Meet our readers
“I live in a little town where I felt very isolated when I was young. Now, thanks to internet and Wikipedia, I have the whole world at home! Thank you.”
“I love that I can explore any subject on Wikipedia. When Nelson Mandela passed away, I looked up his Wikipedia page. From there I clicked into the Apartheid and about the ethnic groups involved. I learned about the language of Afrikaans, which I had never heard of before, and some of the key activists and politicians in ending Apartheid.”
“Slammed my arrogant stock broker brother-in-law when we were arguing over which of two countries had the larger GDP.”
What do we know?
What will we do about it?
Agenda

Traffic Update
Toby Negrin — 15 minutes

Design Research Updates
Jared Zimmerman + Abbey Ripstra — 5 minutes

Product Updates
Erik Moeller + Maryana Pinchuk — 10 minutes

The Next Billion Users
Carolynne Schloeder + Anasuya Sengupta — 10 minutes

Discussion / Questions
10 minutes
Traffic Update
By The Numbers

248,000,000,000 Articles served
Oct '13 - Oct '14 [1]

34 Articles per human on earth
Oct '14 [2]

235 Countries/regions
Oct '14 [3]

[1,3] October 2014 data
High level summary: Readership

- Mobile is growing, desktop is shrinking
- Globally, pageviews are flat (-0.9% AGR)
- Global North[1] traffic (72% of all traffic) is flat
- Global South traffic is increasing, driven by mobile
- In the US, pageviews are declining (-8.6% AGR)
  - In the US, decline on desktop is not fully offset by mobile web

[1] https://meta.wikimedia.org/wiki/List_of_Countries_by_Regional_Classification
## Global readership: summary

<table>
<thead>
<tr>
<th></th>
<th>Monthly pageviews (bn)</th>
<th>Annual growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human, Desktop + Mobile site</td>
<td>16.8</td>
<td>-0.9%</td>
</tr>
<tr>
<td>Human, Desktop site</td>
<td>11.0</td>
<td>-18.5%</td>
</tr>
<tr>
<td>Human, Mobile site</td>
<td>5.8</td>
<td>+64.2%</td>
</tr>
<tr>
<td>Total (incl. crawlers)</td>
<td>20.1</td>
<td>+3.8%</td>
</tr>
</tbody>
</table>

*October 2014 data; annual growth rates based on linear model (May 2013 - October 2014)*
"Globally, total human readership (excluding crawlers and automated traffic) is flat. Mobile growth is increasing as desktop is declining. Mobile growth is replacing desktop readership."
## World / US

<table>
<thead>
<tr>
<th>Region</th>
<th>Metric</th>
<th>Monthly pageviews (bn)</th>
<th>Annual growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>Human PVs total</td>
<td>16.8</td>
<td>-0.9%</td>
</tr>
<tr>
<td></td>
<td>Human PVs to desktop site</td>
<td>11.0</td>
<td>-18.5%</td>
</tr>
<tr>
<td></td>
<td>Human PVs to mobile site</td>
<td>5.8</td>
<td>+64.2%</td>
</tr>
<tr>
<td>US</td>
<td>Human PVs total</td>
<td>3.3</td>
<td>-8.6%</td>
</tr>
<tr>
<td></td>
<td>Human PVs to desktop site</td>
<td>2.1</td>
<td>-24.2%</td>
</tr>
<tr>
<td></td>
<td>Human PVs to mobile site</td>
<td>1.2</td>
<td>+42.2%</td>
</tr>
</tbody>
</table>

*October 2014 data; annual growth rates based on linear model (May 2013 - October 2014)*
<table>
<thead>
<tr>
<th>Region</th>
<th>Metric</th>
<th>Monthly pageviews (bn)</th>
<th>Annual growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global North</strong></td>
<td>Human PVs total</td>
<td>12.2</td>
<td>-1.5%</td>
</tr>
<tr>
<td></td>
<td>Human PVs to desktop site</td>
<td>8.0</td>
<td>-18.0%</td>
</tr>
<tr>
<td></td>
<td>Human PVs to mobile site</td>
<td>4.0</td>
<td>+56.6%</td>
</tr>
<tr>
<td><strong>Global South</strong></td>
<td>Human PVs total</td>
<td>4.0</td>
<td>+6.3%</td>
</tr>
<tr>
<td></td>
<td>Human PVs to desktop site</td>
<td>2.5</td>
<td>-16.5%</td>
</tr>
<tr>
<td></td>
<td>Human PVs to mobile site</td>
<td>1.4</td>
<td>+84.0%</td>
</tr>
</tbody>
</table>

*October 2014 data; annual growth rates based on linear model (May 2013 - October 2014)*
Global North

The Global North is responsible for 72% of total human readership, trends are similar to those observed globally.
The Global South is responsible for 24% of total human readership.

