

[goo.gl/65f2Pq](http://goo.gl/65f2Pq)

# Web Fonts

## State of the Union

ATypI 2015 - São Paulo

David Lemon



Adobe Typekit

John Giannopoulos

**fonts.com**

David Kuettel



Google Fonts

# Overview

Adoption update

Web Fonts in Action

Technology

Opportunities ahead



Adobe Typekit

**fonts.**com



Google Fonts

# What is a web font?

e.g., globo.com is using **web fonts** for the text on the page

The screenshot shows the Globo.com homepage in a web browser. The page features a search bar, navigation links (g1, Globe Sports, gshow, famous & etc, technology, videos), and several news articles. A blue arrow points from the 'videos' link to a video player. Another blue arrow points from the video player to the Chrome DevTools Network tab, which is open to the 'Font' sub-tab. The Network tab shows a list of font files loaded by the page:

Name	Status	Type	Size	Time
opentype-regular-webfont.woff	200 OK	font	23.5 KB	156 ms
s.glbimg.com/gl/ba/fonts	OK	font	23.1 KB	147 ms
opentype-light-webfont.woff	200 OK	font	20.1 KB	134 ms
s.glbimg.com/gl/ba/fonts	OK	font	19.7 KB	125 ms

The bottom of the Network tab shows the following statistics: 8 / 180 requests | 146 KB / 1.6 MB transferred | Finish: 41.78 s | DOMContentLoaded: 1.35 s | Load: 5.63 s

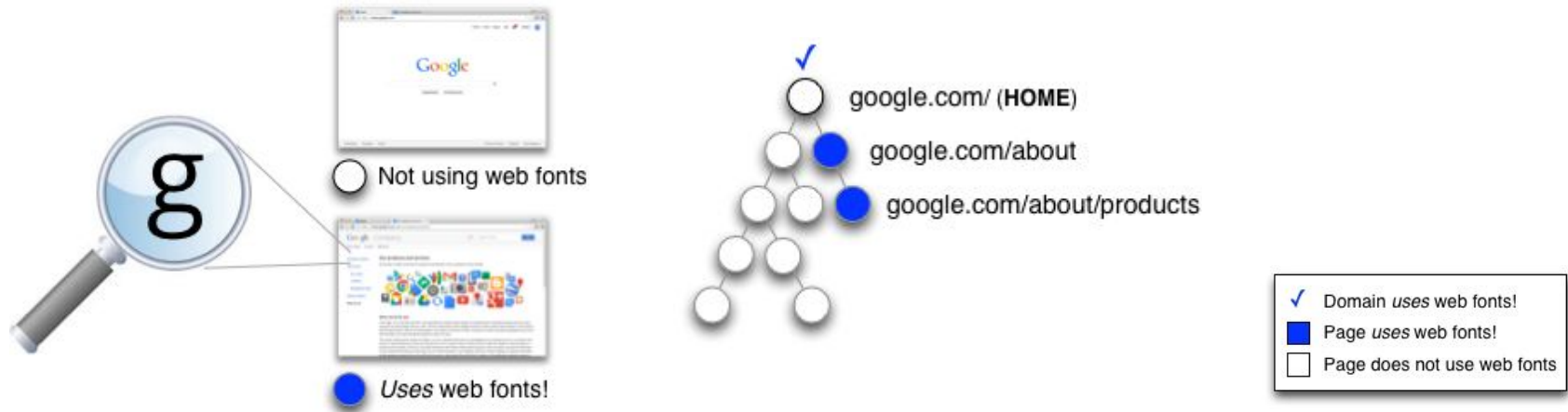
Chrome : Inspect Element : Network : Fonts (web fonts)

# Web Font adoption update

From 1% adoption to...

# Methodology large-scale analysis

Load page in a browser and determine *if **web fonts** were used*



And then repeat...

