# PriOSS: a Privacy One-Stop Shop

Project Group WiSe 2022/23

Patricia Arias Cabarcos, Emiram Kablo IT Security, Paderborn University



# Motivation

• Digital services rely on personal information to provide value

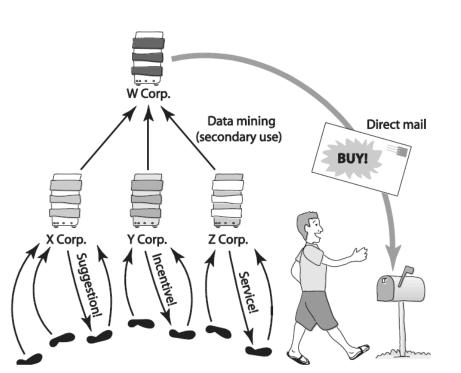
- Privacy needs to be respected!
  - preserve our freedom of choice
  - and personal control over our data flows
- Paradox:
  - people want privacy, but
  - they do little to protect themselves

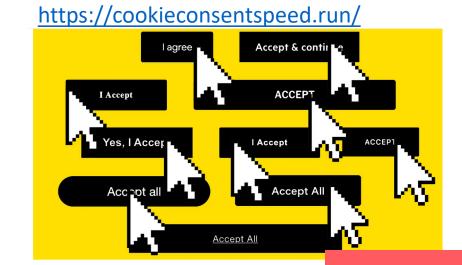


# Digital Privacy is Unusable

### It's not always easy to:

- understand privacy
- control disclosure, exercise rights









# **Privacy Policy**

30 days to read privacy policies: consent fatigue will make GDPR ineffective

How can we better support people

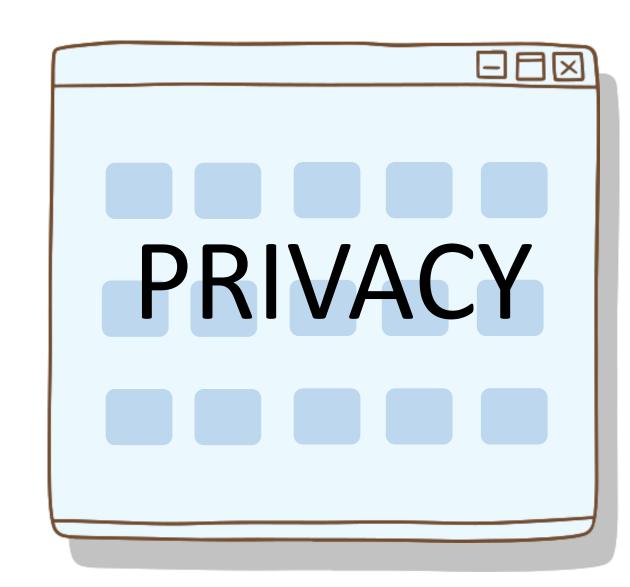
in understanding and controlling

their digital privacy?

# General Idea

Privacy One-Stop Shop

- Resources to:
  - Raise privacy awareness
  - Empower users

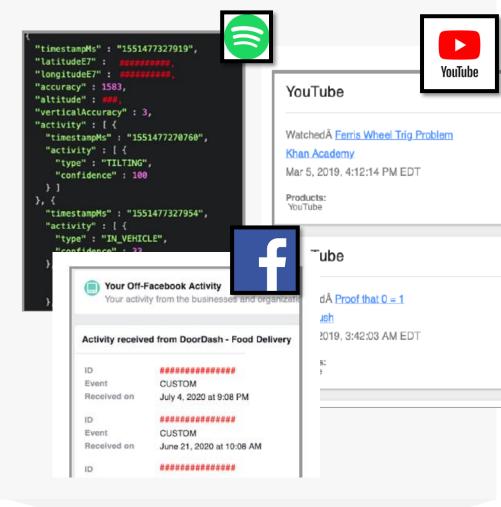


# Concrete Goal

### Develop Transparency Enhancing Apps

- support users understanding:
  - What, why, how data is collected and used
  - With whom is shared
  - Potential inferences! Risks and consequences
  - → interactive visualizations

- supports users to take privacy protections:
  - Opt-out, delete data, withdraw consent
  - → controls and privacy advise



### GDPR Data Exports\*

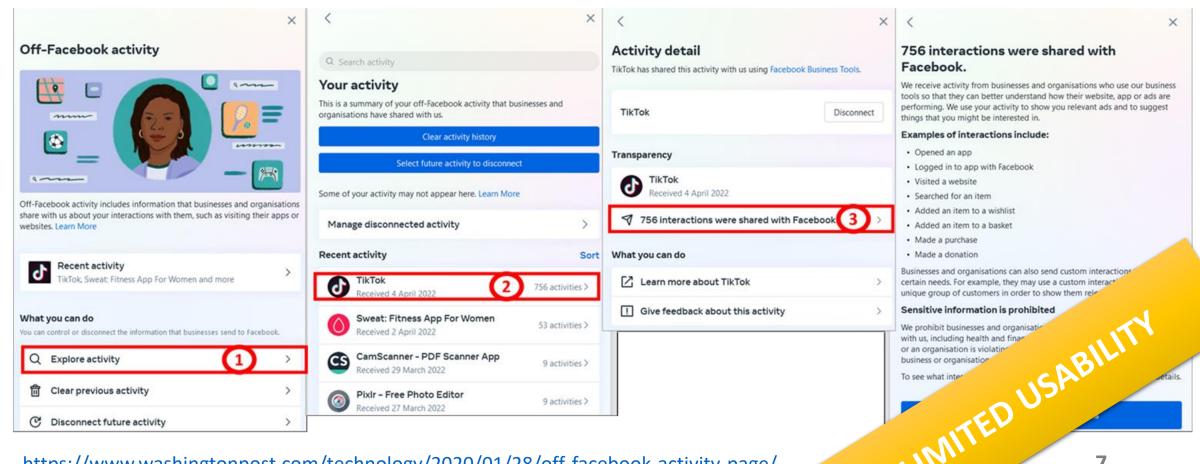


<sup>\*</sup> Veys, S., Serrano, D., Stamos, M., Herman, M., Reitinger, N., Mazurek, M.L. and Ur, B., 2021. Pursuing Usable and Useful Data Downloads Under {GDPR/CCPA} Access Rights via {Co-Design}. SOUPS 2021 (pp. 217-242).