It’s seeing the fastest mobile growth, although the majority of mobile traffic still comes from the Global North.

Automated traffic from the Global South is a negligible fraction.
## Top Growers

<table>
<thead>
<tr>
<th>Country</th>
<th>Monthly pageviews (bn)</th>
<th>Annual growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iran</td>
<td>0.14</td>
<td>+167.9%</td>
</tr>
<tr>
<td>Ukraine</td>
<td>0.25</td>
<td>+52.2%</td>
</tr>
<tr>
<td>South Korea</td>
<td>0.12</td>
<td>+37.7%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.03</td>
<td>+23.0%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.05</td>
<td>+22.7%</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.08</td>
<td>+18.3%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.2</td>
<td>+18.2%</td>
</tr>
<tr>
<td><strong>India</strong></td>
<td><strong>0.53</strong></td>
<td><strong>+12.7%</strong></td>
</tr>
<tr>
<td>Singapore</td>
<td>0.07</td>
<td>+10.5%</td>
</tr>
<tr>
<td>Russia</td>
<td><strong>0.9</strong></td>
<td><strong>+10.3%</strong></td>
</tr>
</tbody>
</table>

With the exception of Russia, South Korea and Ireland, all of the top growers among the largest countries by traffic are in the **Global South**.

**India** and **Russia** stand out as fast growing, major drivers of readership.

Traffic from Russia needs to be better understood, particularly for botnet or crawler requests that may not be accurately identified.

countries in the top 25% by total human PVs as of [October 2014](#); annual growth rates based on linear model (May 2013 - October 2014)
## Top Decliners

The fastest declining countries in the top sources of traffic are in Latin America.

**Mexico** and **Brazil** are key countries to monitor, given that they each generate over 300m human pageviews per month.

<table>
<thead>
<tr>
<th>Country</th>
<th>Monthly pageviews (bn)</th>
<th>Annual growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecuador</td>
<td>0.04</td>
<td>-30.5%</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.08</td>
<td>-29.6%</td>
</tr>
<tr>
<td>Venezuela</td>
<td>0.09</td>
<td>-28.0%</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.05</td>
<td>-23.8%</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.34</td>
<td>-23.2%</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.14</td>
<td>-23.2%</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.08</td>
<td>-22.6%</td>
</tr>
<tr>
<td>Chile</td>
<td>0.08</td>
<td>-22.3%</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.32</td>
<td>-21.0%</td>
</tr>
<tr>
<td>Peru</td>
<td>0.06</td>
<td>-17.8%</td>
</tr>
</tbody>
</table>

countries in the top 25% by total human PVs as of [October 2014](#); annual growth rates based on linear model (May 2013 - October 2014)
Wikimedia vs. the Internet

- Mobile: We are following the global trend, but not yet leveraging organic readership growth
- International: We are following the global trend, and adding to it through Wikipedia Zero
  - 3 Billion Connected; 4 Billion Unconnected
- Social: We are *trailing* the global trend
- Structured Data: Leading trend with Wikidata

Case Study: Facebook

“We believe that mobile usage of Facebook is critical to user growth and engagement over the long term, and accordingly are prioritizing mobile product development.”[1]

[1] Facebook’s 2012 Annual Report

Data from Facebook’s 2013 Annual Report
Sailing with the Wind

- 2010: Launched Facebook Zero[^1]
- 2012: Bought Instagram, a mobile only photo-sharing application[^2]
- 2013: Reorganized engineering around mobile development[^3]
- 2014: Bought WhatsApp, a mobile only messaging app popular in Asia[^4]

[^1]: http://en.wikipedia.org/wiki/Facebook_Zero
[^3]: http://techcrunch.com/2013/12/04/facebook-org-charts/
[^4]: http://en.wikipedia.org/wiki/WhatsApp
About This Data

- Extrapolation from 1:1000 sampled log data
  - New pageview definition
  - Bugs in old data collection fixed, may cause discrepancies
- Caveats
  - Still PV-based
  - WMF uniques measure is in development, but will not be tracking uniques across devices
  - Apps (<1% of all traffic) are not broken out (but can be)
REFLEX

Reporting for Longterm Experiences
Create a metric for usability readiness for our products
Why?

