



Are bookmarks still relevant to Firefox?





Data Preparation

Understanding, Cleaning & Standardizing Data



Exploring Data

Three tables: Users, Events, Survey

- Users table does not have much relevant data
- Events table contains bookmark and tab browsing patterns
- Survey table contains user characteristics

Not all users are represented in each table



Cleaning & Formatting Data

Issues

- ◉ ‘Freeform’ responses on some questions complicate data
- ◉ Some answers in delimited 1|5|7 format
- ◉ Alphanumeric entries e.g. ‘4 Windows’

Solutions

- ✓ Ignore freeform text, small percentage of total responses
- ✓ Export to Excel and use Text → Columns
- ✓ Replace text with “” and cast as numeric



Data **Analysis** & Visualization

Users, Survey, Events Tables



Users Table Overview

- Users: 27,000+
- Firefox Versions: 27
- Average Number of Extensions: 6.4

Users can make multiple submissions to the Test Pilot



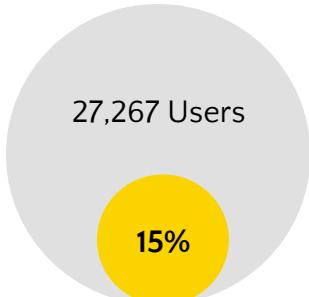
A high-angle photograph of a large group of graduates in black gowns and gold stoles, gathered together, likely at a graduation ceremony.

Survey Table

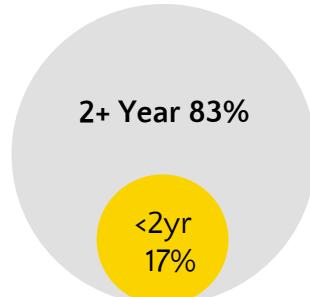




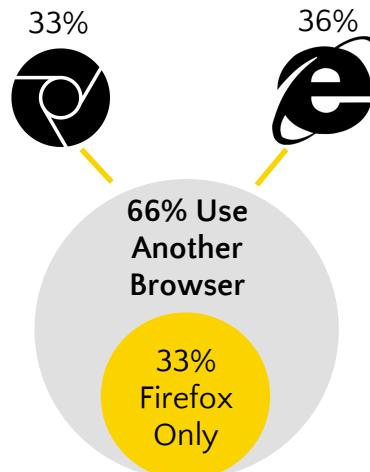
Survey Table: Usage



Surveys Completed



Firefox User History



Browser Variety



Primary Browser



Survey Table: User Profiles



93% Male



7% Female



83% Skill Level 7+



13% Skill Level 0-6



5% Over 55



20% From 36-55



75% Under 35



45% Home



27% Work



11% School



17% Mobile



10% Less than 2hrs



53% From 2-6hrs



37% More than 6hrs



15% Apple



12% Android



40% No Smartphone



Survey Table Takeaways

- Millennial males
- Home users browsing for Entertainment
- Low smartphone usage
- Long-term, Firefox primary users

Users do not necessarily answer all survey questions



Events Table Overview

- Study Startup Instances Recorded: **24,077**
- Events Possible: 28
- Study Duration: 7h:10m:47s

