and use maps but I've never thought about privacy. I do wonder how secure they are though and whether I can do mobile banking on it"

Female, 36 yrs old, Spain

"I'm fed up with the amount of advertising I get on my phone from companies I don't know. I'm now every careful not to give my personal details anyone"

Male, 31 yrs old, Singapore

One in two mobile users have concerns with sharing their personal information while using the mobile internet or apps

- **When asked about privacy, however, most mobile users said they had concerns about sharing their personal information when accessing the internet or apps from a mobile**
 - Slightly more heavy users (60%) than medium / light users (50%) appear to have concerns
 - The impact of these concerns on usage of mobile internet services and apps differed slightly between the two audiences:
 - Of the 60% heavy users who had concerns, 63% would carry on as usual, 36% would limit their use but would use the services more if better safeguards were in place
 - Of the 50% medium / light users who had concerns, 55% would carry on as usual, 41% would limit their use without better safeguards
- **Being asked about privacy on mobile caused a strong reaction among current Non users of mobile internet – 48% said they would not use these services because of their concerns with safeguarding their personal information**
 - 26% would want better safeguards in place to use the services more, 26% would just carry on as usual
- **When using a PC / Mac, users were more consistent. Overall 56% of the total sample said they regularly had concerns, but these concerns appeared to have little impact on their usage - 70% would carry on regardless**
- **Overall, 81% of all mobile users thought that safeguarding their personal information was very important and 76% thought they were very selective to whom they gave their information**
 - But there appears to be a lack of confidence and trust when using the internet from a PC / Mac or a mobile - 62% of users were aware whether they were sharing their information with trusted companies and just 43% assumed companies look after their information and they should not have to worry

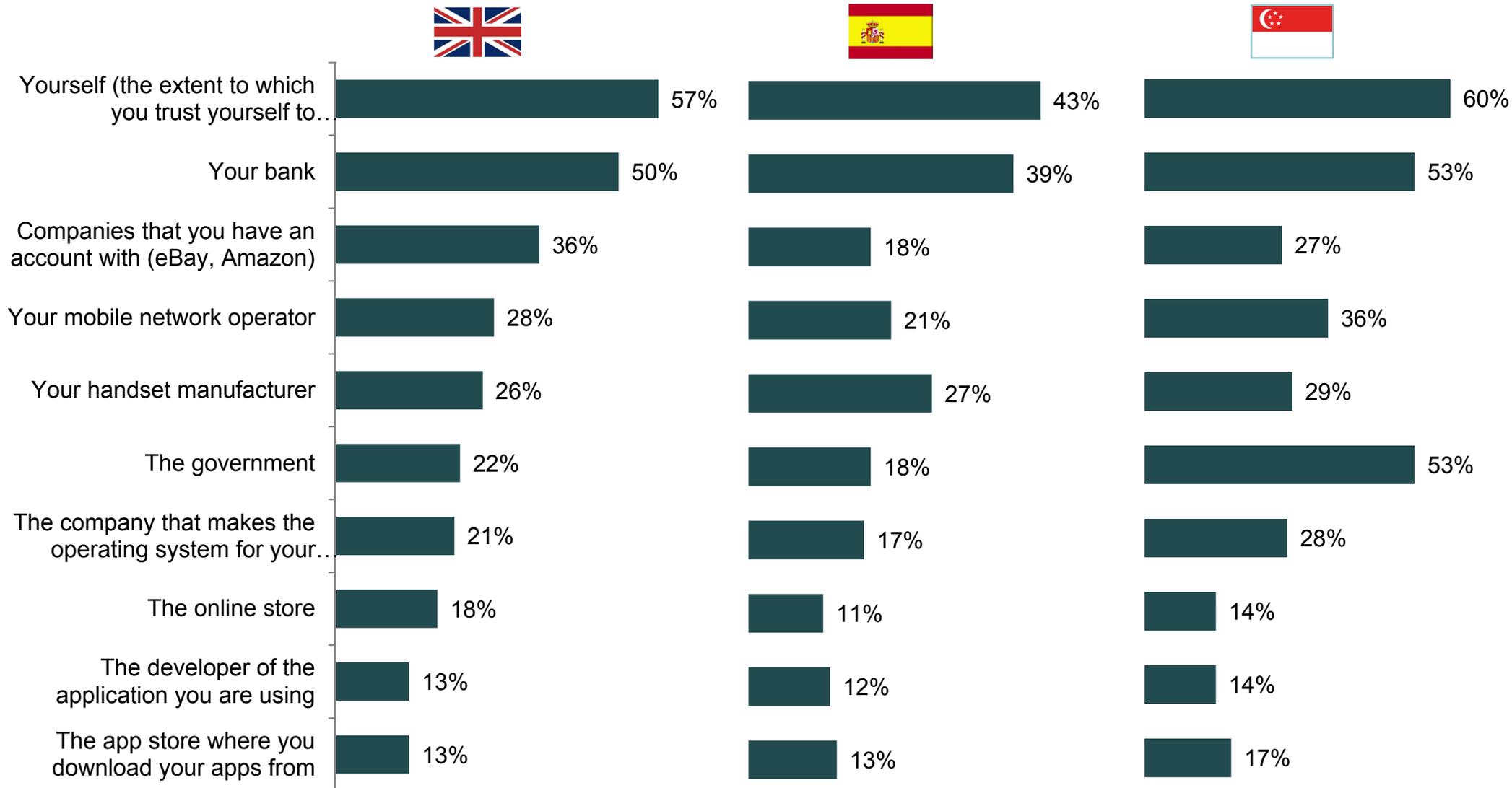
14. To what extent, if at all, do your concerns about safeguarding your personal information impact on your use of mobile internet services or applications on your mobile?