# Example

"Off-Facebook Activity" transparency tool

dashboard for users to see which third party apps and websites have shared their information with Facebook



https://www.washingtonpost.com/technology/2020/01/28/off-facebook-activity-page/ https://www.facebook.com/off facebook activity

# Example

- Off-Facebook Activity transparency tool
  - Source data provided in JSON
  - Can be leveraged to implement more usable and useful transparency

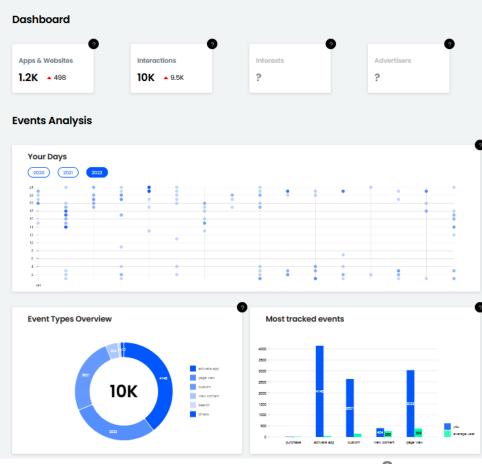
```
"off_facebook_activity_v2": [
           "name": "TikTok",
          "events": [
               "id": 597615686992125,
               "type": "CUSTOM",
               "timestamp": 1649050260
10
11 -
12
               "id": 597615686992125,
               "type": "CUSTOM",
13
14
               "timestamp": 1648988880
15
16
```



Bv

Issam Mani Dominik Schachten Lukas Ostermann

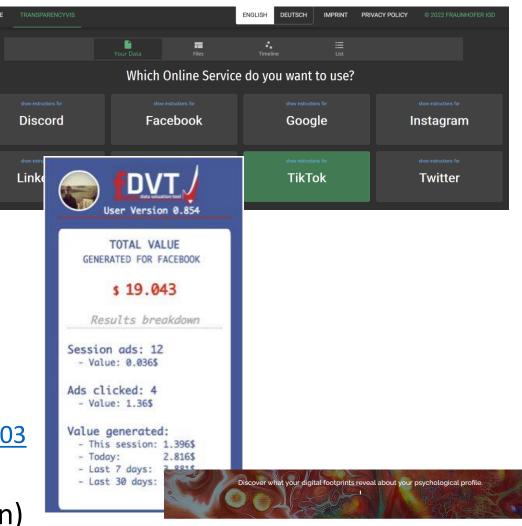
(as part of the course "Practical Usable Security and Privacy")



https://pusp.cs.uni-paderborn.de/

# More Examples

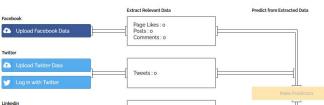
- Other Transparency Tools:
  - TransparencyVis (visualize data exports)
    - https://transparency-vis.vx.igd.fraunhofer.de/
  - FDVT (Facebook Data Valuation Tool)
    - https://dl.acm.org/doi/10.1145/3025453.3025903
  - Magic Sauce (psychological profile prediction)
    - https://applymagicsauce.com/demo



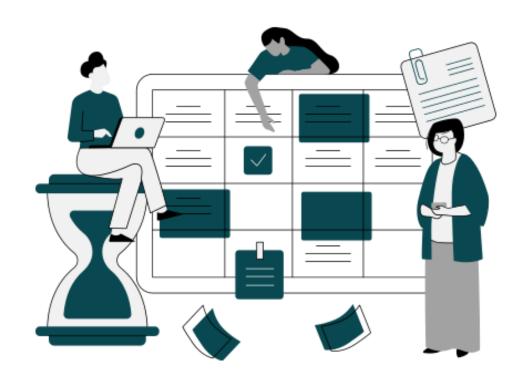
#### See how others see you

This demo predicts your psycho-demographic profile from digital footprints of your behaviour. It reveals how you might be perceived by other online and provides academically robust insights on your personality, intelligence, leadership, life satisfaction and more. We think every citizen has a right to understand their data, but most big tech companies would rather not reveal what is predictable (or profitable) about you. Fortunately, you can now download your social media data and analyse it directly using our tool. See how to use it.

Your use of this demo is completely anonymous and your results will not be stored. By using it you consent to the data submitted being used fo scientific research in line with our <u>privacy policy</u>. You can withdraw from this anonymous study at any time. Thanks!



# Tasks



01 Literature Research

02 User Research

03 Prototype Design & Development

04 User Testing

05 Prototype Refinement

06 Documentation

General portal layout concept

set of transparency enhancing web

applications

# Team — Required Profiles

### **Developers**

- Solid Programming experience
- Backend or Frontend

### **UX/HCI** Researchers

- Knowledge on humancentered design
- Experience with user research



## Other Information

### PG Language

English

### Website:

https://en.cs.uni-paderborn.de/its/teaching

### Contact for questions

pac@mail.upb.de

### General

https://cs.uni-paderborn.de/en/studies/studyelements/project-groups