- Better understand users’ experience
- Focus on opportunity for improvement
- Evaluate how our changes affect user experience
How?

Qualitative, self reported measures (REFLEX)
● confidence of task completion
● ease of use
● enjoyability
How?

Task group level rollups
- NPS (for a group of tasks)
- Sentiment matrix
How?

Quantitative measures
● success or fail
● time on task
● click path aggregation
Reusable Tasks

Find average low February temperature in San Francisco

Who was the second spouse of Albert Einstein

Find the name of a source referenced used for a particular statement in an article

Find articles which subject matter is related to the Sudan Golden Sparrow

Find a specific article which is not the first search result

Navigate to similar or related content on other Wikimedia
Tooling & Plan

Q2

- Evaluate 2 tools, UserZoom and Loop11
- Pilot in realistic snapshot of production site
Tooling & Plan

Q3

- Implement tool on snapshot site, ramp testing to 100-500 users per quarter
Removed UserZoom screenshot
<table>
<thead>
<tr>
<th>Video ID</th>
<th>Task</th>
<th>UZ ID</th>
<th>Profile</th>
<th>Effectiveness</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Error</td>
<td>0:24</td>
</tr>
<tr>
<td>2</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Error</td>
<td>1:36</td>
</tr>
<tr>
<td>3</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Error</td>
<td>1:53</td>
</tr>
<tr>
<td>4</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Abandon</td>
<td>3:36</td>
</tr>
<tr>
<td>5</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Error</td>
<td>0:13</td>
</tr>
<tr>
<td>6</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Success</td>
<td>0:07</td>
</tr>
<tr>
<td>7</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Success</td>
<td>0:09</td>
</tr>
<tr>
<td>8</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Success</td>
<td>1:26</td>
</tr>
<tr>
<td>9</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Success</td>
<td>0:01</td>
</tr>
<tr>
<td>10</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Abandon</td>
<td>1:10</td>
</tr>
<tr>
<td>11</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Success</td>
<td>0:07</td>
</tr>
<tr>
<td>12</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Success</td>
<td>0:13</td>
</tr>
<tr>
<td>13</td>
<td>T1</td>
<td>C59S771</td>
<td>PF1</td>
<td>Success</td>
<td>0:09</td>
</tr>
</tbody>
</table>
Talk: Sparrow (usability testing)

Newest topics

Start a new topic

Red sparrow territory

Reply • 1 comment • 20 hours ago

DannyH (WMF)

Right now, the article says that red sparrows only live in North America. Is that true? I thought that there were red sparrow colonies in Central America too. What's the source for the claim about North American red sparrows?

Reply • Thank

What scent is Sparrows most attracted to?

Reply • 1 comment • a day ago

DRtester1
Reporting + Analysis

- Video, audio, click paths
- Finding patterns that describe issues
- Recommendations for improving experiences
Task Details

Find the average low February temperature in San Francisco

Time on Task: 3:26
Success Rate: 65%
Confidence: 2.1
Enjoyability: 3.8
Ease: -1.6
REFLEX: 1.43

Task Group
Readability
NPS: 6
Sentiment: 7
Task Success Rates

[Graph showing task success rates for various activities with comparison between past and recent studies.]
Task REFLEX Numbers
Product Update
What are we doing about this?

Mobile is the place to grow WMF readership.

Apps can be developed at high velocity, offer native capabilities, still have low usage - great place to trial new ideas.

Mobile web is where 99% of our mobile users are. It’s the current growth engine for readership. This is also where most of our mobile development effort is today.
Readers love mobile

@glennsc amazing how mobile wikipedia looks so much better on regular desktop. maybe they should make this regular wikipedia
6:54 AM - 15 Nov 2014

Levi McGranahan
Wow! Go to the mobile Wikipedia site on desktop. Scaled up mobile site kinda blows the actual desktop version away!
en.m.wikipedia.org/wiki/Tacos
1:51 PM - 3 Dec 2014

Wikipedia’s mobile site on desktop is so much better than the desktop site. I’m switching. en.m.wikipedia.org
4:50 AM - 20 Nov 2014

dave Epstein
Wikipedia's mobile site looks better on desktop than their desktop site.
en.m.wikipedia.org/wiki/San_Franc...
11:05 AM - 18 Nov 2014

mivist
wikipedia's mobile on desktop view looks so nice en.m.wikipedia.org/wiki/Types_of_...
6:20 AM - 10 Nov 2014