14b. If you started browsing the internet or using applications on your mobile, which of the following statements best describes how you might feel?

7. Thinking about when you use the internet from your PC, how often do you have concerns about sharing your personal information?

8. To what extent, if at all, do your concerns about sharing your personal information impact on your use of the internet from your PC? Tick one that applies

Users unanimously trusted themselves more than any other organisation to safeguard their information

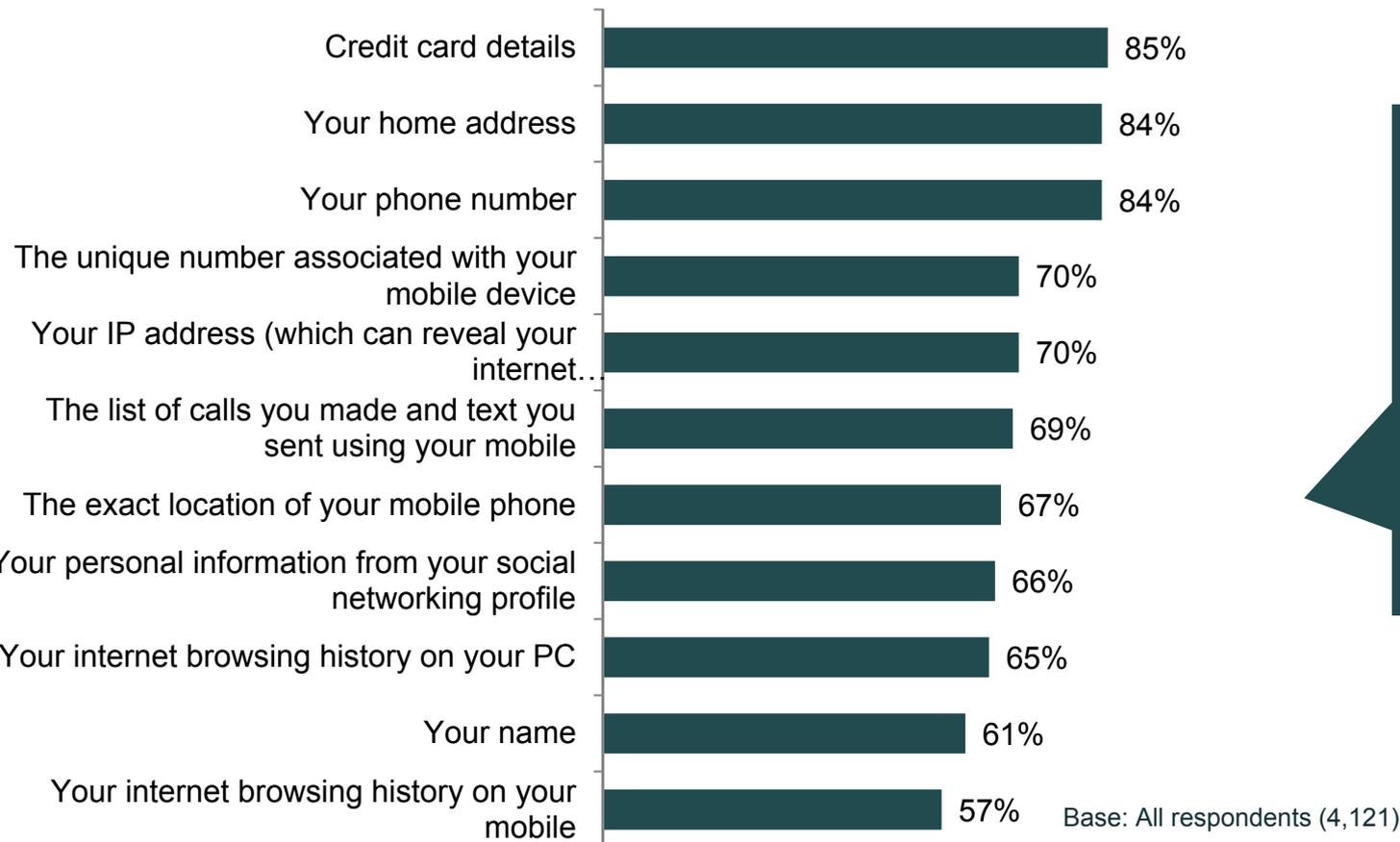


Results are % of users rating top 3 scores, i.e. 8+

Base: All respondents (4,121)

Almost all mobile users want 3rd parties to ask for their permission before using their personal information

- **Almost all users were particularly sensitive about sharing their personal information with companies they did not know (3rd parties)**
 - The vast majority (83%) do not usually share their information with 3rd parties when they sign up or register with a website online
 - And 89% thought it was important for users to have the option of giving permission to 3rd parties to use their personal information
- **Most users wanted 3rd parties to ask permission for most types of information – although the exact location of their phone and browsing history on a mobile was not the most sensitive**



"I don't want companies I don't know using my information without me knowing – but I don't have a problem about them knowing about my location particularly. I can't see why they would want to, I'm not that important"

Female, 24 yrs old, Spain



3. Control: Precautions taken, perceptions of control currently, and desire for control overall

Less than half of mobile users make use of the privacy settings available via their handset