Duplicate records of some events due to timed interval capture



Events Table: Bookmarks





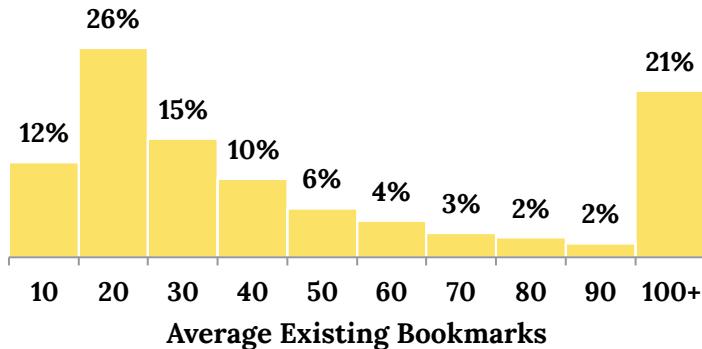
Bookmark Behaviour



Max Bookmarks 19,883

Average Bookmarks 119

Median Bookmarks 29



10,595

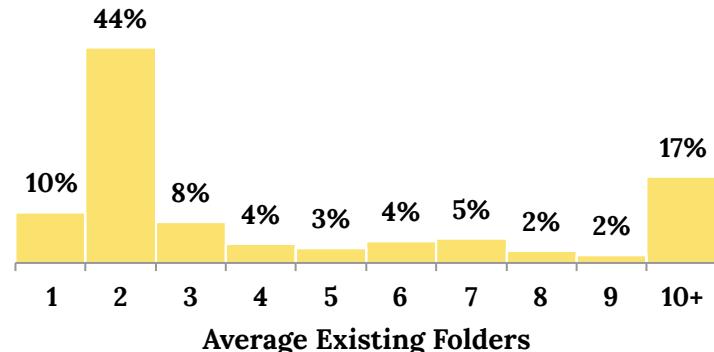
Bookmark Users



Max Folders 2,870

Average Folders 12

Median Folders 2

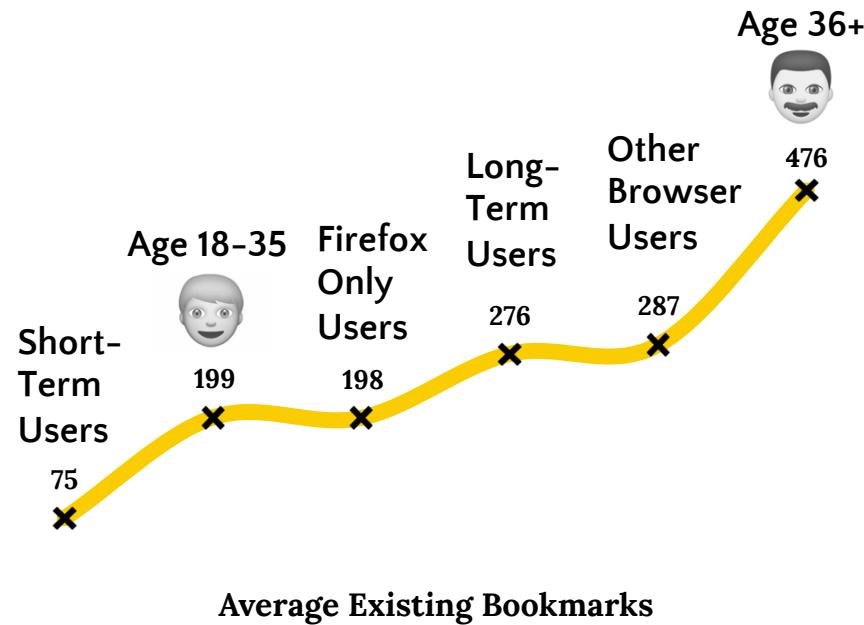


