Data Portability at Google

November 29, 2017
Greg Fair & Ali Lange
Agenda

01 History of Data Liberation
02 Takeout
03 Principles and Values
04 What’s Next?
05 Questions
History of Data Liberation
Google has been thinking about Data Portability over a decade

Welcome to the Data Liberation Front
Monday, September 14, 2009 | 8:51 AM

I remember the first time I heard Google's CEO Eric Schmidt speak back in 2004. He wrapped up his talk to employees by clearly stating that Google didn't lock its users in. He stressed that we didn't want people to use our products solely because they can't get their data out to switch to a competing service.

It was with this in mind that I started Google's Data Liberation Front two years ago in our Chicago office. We're a small team of Google engineers that aims to make it easy for our users to transfer their personal data in and out of Google's services, by building simple import and export functions. I wanted to make sure that users (myself included, as a consumer of Google products!) always had a choice.
Google Takeout launched in 2011

Building on many years of work on what was known internally as “data liberation”
Consumer Use Cases

Data Portability (Takeout) is about putting users in control of their data when they want:

- To backup or to see their data:
  - An easy way to get a readable and/or compatible copy of their data

- To use specific pieces of data with other companies’ services:
  - An easy way to directly transfer specific data to compatible services at other companies
  - Choice about where/how to get it (download, OneDrive, Dropbox, etc.)

- To migrate data between Google accounts:
  - An easy way for students to transfer their most important data when they leave school
02  Takeout
Google Takeout

A single place for Google users to download a copy of their data all at once

30+ products supported, ability to select specific files and folders (e.g., in Drive or Photos)

Export directly to Dropbox and Microsoft OneDrive
Increased Visibility

Connecting the dots between making it easier to see how you use Google and the data associated with your use of Google services.
Google Takeout

When available, industry standard formats are preselected for export.

Users can change format depending on the product, type of data, and their intended use.
Google Takeout

Direct transfer to 3rd party services such as Dropbox and Microsoft OneDrive

Delivery method
- Send download link via email
- Add to Drive
- Add to Dropbox
- Add to OneDrive
Metrics

~30M unique visitors in 2016

Available for more than 30 products

More than one million exports per month

~6 million unique visitors from EU last year

>500PB of data exported in 2016
03 Principles and Values
EU’s GDPR provides a springboard for improved data portability

Article 20
“Right to Data Portability”

“The data subject shall have the right to receive the personal data concerning him or her, which he or she has provided to a controller...and have the right to transmit those data to another controller without hindrance”
Principles: Interoperability & Portability

- User-Driven
- Privacy and Security
- Reciprocity
- Focus On Users’ Data, Not Company Data
Industry Perspective

- Users First
- Use Existing Infrastructure
- Industry Trends
Practical Implementation

- Portability should be flexible
- Encourage open, consistent, interoperable standards
- Increase consumer awareness
Service to Service Portability
Expanding service-to-service portability

- Current: give users their data
- Future: let users move their data to the right place
Applying principles to product solutions

- User-Driven
- Privacy and Security
- Reciprocity
Thinking at scale

- $N^2 \rightarrow N$
- Support companies of all sizes
- Use standards, but don’t be limited by them
- Where existing technologies are working, don’t break what works
Portability - a way forward

- Establish a proof of concept
- Invite everyone to collaborate
- Refine solutions
05 Dankeschön