- **Users were much more active in taking precautions to protect their information on their PC / Mac than they were on their mobile handset**
 - The vast majority used password protection and anti-virus on their PC / Mac, and 51% made use of their privacy settings on their PC / Mac browser
- **Taking precautions on their mobile handset was much more variable compared to PC / Mac**
 - Heavy users were relatively active, with most using password protection for email as well PIN protection for the handset and SIM card. 42% made use of the privacy settings on their handset
 - Medium / Light users were slightly less active overall - 31% made use of their privacy settings
 - Reasons for non use of privacy settings were roughly equally divided between 'not being aware' and 'not being bothered'
 - Non mobile internet / app users were largely inactive – just 7% made use of their privacy settings, mainly because users were not aware of them (63%)
- **50% of Heavy mobile users would regularly agree to a user agreement or privacy statement without reading it**
 - Medium / Light users appeared to be more diligent – 36% would agree to these statements without reading them
 - For both audiences, the main reason for agreeing without reading these statements or agreements was because they were too long (52%) and they didn't have the time (21%)
- **With the exception of Heavy mobile users, the majority of users felt more in control of their personal information when using a PC than when using a mobile**
 - This was generally because they had purchased protection software for the PC (and not for their mobile) and they felt security and privacy protection on a mobile was an unknown
 - Just 21% thought they were more in control when using their mobile than their PC / Mac

The heavier their mobile usage, the greater the sense of control users have over their personal information

- **Significant numbers of mobile users still feel they have some control when using a mobile**
 - 69% of Heavy users felt somewhat or completely in control, compared with 54% of Medium / Light users
 - 44% of Non mobile internet / app users felt in control
- **Many mobile users, particularly Medium / Light users, had the perception of being somewhat in control because they limited their usage of mobile internet services and apps**
 - Several mentioned that they felt more exposed on mobile because there was no external protection software available as there was on a PC
 - In addition, mobile security and privacy was considered much more of an unknown and so users tended to limit their activity overall or at least to companies they felt they knew and trusted
- **But there was a strong sense that most users were not really sure how in control they were – from either their PC / Mac or mobile**
 - Most admitted that they feel they are taking a leap of faith when accessing the internet or using applications from a PC / Mac and a mobile

"I feel vaguely in control of my mobile because I don't do much more than visit sites I know and use applications like facebook – i.e. all the things I currently do on my PC"

Female, 35 yrs old, Spain

"On a PC, you get all this anti-virus software, which you don't get on a mobile – so to my mind, the PC is more secure."

Female, 33 yrs old, UK

The ability to exercise choice and control is important in engendering confidence and trust

- **Overall there was considerable mistrust and scepticism over how personal information was used by known and unknown companies**
 - Just 26% of mobile users were confident that companies would stop collecting personal information if users decided that they no longer wanted to share
- **The majority (57%) of users thought that a consistent set of rules should apply to any company that had access to their location**
 - 37% of mobile internet users had concerns but would carry on using their mobile as usual
- **Similarly, there was concern about companies sending and using their personal information overseas**
 - 57% wanted companies to ask their permission before their information was sent or used overseas
 - 38% had concerns about companies holding this information like this without permission
- **Evidently, users wanted to have control by whatever means they could and there was clear evidence to suggest that greater controls would increase trust and engagement with services and apps**

"I'm happy to share my information with companies I know and trust. But not with those I don't know – they need to ask permission. And by doing so, they might make me feel like trusting them"

Female, 33 yrs old, Singapore

"We get so much spam – of course we want to have control over who has our information. If we give our permission, it means I'm actively making a choice and engaging with that company – which is good for them and good for me"

Male, 46 yrs old, Singapore

Control is key: Headlines

89%

think it is important to have the option of giving permission for their personal information to be used by 3rd parties

84%

think it is important to be able to have the choice whether to receive advertising that is based on browsing history i.e. to be able to turn the service off or on

74%

want to be told if their personal information (location, browsing history and application use) is collected to target them with offers / promotions

79%

would like to know when personal information, and what type of information, is being collected

79%

think it is important to have the choice whether to receive location-based advertising, i.e. to be able to turn the service off or on

89%

think it is important to know when their personal information is being shared by an application and to be able to turn this off or on

"I just want control over who has access to my information and the type of information – then I'll be happy to participate in pretty much anything. If not, then I will limit my use. It's as straightforward as that"