http  
archive

✓ ✓ □ □ ✓ □ • • □ ✓ Alexa Top 1000

Google Fonts

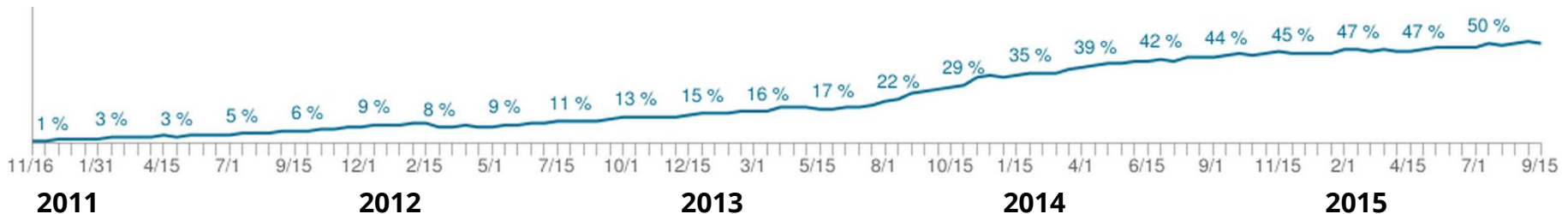
✓ ✓ □ □ ✓ □ • • □ ✓ The Web [10B+ pages] 10,000X!

# Web Font Adoption Alexa Top 1000

# 50%

**+7%**  
since 2014

Percent of the **Alexa Top 1000** domains that are using web fonts on **home page**.



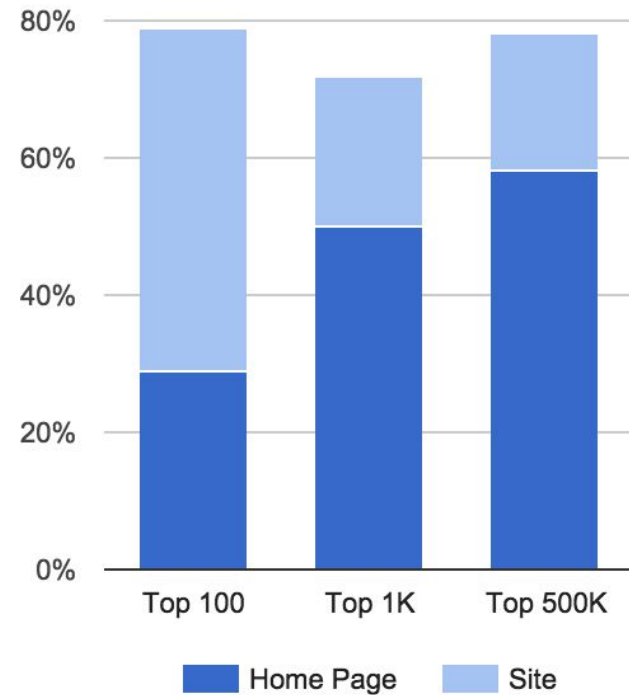
Source: [httparchive.org/trends.php?s=Top1000](http://httparchive.org/trends.php?s=Top1000) (September 15th, 2015)

# Deep Analysis vs. Home Pages

**79% Alexa Top 100**

**72% Alexa Top 1K**

**78% Alexa Top 500K**



Percent of the top **Alexa** domains that are using web fonts on **one or more pages**.

**Source:** HTTP Archive + Google Fonts large-scale analysis (2015)

# Web Font Adoption

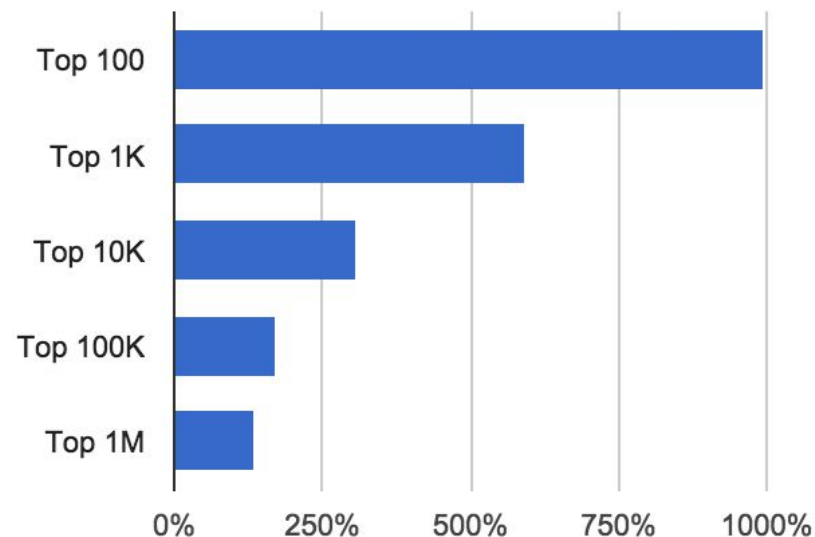
# Deep Analysis

Alexa domains using web fonts

Average number of pages per site with web fonts

Alexa Rank	2013	2014	2015
Top 100	210,648	2,188,672	21,835,951
Top 1K	206,946	457,999	2,717,762
Top 10K	65,403	115,104	355,100
Top 100K	19,912	26,107	45,151
Top 1M	3,549	4,513	6,048

