

# Device Analyzer

## Personal Analytics widely deployed

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Your phone changes network cells on average **358** times a day. That is once every **3m 52s** while it is on.

When wifi is turned on you connect to an average of **1.6** different networks a day but see an average of **50** different networks in that time.



Location



Data Transfer

While you are connected to a wifi network you transfer **3.3 MB** per day, compared to **1.3 MB** over 3G.

On average you send **2.9** but receive **3.4** text messages a day.

One quarter of your phone calls last no longer than **24** seconds and **56%** are shorter than one minute.



Phone & Texts

You don't answer every **third** call and half of all callers give up after **20** seconds, which is **5** seconds longer than it takes you to answer **90%** of your calls.



Apps

3 out of 4 days you use no more than **4** third party apps.



Battery & Charging

You turn the screen of your phone on **36** times a day but 1 in 4 times will switch it off again within **5.2** seconds.

When you plug your phone into a charger you will unplug it within **27** minutes 1 in 4 times. However, your phone is equally likely to remain plugged in for longer than **8h 46m**.



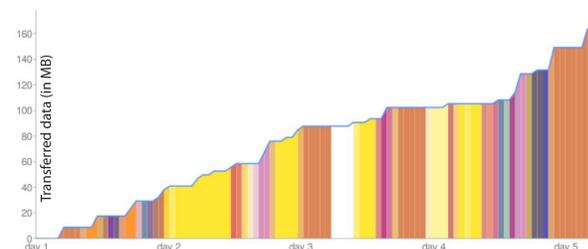
Bluetooth

You basically never use Bluetooth.

### Device Analyzer for Android



These statistics are based on a tiny sample of  $n=5$  with a total of 270 use days. Please help us expand our dataset!



#### Why collect this data?

- If you want to make informed choices when designing mobile devices it is necessary to know how current devices are used
- It is difficult to know what people do with their smart phones
- Diary studies cover only small numbers of people and often suffer from omissions and low level of detail
- Phone minutes and texts are available to network operators but don't characterize modern smart phone use well

#### How do we protect Personal Data?

- Hashing & aliases protect identifying data
- In-app overview of last sampled data
- There is in-app information about the possible privacy implications of sharing data
- A periodic reminder ensures that users are aware that their data is being collected
- Users can specify that they want their data to be released to University of Cambridge only
- Different types of data can be excluded from a publicly shared dataset
- There is a 3 month period where users can review their data before it is published.
- If the user is concerned about the privacy impact of sharing the reviewed data they can change sharing preferences or withdraw from the study entirely.
- We will delete all data on request

#### What is the Motivation for contributing?

- Participate in research
- Get statistics about your own phone use
- Analyze your usage history on the website and compare yourself with other people
- Find new applications based on your usage
- Get phone tariff recommendations based on your past usage behavior

#### Participate!

