Because we care: Privacy Dashboard on Firefox OS

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Motivation
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- Do you know what a smartphone is?
- Do you know where the data comes from?
- Do you know who is after you?
- Do you really have nothing to hide?
Yes and No

- No, users are not idiots!
- Yes, they don’t have knowledge.
- Yes, they don’t have the tools.
The big question

How do we fill the gap between the users' expectations and actual functions of the phone?
The big answer

User-centric privacy tools
Outline

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The big question

How do we fill the gap between users' expectations and the actual functions of the phone?

The big answer

User-centric privacy tools

How do we do it?

First study

Feeling in control - Ease of use - Taking actions

Design: Educate

Implementation: Empower

Second Study

Where do they belong?

Ease of Use

Conclusions

- Changes in Perception of Privacy
- The accessibility and arrangement
- Educating, advertising and tutoring
- Personalization of settings
How do we do it?

1st iteration

Second study: Privacy Panel 2.0

Improve -> Privacy Panel 1.0

Second evaluation

Preliminary evaluation: implications for design

Second Design

Design and implementation solutions

Lab study

“Everyday experts” focus group

2nd iteration

First study: user requirements and fears
First study

“Everyday experts” focus group
- Identification of user needs, concerns, and fears about personal data and related privacy issues on mobile phones and related services

Participatory feature design session
- Create shared understanding between everyday experts and product experts
  Prioritize features that really matter according to user needs

Design guidelines
- Define design guidelines for the development process based on the results of the introductory study

Feeling in control  Ease of use  Taking actions
The big problems

- Lack of location protection
- Lack of data protection when phone is shared
- Lack of transparency
- Trust is something that you earn!
  - Account-less control
  - Backup anywhere
  - Social aspect of sharing privacy settings
- Lack of education
Design: Educate
Implementation: Empower

Find My Device
Many people see their phone as an intimate companion. The device, as well as the data stored on it, are precious. Because we carry our phone everywhere we go, it can get lost easily.

Location Blur
Many apps will access your exact location to tailor information to your needs. All this data combined can be used to generate a movement profile of all the places you have been to.

Permissions History
Almost all apps use some of your data, like your address book, or a feature of your phone, like the camera. It is difficult to keep track of all the different app activities because they happen automatically. That is why people often do not even know what app uses what data.

Guest Mode
If you borrow your phone to a friend or let your kids play with it, they will have access to all apps and all the sensitive data on your phone.
Second Study

- Does our Privacy Dashboard bridge the gap and meets users’ expectations?
- What are the users’ learnability, performance and satisfaction using the privacy features?
- Does the Guided Tour work? Does it actually have impact on users’ awareness?
Placement
General Satisfaction

[Box plot diagram showing satisfaction scores for various features: Remote Privacy Protection, Backup, Adjustable, Location Accuracy, Secondary-user Mode, and Overall Satisfaction. The x-axis includes Ease of Learning and Satisfaction of Performing Tasks.]
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