1000% for Alexa 100



Significant increase in use within **domains**

**Source:** Google Fonts large-scale web font analysis (2015)



# 5 Billion<sup>+</sup>

2.5X since 2014

Number of **pages** across **the web** using web fonts

**Source:** Google Fonts large-scale web font analysis (2015)

# 75 Million<sup>+</sup>

+15M since 2014

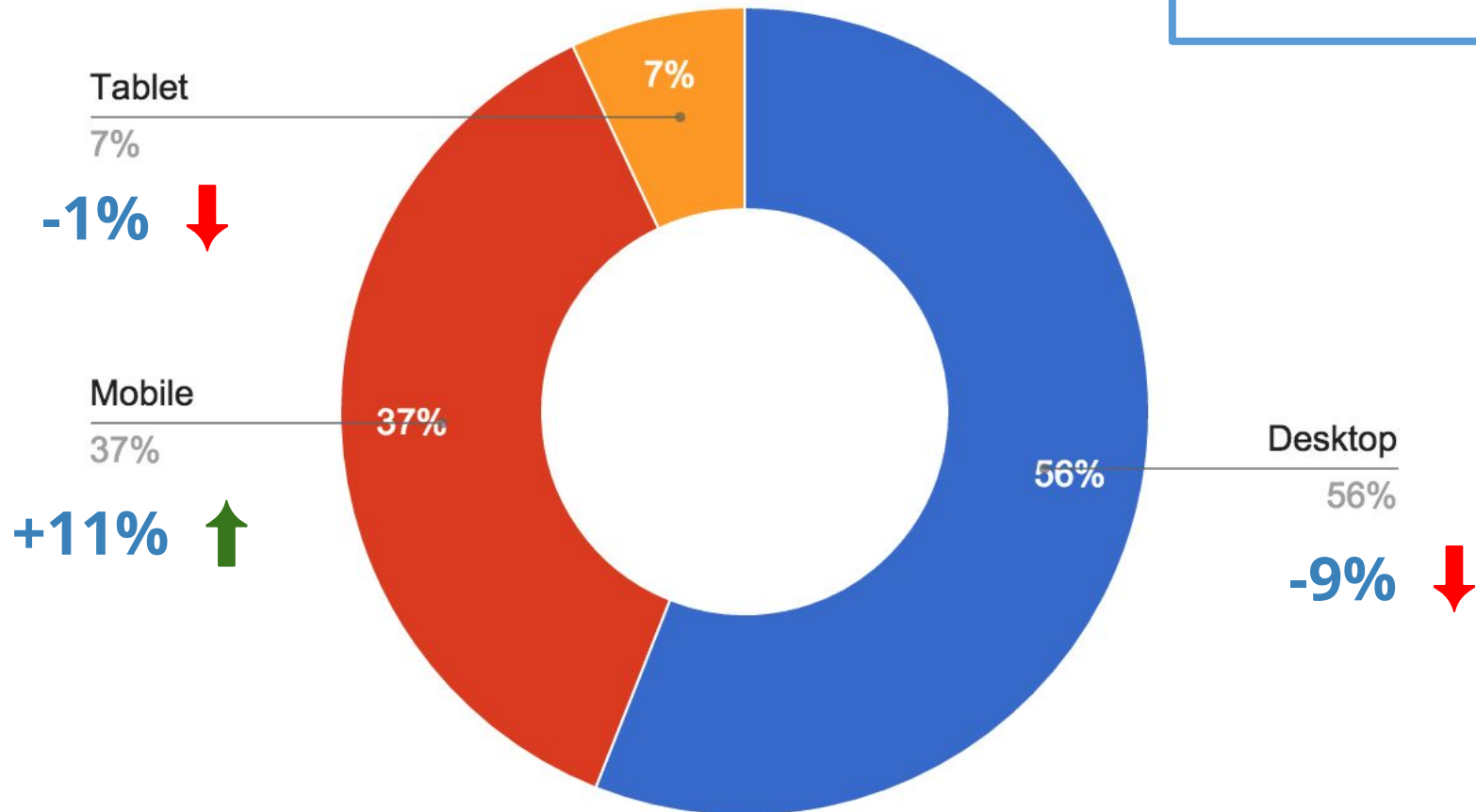
Number of **domains** across **the web** using web fonts on **one or more pages**

