Device Analyzer

Understanding Smartphone Usage

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On a typical day you will visit places that are 3.8 km apart. 1 in 5 people will move 1.5 km on average per day, one will move 66.4 km on average per day. The furthest we've seen anybody travel in a single day is 18886 km.

Location

On days when wifi is turned on for at least one hour, you see an average of 17 unique networks. Devices in our dataset have seen on average 584 networks.

Wifi

One in 10 people spends over 76% of time on a 2G network. A typical user spends 70% of time on either 3G or WiFi.

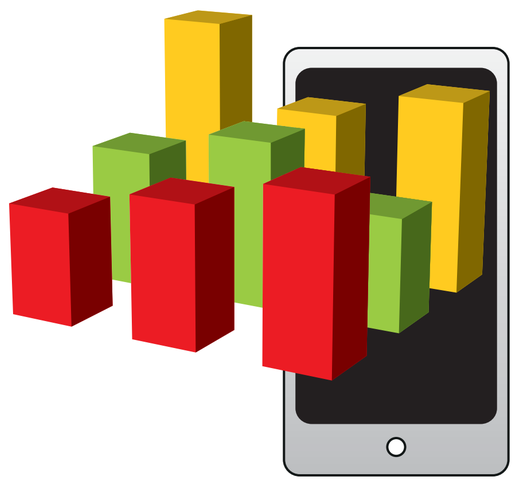
Data Transfer

On a typical day you send and receive 2 text messages a day. However, the average is 11 messages a day. The average message has 55 characters.

Half of your phone calls last no longer than one minute and 89% are shorter than 5 minutes.

Every third call is not answered and half of all callers give up after 20 seconds, which is 4 seconds longer than it takes you to answer 90% of your calls.

Phone & Texts



Device Analyzer for Android

You turn the screen of your phone on 57 times a day but 1 in 5 times will switch it off again within 4.1 seconds.

When you plug your phone into an AC charger you will unplug it within 9 minutes 1 in 5 times. Equally likely, it will remain plugged in for at least 5h 7m.

Over night, the longest 20% of charges last at least 8h 30m.

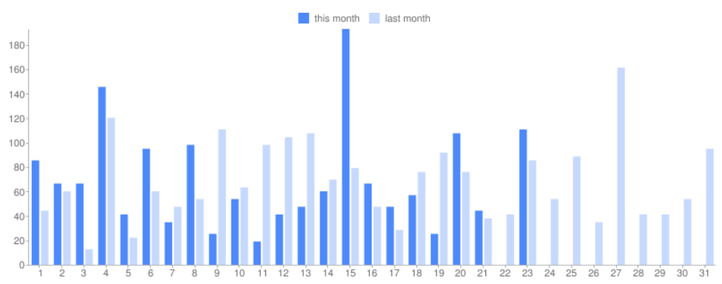
Battery & Charging

Most days you start no more than 9 apps, including core system components. One in five days you only start 4 apps.

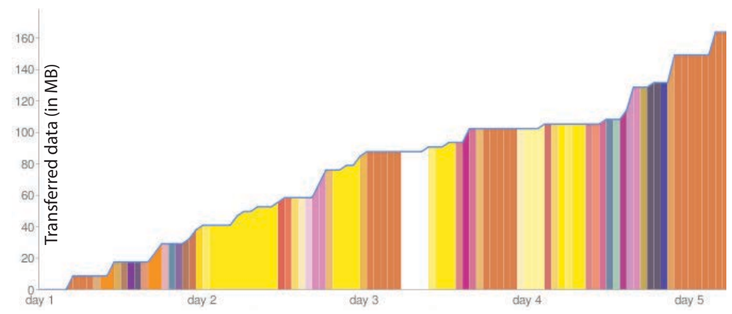
Apps

Bluetooth

Over half of our participants activate Bluetooth at most 1 in 14 days. On those days Bluetooth is active for 52 minutes for a typical user.



These statistics are based on over 1,400 years of usage data. 12,500 participants contributed data from 920 types of Android phones.



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
- Network operators know some aspects of your phone use, but don't have the ability to characterize modern smartphone use well

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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!