Executive Summary on Privacy Awareness Survey on Smartphones and Smartphone Apps

Submitted to

Office of the Privacy Commissioner for Personal Data

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Executive summary

Background

The Office of the Privacy Commissioner for Personal Data (PCPD) commissioned the Centre for the Advancement of Social Science Research of the Hong Kong Baptist University (CASR) to conduct a telephone survey on the usage habit (particularly their awareness on personal data privacy protection) of smartphones users in Hong Kong.

Survey Method

Prior to the survey, CASR conducted a focus group discussion on 21 June 2012 for randomly invited smartphone users aged 18 or above in order to find out their experience in using smartphones and their awareness of the privacy risk and security associated with using smartphones. The results from the focus group discussion helped the development of the questionnaire in the survey.

The survey was held between 19 July 2012 and 29 July 2012 for smartphone users aged between 15 and 70. In total 1013 respondents using smartphones were successfully interviewed. Given nearly 83% (838 respondents) of those surveyed were using either Android or iPhone smartphones, the results and analysis concentrated on the usage habits of those 838 respondents.

General Findings

Demographic distribution by gender:

Male:	47.6%	(399 respondents)
Female:	52.4%	(439 respondents)

- The figures suggest that the use of smartphones was evenly distributed across the two genders in the survey.

Demographic distribution by age (based on those who answered):

Aged 15-20:	22.1%	(185 respondents)
Aged 21-30:	20.9%	(175 respondents)
Aged 31-40:	21.1%	(177 respondents)
Aged 41-50:	23.0%	(193 respondents)
Aged 51-60:	9.7%	(81 respondents)
Aged 61 or above:	2.1%	(18 respondents)
Refused to disclose:	1.0%	(9 respondents)

- The figures suggest a heavier use of smartphone by the youths, particular the five-year age group from 15 to 20 years old.

Smartphone types:

iPhone:	36.5% (306 respondents)
Android[1]:	63.5% (532 respondents)

- The figures suggest a more popular use of Android phone than iPhone.

[1] Including respondents using Samsung, HTC, LG, Motorola, Sony, or other brands that run the Android operating system

Number of years using smartphones (not necessarily the current model):

Less than one year:	21.6% (181 respondents)
1 – 2 years:	43.6% (365 respondents)
3 – 4 years:	22.9% (192 respondents)
5 – 6 years:	6.4% (54 respondents)
7 – 8 years:	1.1% (9 respondents)
9 – 10 years:	0.8% (7 respondents)
More than 10 years:	3.6% (30 respondents)

- The findings suggest that the majority of respondents (more than 65%) have used smartphones for less than two years.

Major use of smartphone:

Text communications with friend (Facebook, Whatsapp):	66.7% (559 respondents)
Making phone calls:	52.9% (443 respondents)
Web surfing	36.0% (302 respondents)

- The findings suggest that text-based communications has overtaken voice as the primary use of smartphones.

Factors to be considered by respondents when purchasing smartphone:

Functionality of the smartphones:	84.7% (710 respondents)
Price:	77.4% (649 respondents)
Outlook:	65.0% (545 respondents)
Brand popularity:	56.2% (471 respondents)
Repair/Warranty service:	45.2% (379 respondents)
Risk of privacy intrusion:	22.9% (192 respondents)

- The findings suggest that privacy protection is the least important factor considered by smartphone buyers.

Findings Related to Mobile Apps

Number of respondents installing mobile apps:

Overall:	93.6% (784 out of 838 respondents)
Aged 15 - 20:	95.1% (176 out of 185 respondents)
Aged 21 - 30:	98.9% (173 out of 175 respondents)
Aged 31 - 40:	94.4% (167 out of 177 respondents)
Aged 41 - 50:	89.6% (173 out of 193 respondents)
Aged 51 - 60:	88.9% (72 out of 81 respondents)
Aged 61 or above:	83.3% (15 out of 18 respondents)

- The findings suggest that the younger generation is more ready to install apps to their smartphones.