**Source:** Google Fonts large-scale web font analysis (2015)

# Web Font views by device

Desktop vs. Mobile vs. Tablet

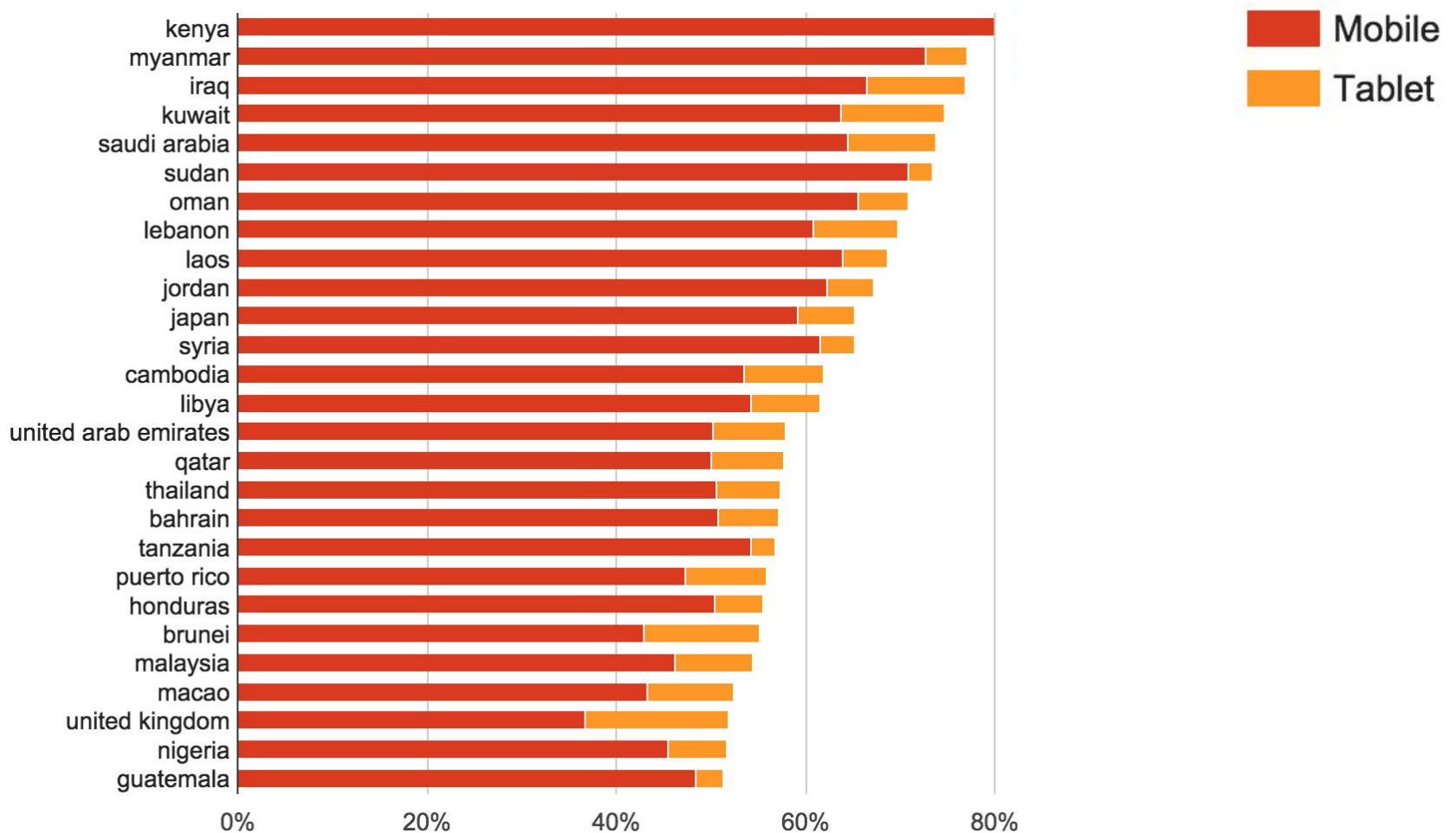
Δ since 2014



Views of Google Fonts by device (October 6th, 2015)