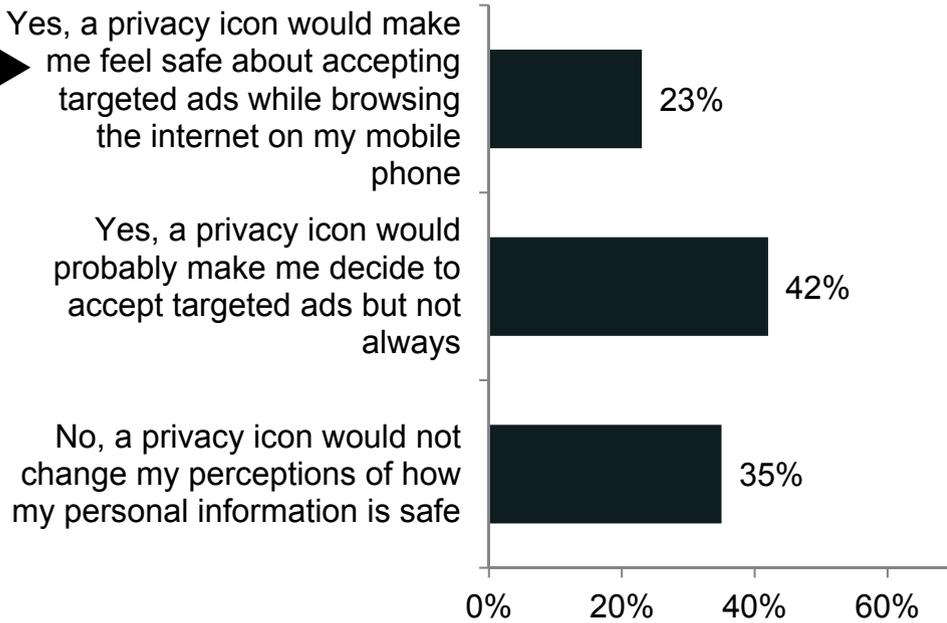
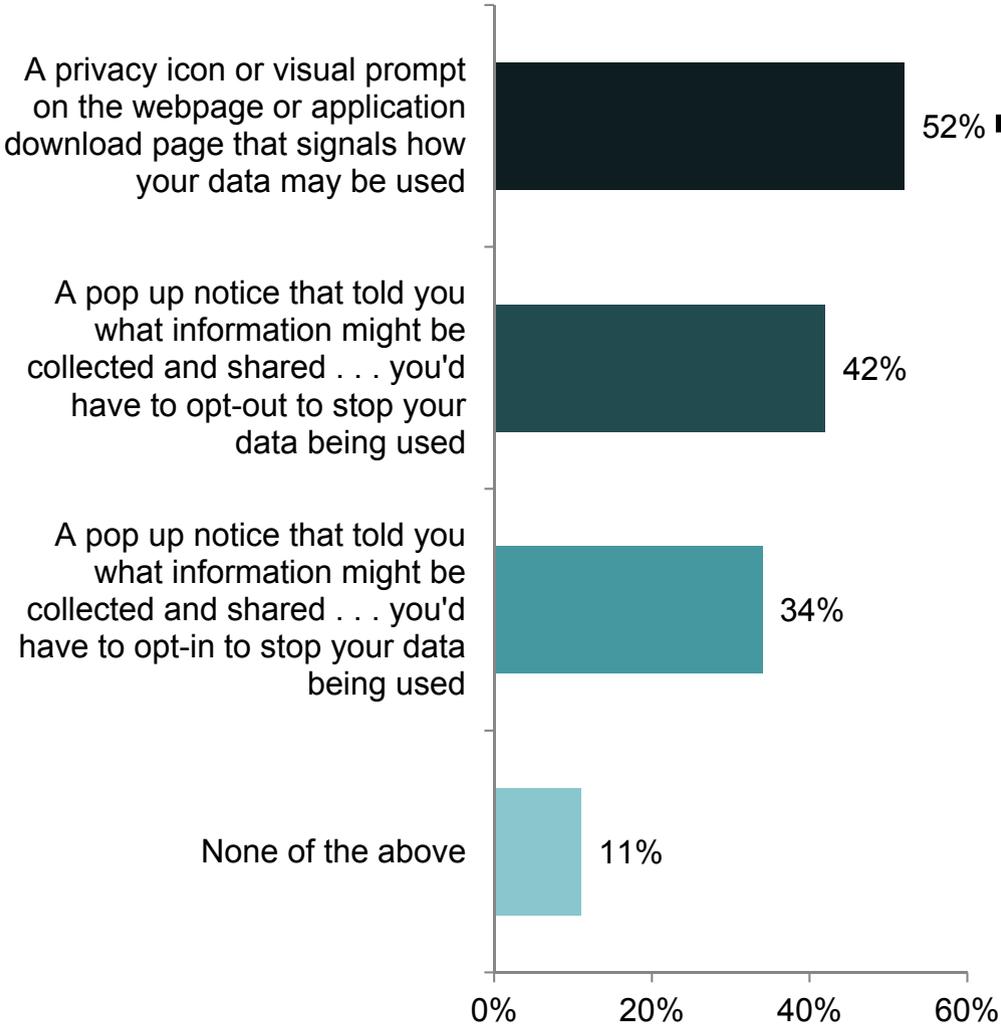
Female, 31 yrs old, Singapore

"I am learning about smartphones. There is a balance to be struck which I'm not sure about yet. On the whole I would prefer to be asked for permission and if I am asked I would be happy to engage. If anyone is using my information without my permission, then I would stop using the service or app. At the moment I limit my behaviour because I'm not sure what's happening"

Male, 39 yrs old, Spain

Mobile users would accept targeted advertising if the right controls are in place

Users were consistent in their responses to different ideas for control – 65% indicated that these sorts of controls would encourage them to accept targeted advertising under the right circumstances



"A pop up is good because I'm aware something is going on. It's easy to forget otherwise. I want to be able to choose at quite a granular level what pieces of information I give up so the more controls that help me do this the better"

Male, 41 yrs old, UK

Base: All respondents (4,121)

Q.39 Here are some ideas that could be used to explain that your personal information is being used to target you with offers / promotions on your mobile. Which of them would be of most use to you? Q.40 If an industry accredited icon was displayed on mobile internet sites you visit (to indicate personal information will be collected anonymously), would you be more or less willing to share?



Search Results	
Anchovies & Olives 3900 Mission Blvd, San Francisco, CA Named Top 10 Best New Restaurants	1.5 mi
Mario's 409 Gough St, San Francisco, CA ★★★★☆	1.3 mi
Al Boccolino 291 Ivy St, San Francisco, CA ★★★★☆	1.5 mi
Roma's Pizza 1270 Mission St, San Francisco, CA ★★★★☆	1.5 mi
Little Italy 501 Hayes St, San Francisco, CA ★★★★☆	1.9 mi
Pasta Italiano 4803 North 13th St, San Francisco, CA	2.5 mi