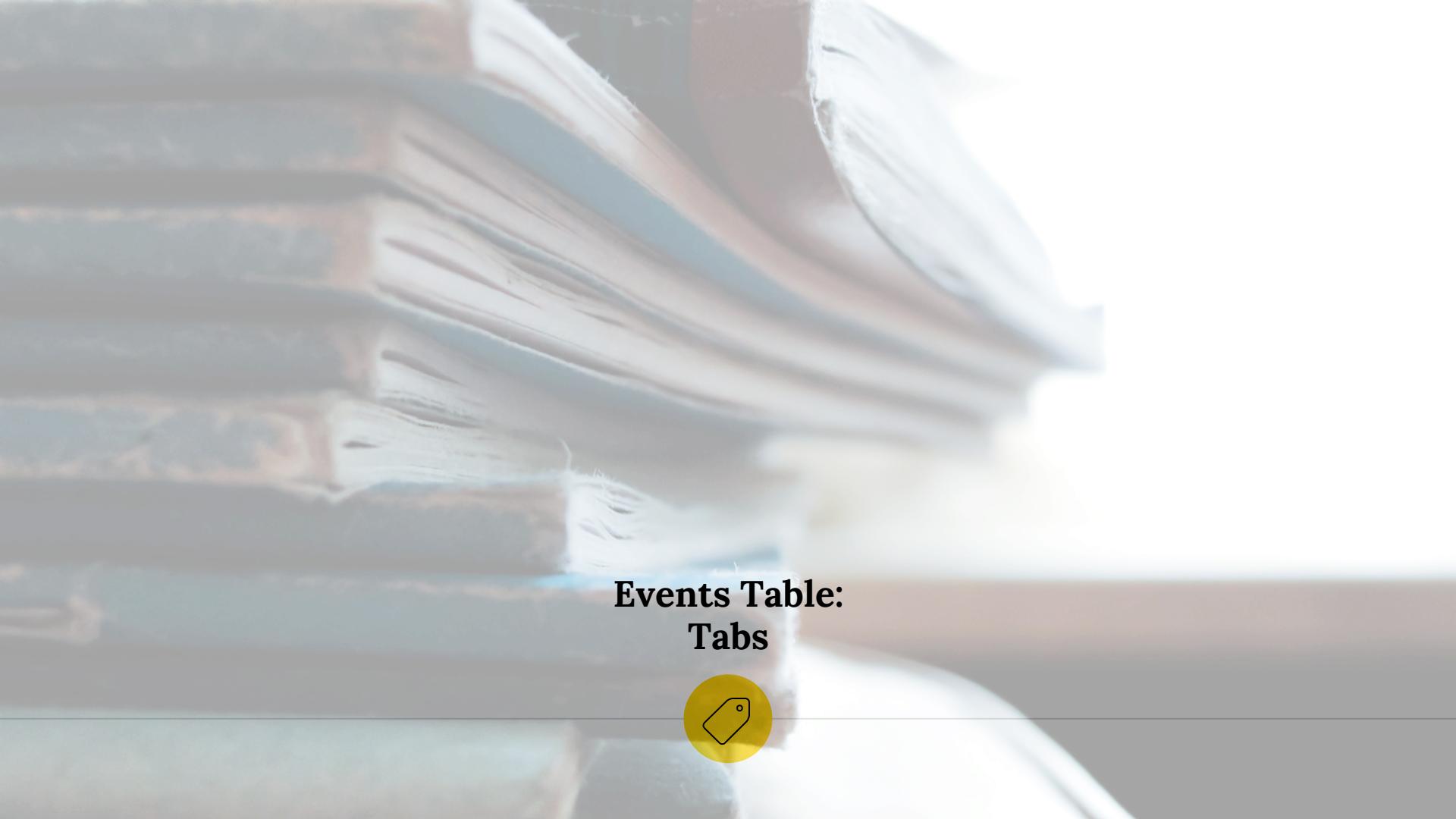


Bookmark Engagement

6,872 or **29%**
Users Took
Bookmark Actions

9.5
Average Bookmark
Actions Taken per
User





A stack of event programs or brochures is shown fanned out, with various colors like blue, white, and orange visible. A yellow circular icon with a black outline of a tag is overlaid on the bottom left.

