Mapping Data Flows at the Public Library

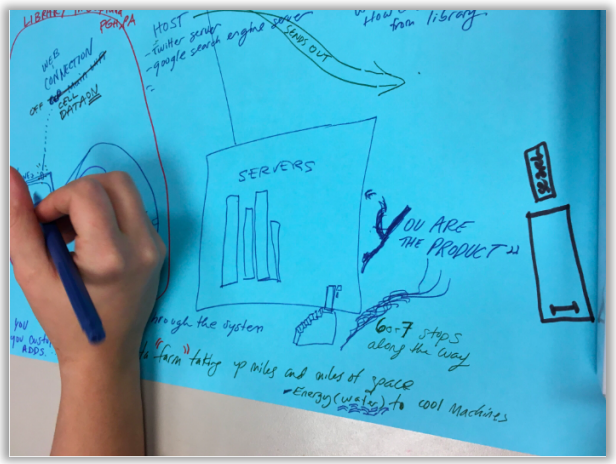
OVERVIEW
Participants map the path that a data packet makes when someone searches the library catalog.

WORKSHOP PURPOSE
This workshop helps to raise awareness of the data infrastructure, the data life cycle, and data access and privacy. Participants consider the route that data travels and the entities have that access to it along the way.

DESCRIPTION OF ACTIVITY FOR LIBRARY WEBSITE
"Sending data over networks is like mailing a letter – there is a sender and receiver. But what happens in between? This puzzle-game follows the flow of data when someone searches the library catalog"

QUESTIONS TO PROMPT DISCUSSION:
1. *When you search the library catalog, where does the information go?*
2. *How do you think a Google search works?*

KEY TERMS AND CONCEPTS:
Cyber-infrastructure, data awareness, data flows, data mapping, packets, router, modem, domain name server (DNS), internet service provider (DNS), data preservation, telecommunication network, web host.



PHASES OF DATA LIFE CYCLE ADDRESSED:
Collect/Create, Describe/Organize Data, Preserve Data, Transform/Use Data.

RECOMMENDED AUDIENCE & ENVIRONMENT
For teens, ages 13 and up. This activity is best for groups of six to eight but if participants work in pairs, up to 12 can participate. Some of the terms and metaphors used in this activity may require scaffolding for younger audiences.

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MATERIALS NEEDED

1. A ball of red yarn
2. Large note cards or three-dimensional depictions of the entities along the route that data takes (For example, cover shoe boxes with paper and decorate them to look like a library, the library modem, etc.)
3. Sketch paper
4. Colored markers
5. Sticky notes

STEP-BY-STEP PLAN

This workshop was adapted from the Mapping Data Flows activity created by the Data Privacy Project. Additional downloadable workshop images and materials can be found here: http://www.dataprivacyproject.org/mapping-data-flows/.

Directions

1. Start at the library catalog terminals in the library (or ask participants to use the library's mobile app on their own device).

2. Ask participants to search the library catalog for something interesting.

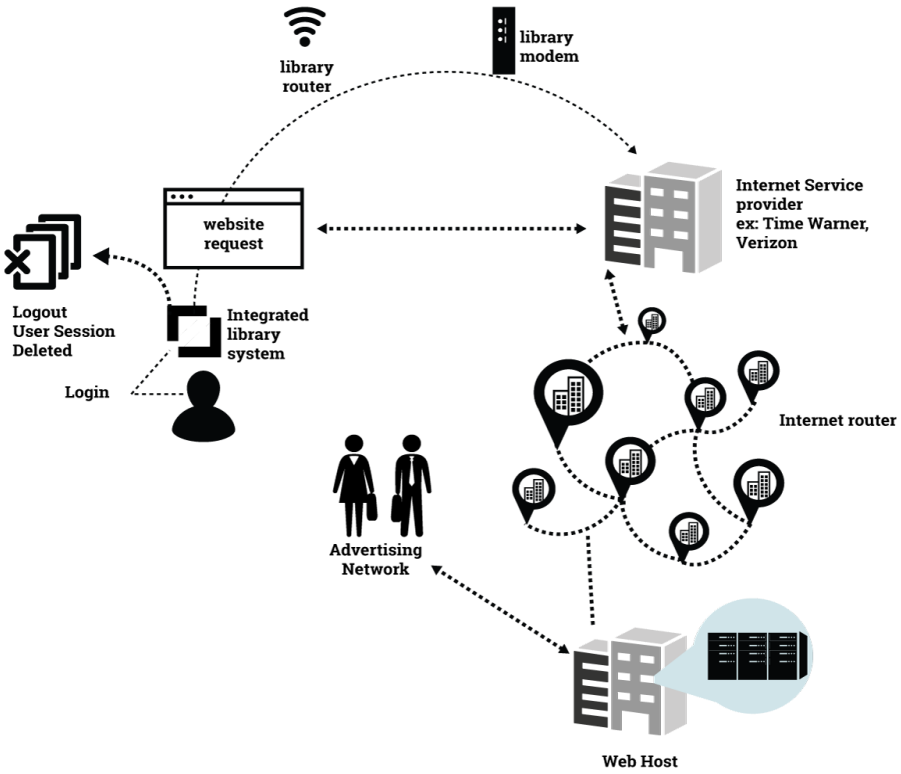
3. Using sketch paper and sticky notes, ask participants to create a map depicting the trail of their search across the library network and beyond, drawing or using sticky notes to visualize the pathway that data takes on its journey. (Hint: components of the search include "Library patron", "Library Catalog" (a computer terminal or mobile app), "Website Request," "Library Router," "Library Modem," "Internet Service Provider," "Internet Router," and "Web Host").

   How does each part connect and in what order?

   Alternatives:

   - Use a ball of yarn and large note cards labelled with the following headings: "Library patron", "Library Catalog" (a computer terminal or mobile app), "Website Request," "Library Router," "Library Modem," "Internet Service Provider," "Internet Router," and "Web Host"). The first teen (the "library patron") will hand the ball of yarn to the next, in the order they think data flows from the library and back. The yarn follows the direction of data flows and ends up back with the "library patron".

4. Afterward, visit the web site for the Mapping Data Flows activity created by the Data Privacy Project: http://www.dataprivacyproject.org/mapping-data-flows/. It outlines the route that data took during a catalog search at the library. A fun way to make data flows concrete is to think about it in terms of the postal system, as if data is a letter to be sorted and delivered (although many teens today are not familiar with how the postal system works, never having actually mailed a letter themselves!).



SEARCHING THE LIBRARY CATALOG:
DATA FLOWS AT THE PUBLIC LIBRARY

Source for image:
Data Privacy Project

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