Henry Tsai
I'm exclusively using mobile version of Wikipedia on desktop these days m.wikipedia.org
8:31 AM - 20 Nov 2014

Evil Mistress
Wow, the mobile design of Wikipedia on the Desktop is a way cleaner design.
9:41 AM - 22 Nov 2014

Ricky Mondello
"Mobile" wikipedia viewed on a "desktop" is much nicer than the "desktop" version. Compare:
en.m.wikipedia.org/wiki/The_Last__
en.m.wikipedia.org/wiki/The_Last__
11:54 PM - 2 Nov 2014

Jacob Simon
Wow, the mobile version of wikipedia looks really nice on the desktop:
en.m.wikipedia.org/wiki/Thee
What readers currently do

Quick fact lookup

e.g., “How tall is Arnold Schwarzenegger?”
   “When will Better Call Saul start airing?”
   “Where did Elizabeth Garrett go to school?”

Learn about topic

e.g., “What is normcore?”
   “What’s the history of chandeliers?”
   “What is Michael Larson’s background?”

Measures of engagement

On Wikipedia app:

<table>
<thead>
<tr>
<th>4.1 sessions/month</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6 pages/session</td>
</tr>
</tbody>
</table>

Industry average*

On all apps:

<table>
<thead>
<tr>
<th>13.7 sessions/month</th>
</tr>
</thead>
<tbody>
<tr>
<td>75% of apps have 7+ sessions/month</td>
</tr>
</tbody>
</table>

* http://therealtimereport.com/2014/07/29/75-of-apps-are-used-at-least-seven-times-per-month/
How do we engage readers more?

Some possible approaches:
1. Learn more
2. Reasons to return
3. Easy sharing
4. Browsing and discovery
5. Beautiful content

Wikipedia is: where I end up → where I go
1. Related content

Learn more about this topic
2. Trending articles

A reason to return
3. **Tweet a fact**

Easy, lightweight sharing of knowledge.
4. Curated lists

Browsable collections created/curated by readers

Unfree screenshots removed
5. Beautiful content
rich, visual, modern reading experience
How do we measure engagement?

- The number of people who read Wikipedia (Unique users/month)
- How many times they come back (Sessions/month)
- How much they read every time they visit Wikipedia (PV/Session)

e.g., make knowledge a daily part of people’s lives!
Wikipedia Zero and the next billion users
Unfree diagram removed
Focus Areas

Unfree diagram removed

Mobile pageviews in Nepal doubled with Wikipedia Zero launch, now exceeding desktop.
Mobile pageviews in the Philippines jumped 47% during ad campaign
Local Language Content

10% of Indians speak English[2]  

95% of mobile Wikipedia page views in India are on en.wikipedia.org

Who, where and how

- Survey in 11 Countries, 16 Languages
- Total Responses: ~96000, Dropout rate: 51%, Completed: ~47000
- Survey ran on desktop and mobile
Gender Gap

Readers
35000 responses

Contributors
8000 responses
Sister projects

- Wikipedia: 82%
- Wiktionary: 22%
- Wikipedia only: 18%
- Wikinews: 13%
- Wikibooks: 12%
- Wikispecies: 9%
- Wikisource: 7%
- Commons: 7%
- Wikiversity: 4%
- Other: 3%
- Wikivoyage: 3%
Offline Wikipedia

- 69%: No, I've never heard of it
- 16%: Yes, I've used it before
- 10%: No, but I've heard of it
- 4%: Yes, but I don't need it
- 2%: I have access to it, but I don't use it
The next billion readers live in the Global South and use mobile devices. Let’s meet them!
Discussion
Extra Slides
Apps Update
Referred traffic
The trend in the proportion of Google-referred pageviews over total traffic is flat for the mobile site in all regions but is declining everywhere on desktop, particularly in the Global South.
Readership Trends
High level summary: Referrals

- Referrals from Google on desktop are slightly declining, on mobile stable
  - Need to investigate referrals vs. overall changes in search volume/behavior
- Google dwarfs all other external referrals (37.2% of total human pageviews)
  - Yahoo+Bing combined = ~10% of Google traffic
- Social traffic (Twitter, FB, Reddit) negligibly small