# Smartphone privacy

Our website: <a href="https://portfolio.cr.utwente.nl/student/jsiderius/dataviz3/">https://portfolio.cr.utwente.nl/student/jsiderius/dataviz3/</a>

(if unavailable, all files are in the "dataviz\_2021\_code\_smartphonePrivacy.zip" file)

Cato de Kruif - s2244217 Ellis Dijkstra - s2331357 Froukje Temme - s2248646 Priya Naguine - s2315653 Huub Rijnders - s2178249 Jannick Siderius - s2100282

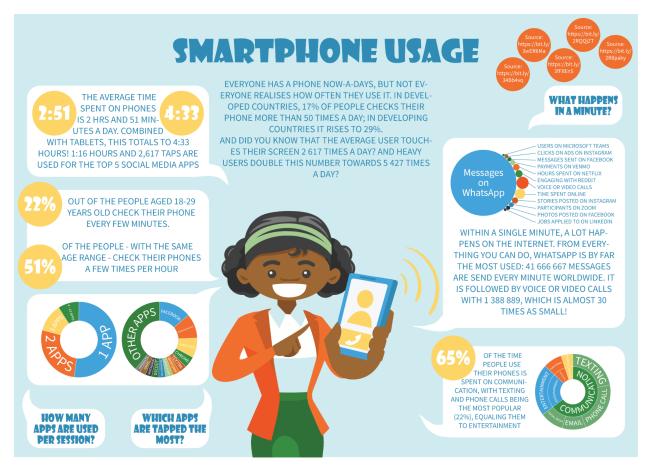
# Smartphone usage (Ellis)

#### Visualization 1



Pew Research. (2021, April 7). Mobile Fact Sheet. Pew Research Center: Internet, Science & Tech. https://www.pewresearch.org/internet/fact-sheet/mobile/

#### Visualization 2



Turner, A. (2021, February 20). 50+ Smartphone Addiction Statistics & Cell Phone Usage (2021). BankMyCell. <a href="https://www.bankmycell.com/blog/smartphone-addiction/#chapter2">https://www.bankmycell.com/blog/smartphone-addiction/#chapter2</a>

DScout, Inc. (2016, June). Mobile Touches. DScout. https://blog.dscout.com/hubfs/downloads/dscout\_mobile\_touches\_study\_2016.pdf

Deloitte. (2017). Global mobile consumer trends.

https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Technology-Media-Telecommunications/gx-tmt-global-mobile-consumer-trends-survey-2017.pdf

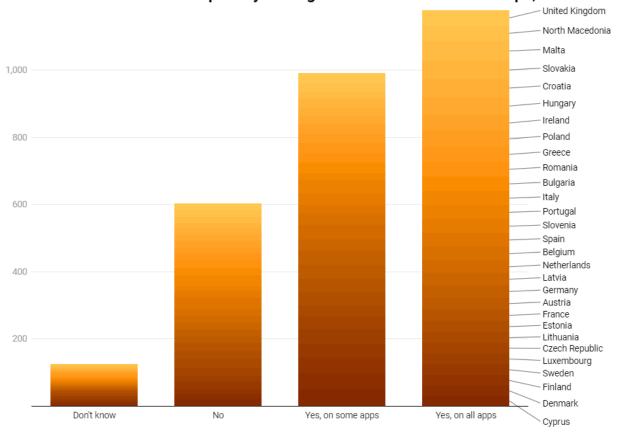
eMarketer. (2016). US Mobile Usage: Top 5 Stats to Know. https://www.emarketer.com/corporate/coverage/be-prepared-mobile

Domo. (2020). Domo Resource - Data Never Sleeps 8.0. <a href="https://www.domo.com/learn/data-never-sleeps-8">https://www.domo.com/learn/data-never-sleeps-8</a>

# User awareness (Cato)

#### Visualization 1

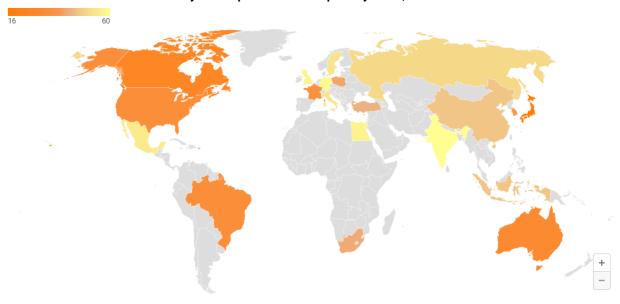
#### Share of user awareness of privacy settings in some countries of Europe, 2019