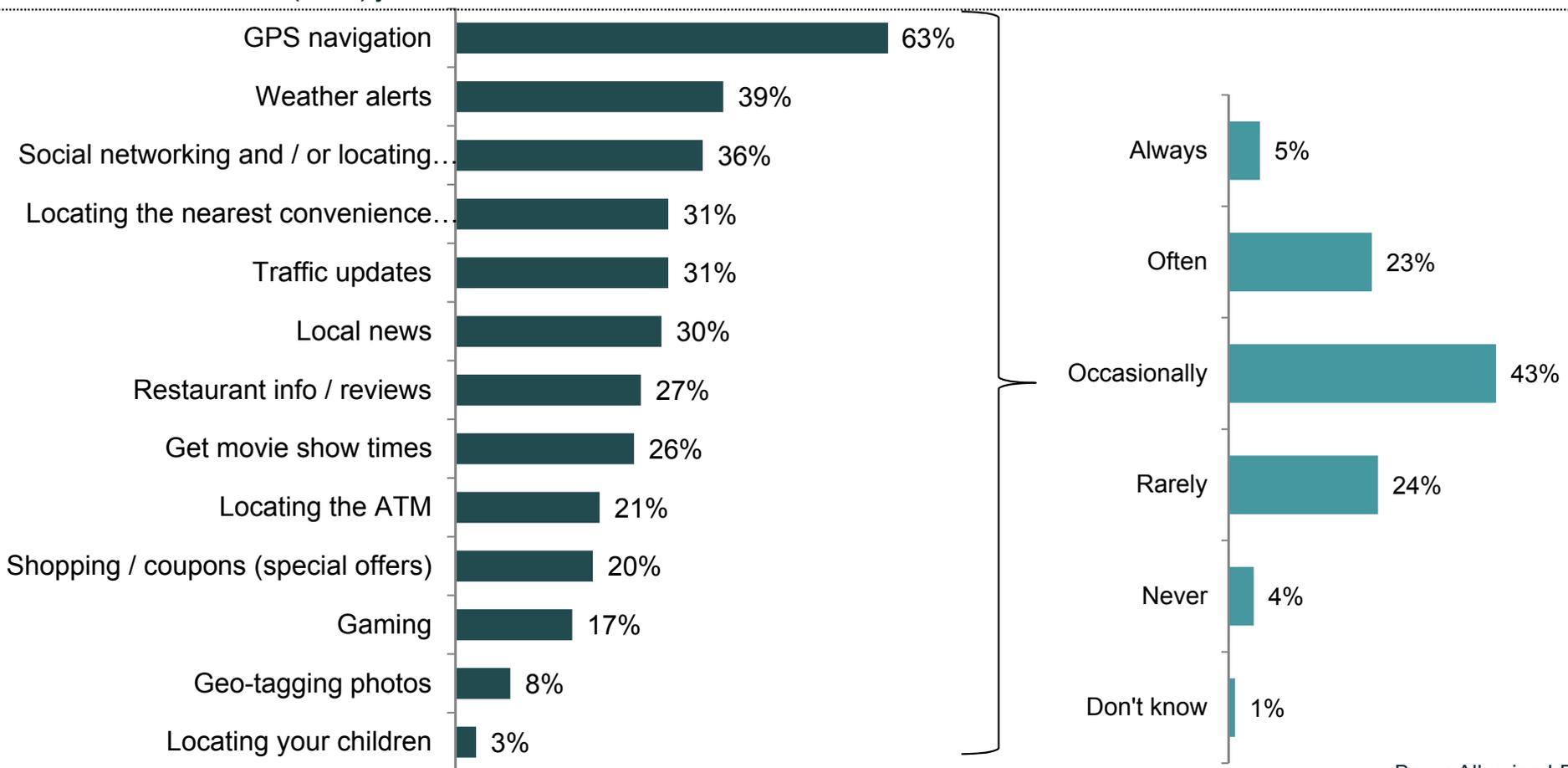
By: Relevance



4. Services and Applications: LBS, LBS advertising; Behavioural advertising and Applications

The more people use Location-Based Services (LBS), the more they value them, but they want choice and control

- **Practical services such as maps and weather are the most frequently used location-based services and users of these services value them very highly** - 70% of those using these services regularly value these services
- **But users want control** - 78% are concerned at 3rd parties having access to the location of their mobile without permission and 81% wanted to be asked permission to share their location with a service or an app
 - Most users wanted this every time the service was used but a significant number of those familiar with these services (34%) just wanted to be asked on the first time



Base: All using LBS (1375)

Having control over location-linked advertising appears crucial for mobile users

- **LBS promotions and advertising were similarly valued by those who were familiar with this sort of service**
 - 61% of those familiar thought the services were valuable - users like receiving offers from companies they had signed up to
- **Having control over the service would appear to be critical - 86% think it is important to be able to turn LBS promotions or advertising on or off**
- **The majority (62%) of users were concerned that some companies had the ability to use their location without their stated permission – of which 38% would limit their use without better safeguards in place**
 - But over half who had concerns (52%), said their concerns would make no difference to them and would carry on using the service as usual
- **Better safeguards are needed to encourage take up amongst those not familiar with LBS promotions**
 - Concerns about receiving ads based on their location without permission would appear to have a strong impact on take up – 38% would limit their use unless better safeguards were in place, 43% would not use the services at all
- **Users were divided on precisely what sort of company they would consider receiving LBS ads from**
 - Essentially it was a company that they were familiar with (i.e. had purchased from before) and one that gave them some control

"It's happened to me when I signed up with [ABC] and [XYZ], I got inundated with spam messages from stores I didn't know or sign up for. It's a real pain to stop as well. Permission is really important I can tell you"

Female, 34 yrs old, Spain

"I can see these could be useful – it depends on what mood you're in. You wouldn't want it on all the time as it would drive you mad, but if you're wandering around doing some shopping with friends, it could be good to get offers from companies you like"