# Top Mobile + Tablet usage by Country

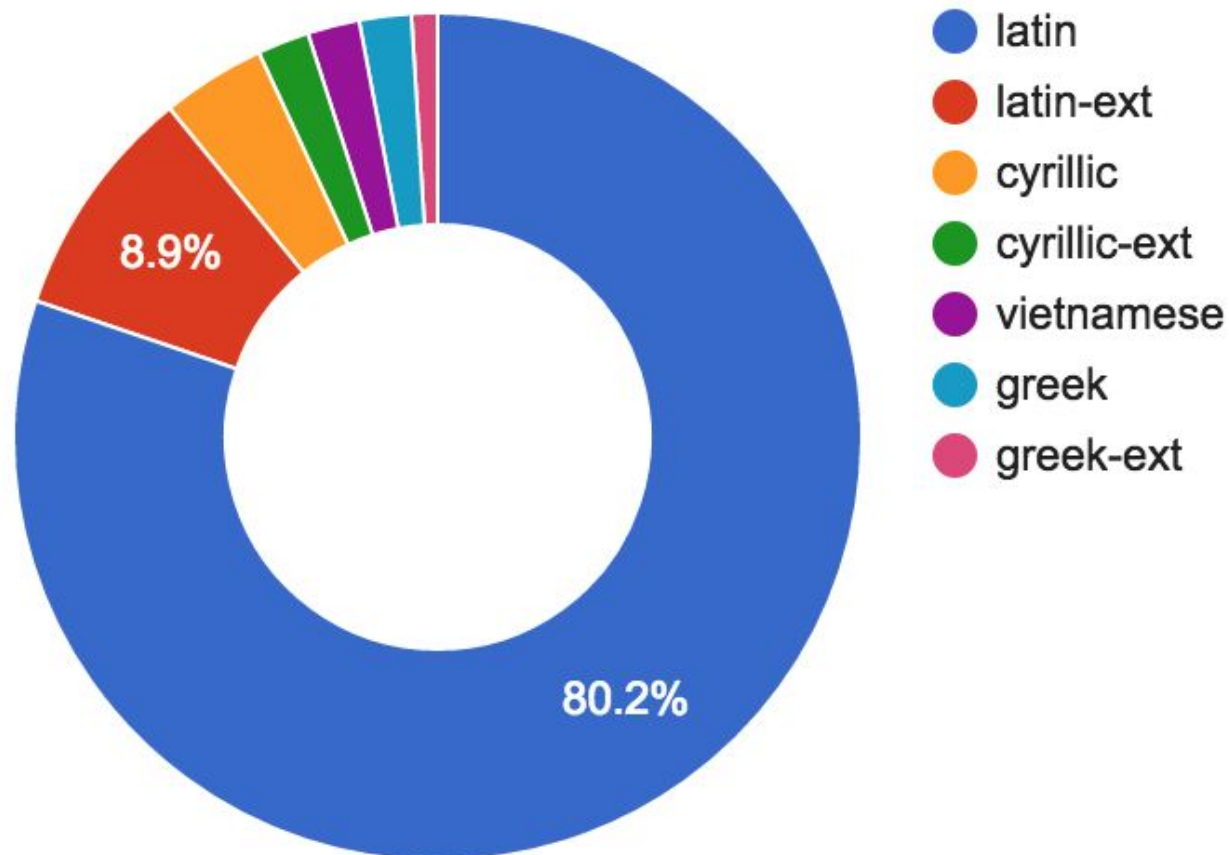
Font views on Mobile + Tablet as percent of total



(Countries with >1M font views, October 6th, 2015)

# Web Font views by Script

## Top character sets



Views of Google Fonts by Script (October 6th 2015)

# Focus on Brazil

and Latin America

# Google Fonts in Brazil + Latin America

## Brazil

#2 Country for Google Fonts API requests

**500M** font views/day from **Brazil**

**83M** font views/day from **São Paulo** (#1 in Brazil)

**1M** pizzas consumed per day in **São Paulo** ([wiki](#))

**Londrina Solid** **576M** total font views by Marcelo Magalhães

## Latin America

**Montserrat** **72B** total font views by Julieta Ulanovsky

**Lobster** **40B** total font views by Pablo Impallari

**Bitter** **30B** total font views by Huerta Tipográfica

(October 12th 2015)