Events Table: Tabs



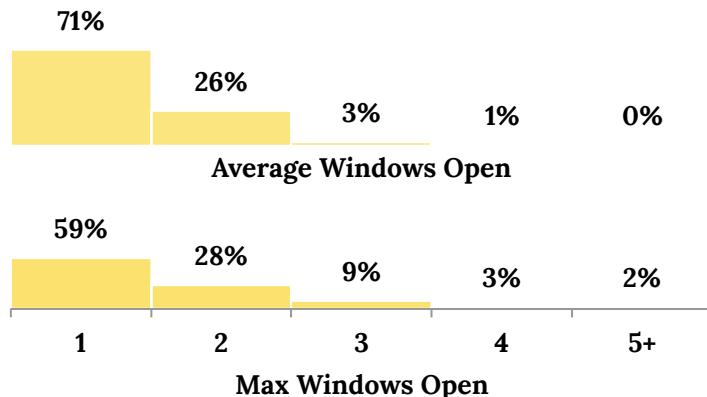


Windows & Tabs Behaviour



Max Windows **27**

Average Windows **1.1**



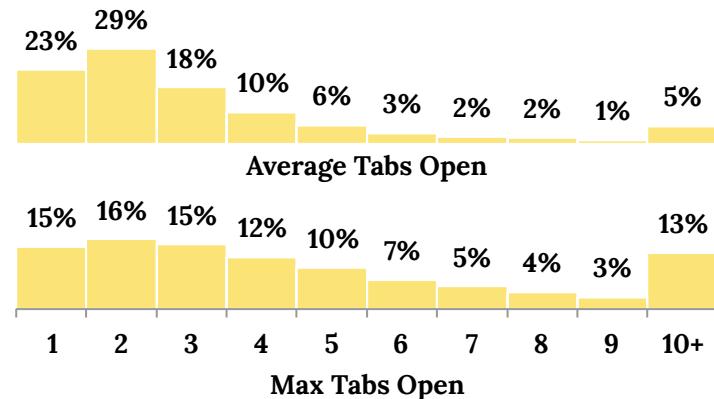
14,598

Window & Tab Users



Max Tabs **1,103**

Average Tabs **3.3**

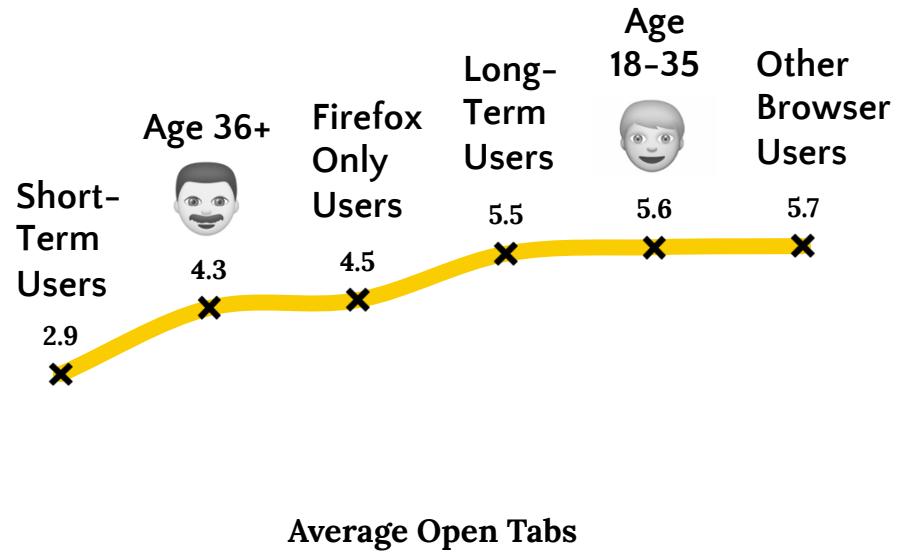




Tabs Engagement

14,321 or **59%**
Users
Opened/Closed a
Tab

29.9
Average Tab
Actions Taken per
User





Recommendation

Bookmarks or Tabs?



User Engagement Comparison

Bookmarks

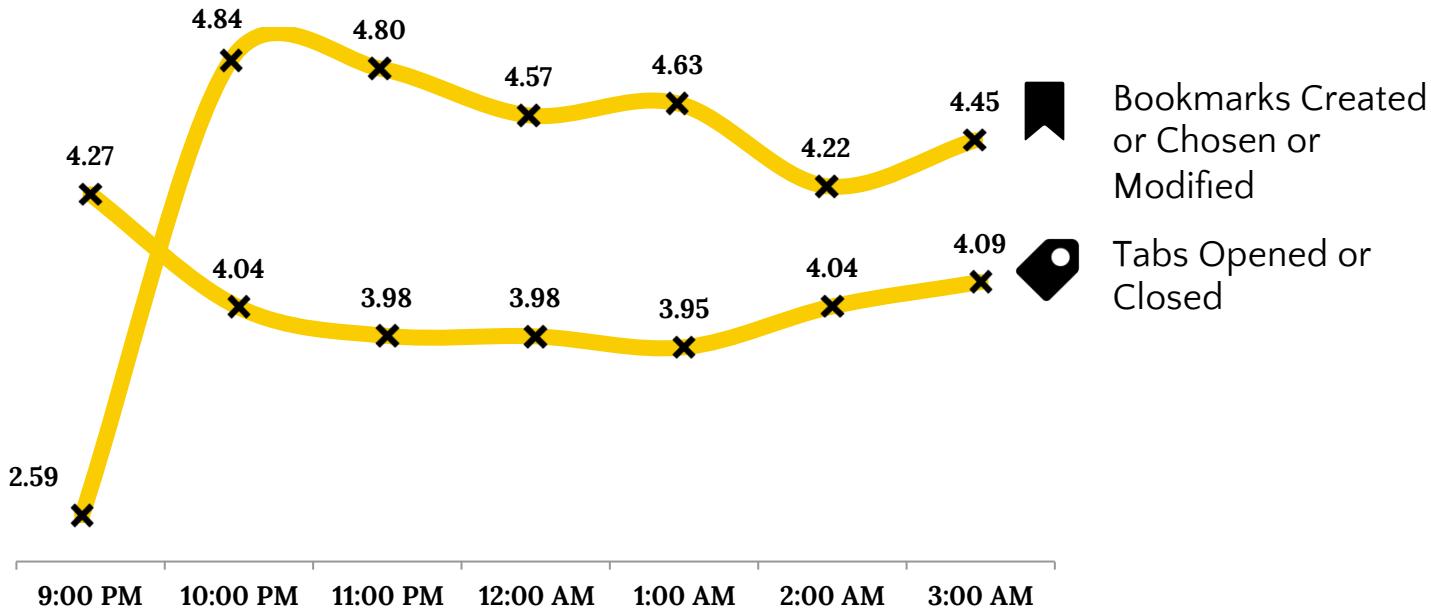
- Average bookmark actions taken: 9.5
- Average bookmarks stored: **119.3**
- 29% of users chose or created a bookmark
- Ages 36+ had highest number of bookmarks