Female, 31 yrs old, Singapore

Behavioural Advertising appears to be valued more by heavy mobile internet users - but prior consent is crucial

- **60% of mobile internet users were familiar with advertising based on one's browsing history**
- **35% of those familiar with this service though it was valuable (46% of heavy users) and 30% were willing to share their browsing history**
 - The majority who were unfamiliar saw little value and were unwilling to share
- **Having the ability to turn a behavioural advertising service on or off is important to almost everyone (84%)**
 - 81% have concerns about receiving such advertising without their consent
- **Receiving behavioural advertising without consent would appear to have an impact on non mobile internet users in particular**
 - 36% of mobile internet users would limit their use but increase it if better safeguards were in place; 45% would carry on as usual
 - 57% of non internet users would not use the service
- **Overall, users appeared to be largely accepting of behavioural targeting . . .**
 - Because relevant advertising is better than irrelevant advertising (given that advertising is going to be there anyway)
 - So long as their browsing history was not personal or personally identifiable
 - If the service could be switched on or off

"It's better than getting rubbish, at least it'll be something you're interested in."

Female, 33 yrs old, UK

"This can cut a lot of time, they can direct you to things you like the most. This is useful on a mobile when the screen isn't so big"

Male, 33 yrs old, Spain

"Yes, the reason we use the internet is for more information and cheaper sources, so this makes sense to me – so long as I can turn it off or on. I do this anyway on my PC"

Male, 41 yrs old, Singapore

BT Q1. The advertising described [in the example] above is based on your previous browsing history. How familiar are you with being served more relevant advertising because it is based on your browsing history? BT Q2. How valuable is receiving advertising that is more relevant because it is based on your browsing history? BT Q3. How willing or unwilling are you with sharing your browsing history in return for receiving advertising that is more targeted / relevant to you? BT Q4. How important is it to you to be able to have the choice whether to receive this sort of advertising, i.e. to be able to turn the service off or on? BT Q5. How concerned are you that your browsing activity is used to serve you with targeted advertising without your explicit consent? BT Q6. To what extent, if at all, might your concerns impact on your use of internet services on your mobile?

Most mobile users are not comfortable with applications collecting their personal information without their consent

- **Users were very clear that they should have a choice whether applications can collect personal information without their consent – 76% thought it was very important**
 - Almost all users (92%) have concerns when applications collect personal information without their consent
- **But if applications were collecting personal information without consent, about half (47%) of those familiar with this would carry on as usual**
 - 41% would limit their use of apps unless better safeguards in place
- **The impact would be much more serious amongst those not familiar – 61% would not use applications because of their concerns**
 - Just 28% would limit their use unless better safeguards were in place
- **Overall, most would rather pay than run the risk of their personal information being used without their consent**
 - A few of the more regular app users, however, were happy to share some information such as name, age, gender or preferences – they felt this trade off was normal and acceptable

"This is wrong. You play a game and then your friends get a message from me – that's terrible. This happened to me and my friend complained and I had no idea what it was about"

Male, 24 yrs old

"If I knew any app was using my personal information without my consent, I'd delete it immediately. It all depends on what they need the information for – without knowing more, I'd prefer to pay for the app and not have the worry"

Male, 39 yrs old

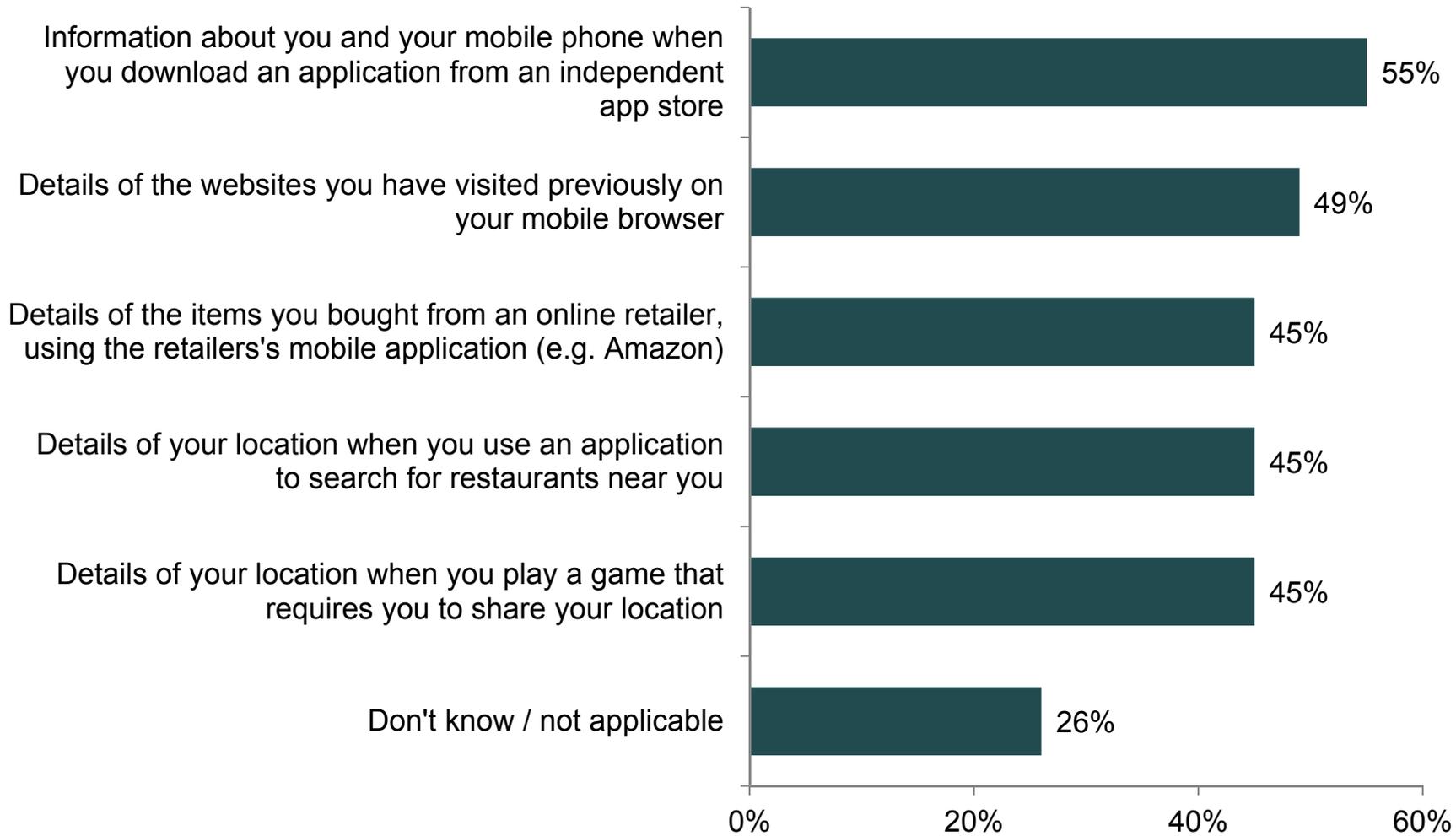
"I'm ok with this – I use a lot of apps and if you share you get some benefits and incentives. This sort of information isn't a problem for me to share".