Source: Joseph Johnson • Get the data • Created with Datawrapper

Joseph Johnson. (2020). EU smartphone users awareness of privacy settings 2019, by country. <a href="https://www.statista.com/statistics/1186040/smartphone-user-eu-awareness-privacy/">https://www.statista.com/statistics/1186040/smartphone-user-eu-awareness-privacy/</a>

#### User awareness of their country's data protection and privacy rules, 2019



Source: Joseph Johnson • Get the data • Created with Datawrapper

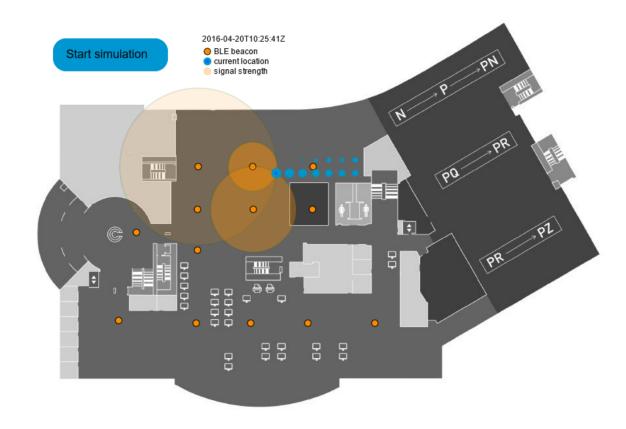
FRA. (2020). Your rights matter: Data protection and privacy. https://fra.europa.eu/sites/default/files/fra\_uploads/fra-2020-fundamental-rights-survey-data-protection-privacy\_en.pdf

# Location tracking (Jannick)



Visualization 1

Huub Rijnders. (2021) Data from Google Location History <a href="https://www.linkedin.com/in/huub-rijnders-757a02175/">https://www.linkedin.com/in/huub-rijnders-757a02175/</a>



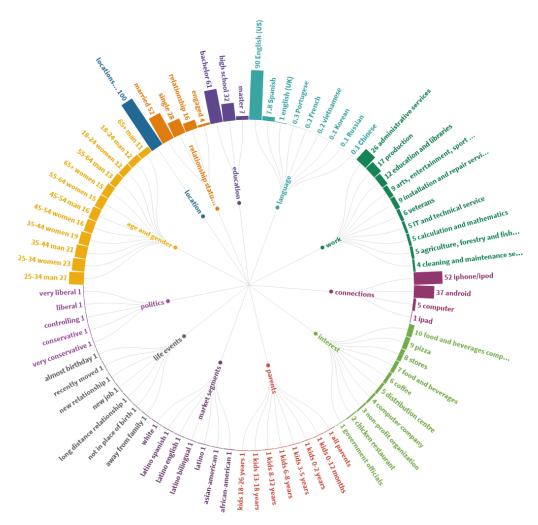
Mohammadi, M., & Al-Fuqaha, A. (2016). UCI Machine Learning Repository: BLE RSSI Dataset for Indoor localization and Navigation Data Set. UCI Machine Learning Repository. <a href="https://archive.ics.uci.edu/ml/datasets/BLE+RSSI+Dataset+for+Indoor+localization+and+Navigation">https://archive.ics.uci.edu/ml/datasets/BLE+RSSI+Dataset+for+Indoor+localization+and+Navigation</a>

# User tagging (Froukje)

# Visualization 1



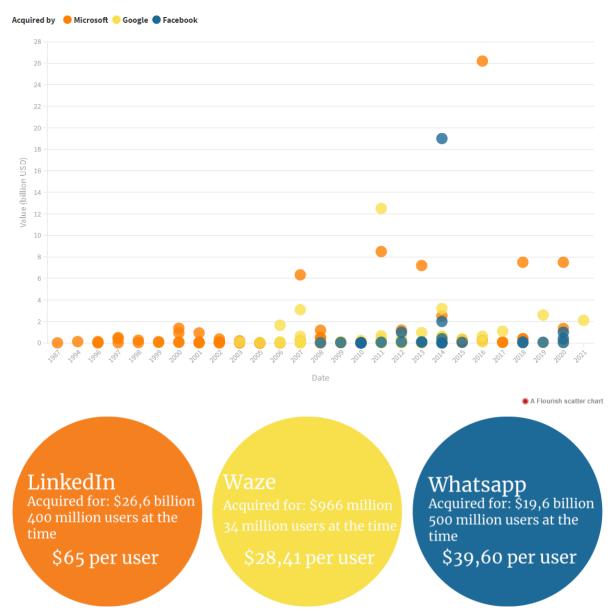
Facebook. (2021). Facebook Audience Insights. <a href="https://www.facebook.com/business/insights/tools/audience-insights">https://www.facebook.com/business/insights/tools/audience-insights</a>