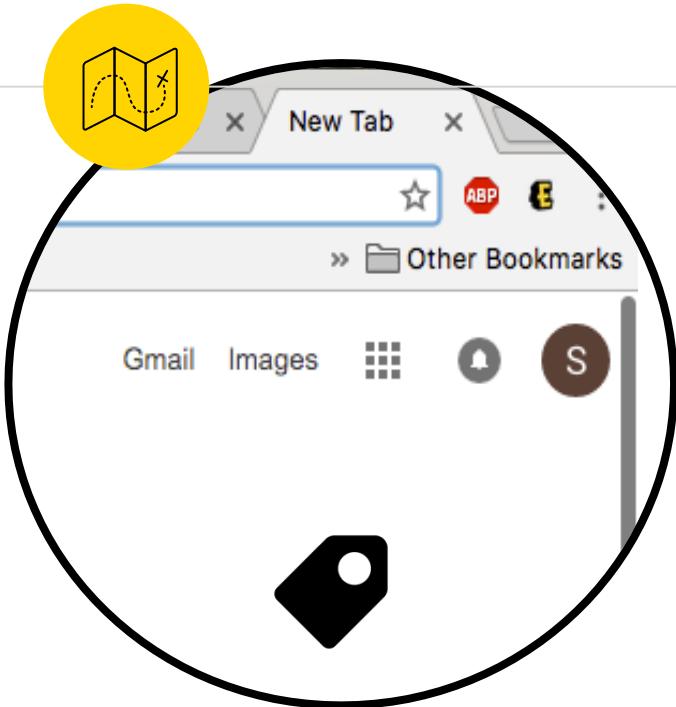
Tabs

- Average tab actions taken: **29.9**
- Average tabs open: 3.4
- **59%** of users opened or closed a tab
- **Ages 18–35** had highest number of open tabs



Hourly User Engagement





Recommendation: Improve Tab Support

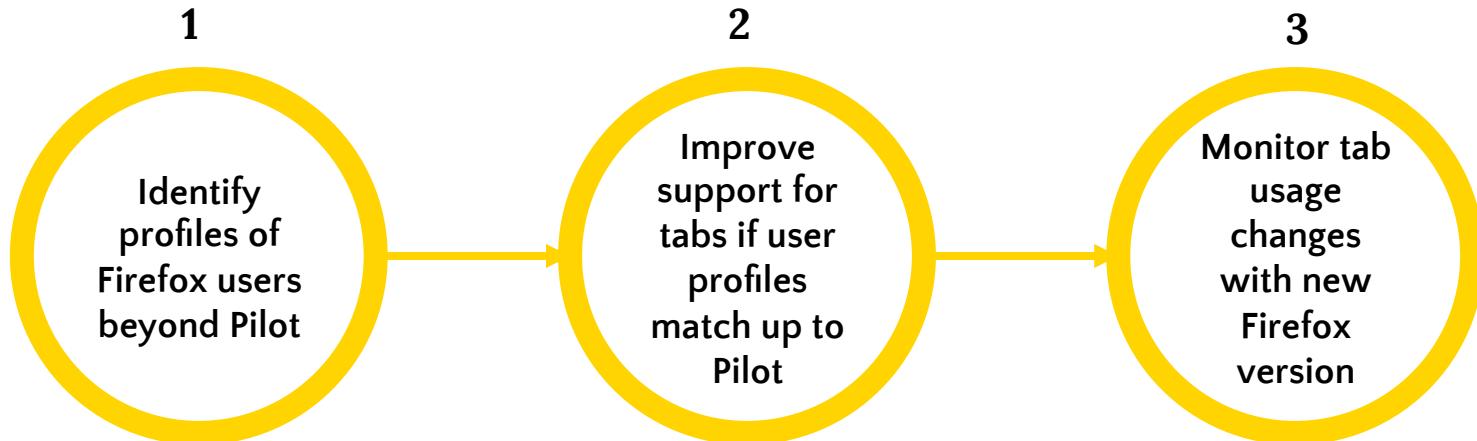
There is clearly **demand** for multiple webpages

Engagement with tabs is higher than bookmarks, even though hourly average usage is similar

Long-term, **younger**, core Firefox users lead tab usage



Next Steps





Data **Limitations**

Shortcomings and ambiguities



Structure & Scope Issues

Selection Bias

Survey respondents were overwhelmingly **males under 35** who consider themselves primarily Firefox users

Limited Data

Only 4,081 or **15% of users** completed surveys
Limited insight on tab activity compared to bookmarks

Conflicts

Multiple versions of Firefox used
Duplicate records of some events due to set interval capture



Future Analysis

What Comes Next



Follow Ups

- Improve Pilot support for mobile
- Increase survey completion rate
- Create more event codes for tab activity
- Look at usage over longer timeframe



Thanks!