Male, 52 yrs old



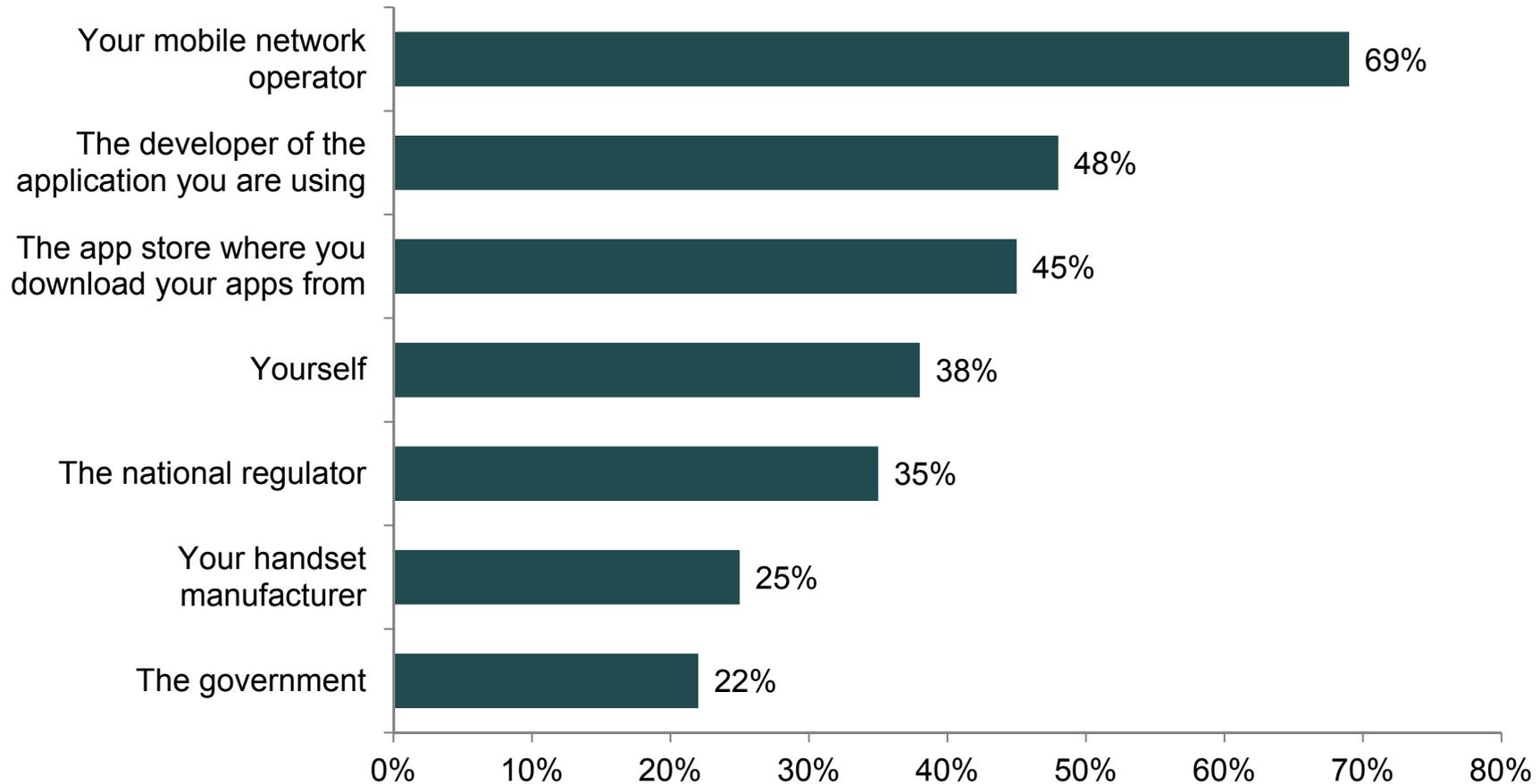
5. Accountability and Responsibility

Users hold their MNO responsible for safeguarding their personal information in various contexts