Google & Alphabet Group. (2021). Google Ads Settings. Google. <a href="https://www.google.com/ads/preferences/html/blocked-cookies.html">https://www.google.com/ads/preferences/html/blocked-cookies.html</a>

# Data selling and targeted advertising (Huub)

#### Visualization 1



Wauters, R. (2013, January 8). Waze ended 2012 with 34 million users and expects to double that by the end of this year. TNW | Insider.

https://thenextweb.com/news/waze-ended-2012-with-34-million-users-and-expects-to-have-doubled-that-by-this-years-end

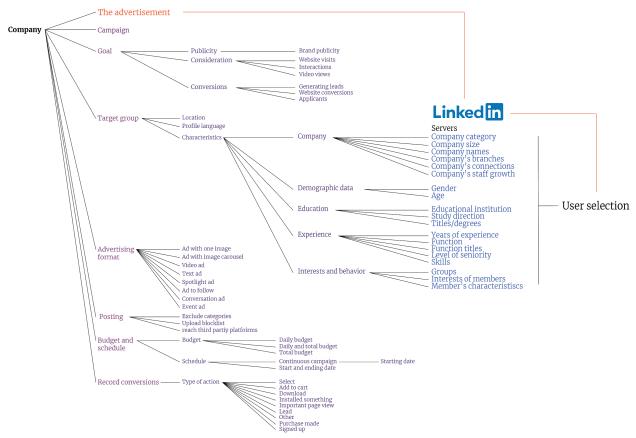
Lunden, I. (2013, June 25). TechCrunch is now a part of Verizon Media. TechCrunch. <a href="https://techcrunch.com/2013/06/25/a-year-after-microsoft-bought-it-yammer-nears-8m-users-plans-for-deeper-integration-and-a-new-klout-partnership">https://techcrunch.com/2013/06/25/a-year-after-microsoft-bought-it-yammer-nears-8m-users-plans-for-deeper-integration-and-a-new-klout-partnership</a>

Forrest, C. (2014, March 12). The top 7 acquisitions of all-time in social media, and why they matter. TechRepublic.

https://www.techrepublic.com/article/the-top-7-acquisitions-of-all-time-in-social-media-and-why-they-matter/

#### Visualization 2

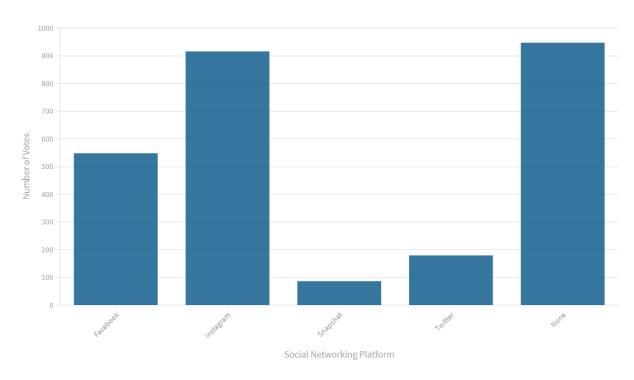




LinkedIn. Advertisement campaign manager. <a href="https://linkedin.com/campaignmanager">https://linkedin.com/campaignmanager</a>

# Case study: Facebook (Priya)

## Visualization 1



Halper, A. (2021, June 1). Social Influence on Shopping - dataset by ahalps. Data.World. <a href="https://data.world/ahalps/social-influence-on-shopping">https://data.world/ahalps/social-influence-on-shopping</a>



Facebook. (2020). Facebook - What categories of my Facebook data are available to me? <a href="https://www.facebook.com/help/930396167085762?helpref=related&ref=related&source\_cms\_id=849835245164523">https://www.facebook.com/help/930396167085762?helpref=related&ref=related&source\_cms\_id=849835245164523</a>

## **Tools**

Excel VSCode OpenRefine Google Docs

Flourish
Tableau
Word Art
Datawrapper
Kepler.GL
Carto
p5.js

Adobe Illustrator Adobe Photoshop Adobe After Effects

## **Dataset**

All datasets are in the "dataviz\_2021\_code\_smartphonePrivacy.zip" file, in the folder called "data".

### Smartphone usage

Smartphone data (Excel)

#### Privacy awareness

Awareness in EU (CSV)
Awareness in the World (CSV)

#### Location tracking

BLE beacon tracker data (CSV) Kick-In location data (CSV) BLE beacon simulation code (p5.js)

### User tagging

Facebook user profile (Excel)
Facebook user tags (Excel)

### Data selling

Tech company acquisitions (Excel) Linkedin ad parameters (Excel)

#### **Facebook**

Facebook data stores (Excel) Social media shopping (CSV)