*9 respondents did not reveal their age.

Popular mobile apps:

Most popular app – Whatsapp	59.7% (500 respondents)
Second most popular app – Facebook	29.4% (246 respondents)

- The findings suggest that social networks are the most popular mobile apps.

Keeping tab on mobile apps:

Those who did not know how many apps they have downloaded/installed:	40.9% (343 respondents)
Those who did not periodically check their installed apps and delete unused ones:	21.4% (179 respondents)
Those in the age group 51 – 60 who had not periodically checked their installed apps and delete unused ones:	41.7% (30 out of 72 respondents)

- The findings suggest that the older generation is less likely to check their installed apps and delete unused ones.

Mobile app access:

Those who did not know or were not sure what information their apps had access to:	56.8% (476 respondents)
Those Android users who did not know what information their apps had access to:	53.6% (288 out of 532 respondents)
Those iPhone users who did not know what information their apps had access to:	62.4% (194 out of 306 respondents)

- The findings suggest that iPhone users need to pay more attention to what information their apps have access to.

Considerations before installing apps:

Those who would consider privacy policy of an app before installing it:	26.8% (225 respondents)
Those who were not aware that their contact lists might be uploaded to a central server when using social network apps:	51.4% (431 respondents)
Those iPhone users who were not aware that their contact lists might be uploaded to a central server when using social network apps:	56.5% (173 out of 306 respondents)
Those who were in the 15 – 20 age group who were not aware that their contact lists might be uploaded to a central server when using social network apps:	58.4% (108 out of 185 respondents)
Those who has used smartphone for less than two years who were not aware that their contact lists might be uploaded to a central server when using social network apps:	56.0% (306 out of 546 respondents)
Those who did not know apps might secretly access information they had not said they would:	70.3% (589 respondents)

- The findings suggest that users' general awareness of what information their mobile apps could access is not high. The awareness levels of iPhone users, users with less than 2 years of use and youths between 15 – 20 are weaker when compared with other groups.

Privacy protection when using smartphones

Smartphone security:

Those who had taken no step to protect information on their smartphones (enabled screen lock, installed anti-virus/anti-theft software, etc):	47.1% (395 respondents)
Those Android[2] user who had not installed anti-virus to protect their smartphone	56.2% (154 out of 274 respondents)
Those who had not used auto screen lock to protect their smartphones	60.2% (505 respondents)
Those who had not installed anti-theft software to protect their smartphones	89.6% (751 respondents)
Those who used encryption to protect personal information stored in their smartphone	13.2% (111 respondents)
Those who were not worried about data leakage when using smartphones or installing apps	50.2% (421 respondents)
Those who were in the 15 – 20 age group who were not worried about data leakage when using smartphones or installing apps	61.1% (113 out of 185 respondents)

- The findings suggest that the awareness of smartphone security and potential on data leakage from smartphones were not high. Youths between 15 – 20 group are the weaker group in this respect.

[2] Apple does not allow anti-virus software to be placed in App Store as it believes iOS and how it controls iOS apps makes iOS secured against virus.

Conclusions

On the global basis, Hong Kong is probably one of the cities with the highest smartphone penetration rates. Given the use of smartphones has shifted from voice-based communication to text-based communication, more personal data is likely to be stored in them.

This smartphone survey provides a general picture on the use of smartphones by Hong Kong residents and their awareness of personal data protection pitfalls. It shows that the privacy protection awareness of the following areas could be improved upon:

1. Users should find out more about what information stored in the smartphone a mobile app will access before installing it;
2. The youth group (aged 15 – 20), who are one of the more active groups of mobile app users, need to pay more attention to what mobile apps they have installed, what access these apps have and review them often;
3. iPhone users need to be aware of iPhone's design characteristics that it will not show comprehensively the type of information an app would need to access prior to, during and after the installation process.