Base: All respondents (4,121)

Mobile users hold their MNO primarily accountable if they feel their privacy had been breached



Base: All respondents (4,121)



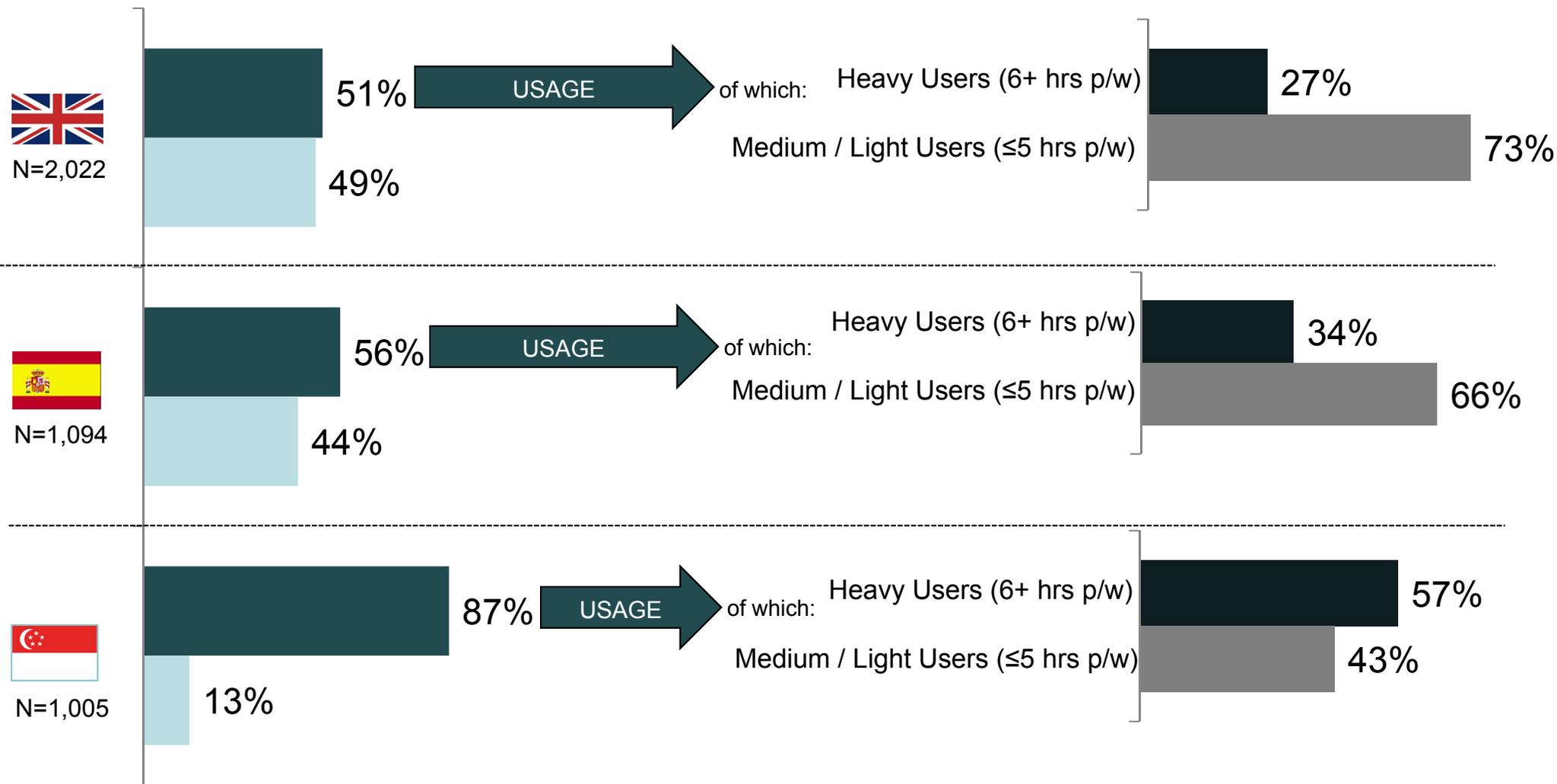
Appendix: Sample Overview

Sample Overview

- To ensure sufficient representation of mobile internet and application users, a minimum quota of 50% smartphone users was set for each country
- In all other respects, the aim was to ensure a nationally representative sample in terms of user demographics, handsets used, payment methods (contract, pay as you go) and mobile operators used
 - This was achieved in the UK
 - In Spain, there was a slight bias towards younger age groups, although older age groups 55-64 and 65+ were still represented
 - In Singapore, there was a much stronger age bias - nearly 80% of the sample came from age groups 18-44
- In keeping with online panels, usage of the internet and applications across the three countries was relatively sophisticated, compared to the individual populations as a whole. There was some notable differences between countries, however
- Mobile internet and app usage varied – the majority of UK and Spanish users were medium / light users (5 hours or less per week), whereas most Singaporeans were heavy users (6 hours or more per week)
- Frequency of usage and exposure to the mobile internet and apps were important factors in users' attitudes towards privacy, and overall engagement with services and applications
 - Responses were largely consistent across the three countries within the different usage groups - i.e. heavy users in Singapore were largely similar in attitudes to heavy users in the UK and Spain, non users in the UK were similar to non users in Spain

Sample: Mobile internet and app usage

- Mobile Internet / App Users
- Non Users of mobile internet / Apps



Q.4 Excluding email, how much time do you spend on the internet on **your mobile phone** (and 3G-enabled tablet such as an Apple iPad/Motorola Xoom) during a week?

Q.5 How much time do you spend using applications (free or paid) **on your mobile phone** during a typical week?

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