Interesting  
adoption stats



# Most viewed video on YouTube



**Gangnam Style** on YouTube

2,426,371,632 total video views



# Videos vs. Web Fonts

October 6th, 2015

**Gangnam Style** by PSY on YouTube

2,426,371,632

total video views

**Open Sans** by Steve Matteson on Google Fonts

1,403,376,005,517

total font views

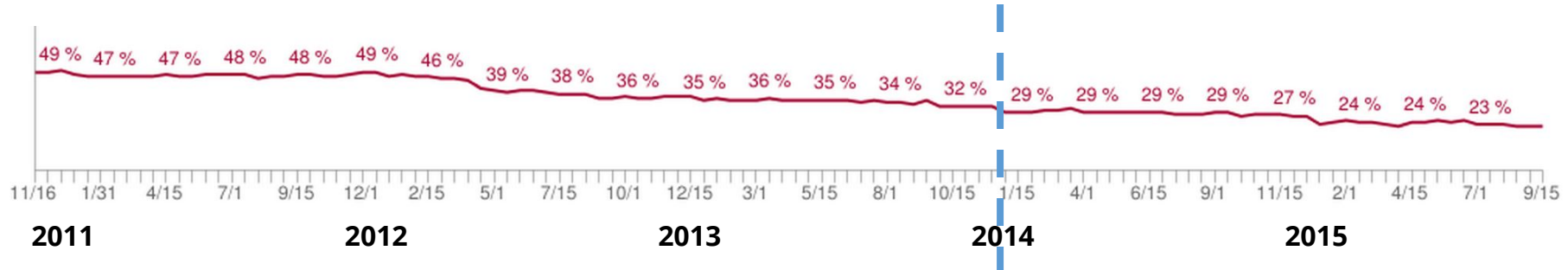
*Now serving **2.8B** Open Sans views per day!*



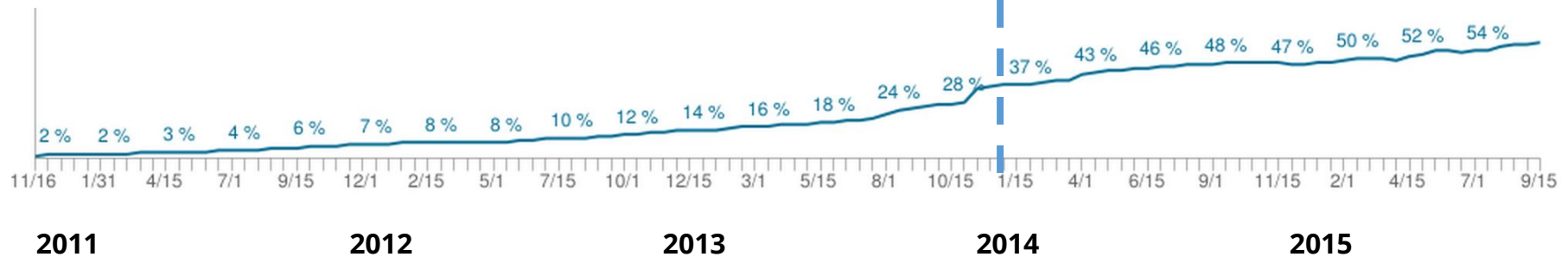
# Technology Trends Alexa Top 500K

Flash 49% to 22% ↓

Crossed over in 2014



Web Fonts 1% to 58% ↑



Source: [httparchive.org/trends.php?s=Top1000](http://httparchive.org/trends.php?s=Top1000) (September 15th, 2015)

Web Fonts in *Action!*

# Industry moving from FLASH to HTML5

- Google Chrome update - Sept. 2015
  - <http://chrome.blogspot.com.br/2015/06/better-battery-life-for-your-laptop.html>
- Mozilla & Facebook
  - <http://www.theverge.com/2015/7/14/8957177/mozilla-blocks-flash-as-facebook-security-chief-calls-for-its-death>
- Interactive Advertising Bureau (IAB) “New” Display Creative Guidelines
  - <http://www.iab.net/displayguidelines>
- Yahoo! “New” Display Ad Specifications
  - <https://adspecs.yahoo.com/pages/html5guidelines/>
- Amazon
  - <http://venturebeat.com/2015/08/20/amazon-com-will-stop-accepting-flash-ads-on-september-1/>

# Why ?

**Philippe Le Hegaret**

<http://www.w3.org/2012/Talks/1120-owp-plh/#%281%29>



- Pervasive “Open Web” technology
- Usage & reach
- Powerful and modular
- Multi-application use
- Major browser/platform support

# What does this all mean?

- Perfect “*HTML5*” storm brewing
- Discovering new web font “*use cases*” beyond the WWW
- HTML5 workflow is still fraught with friction

# Challenges that need to be addressed

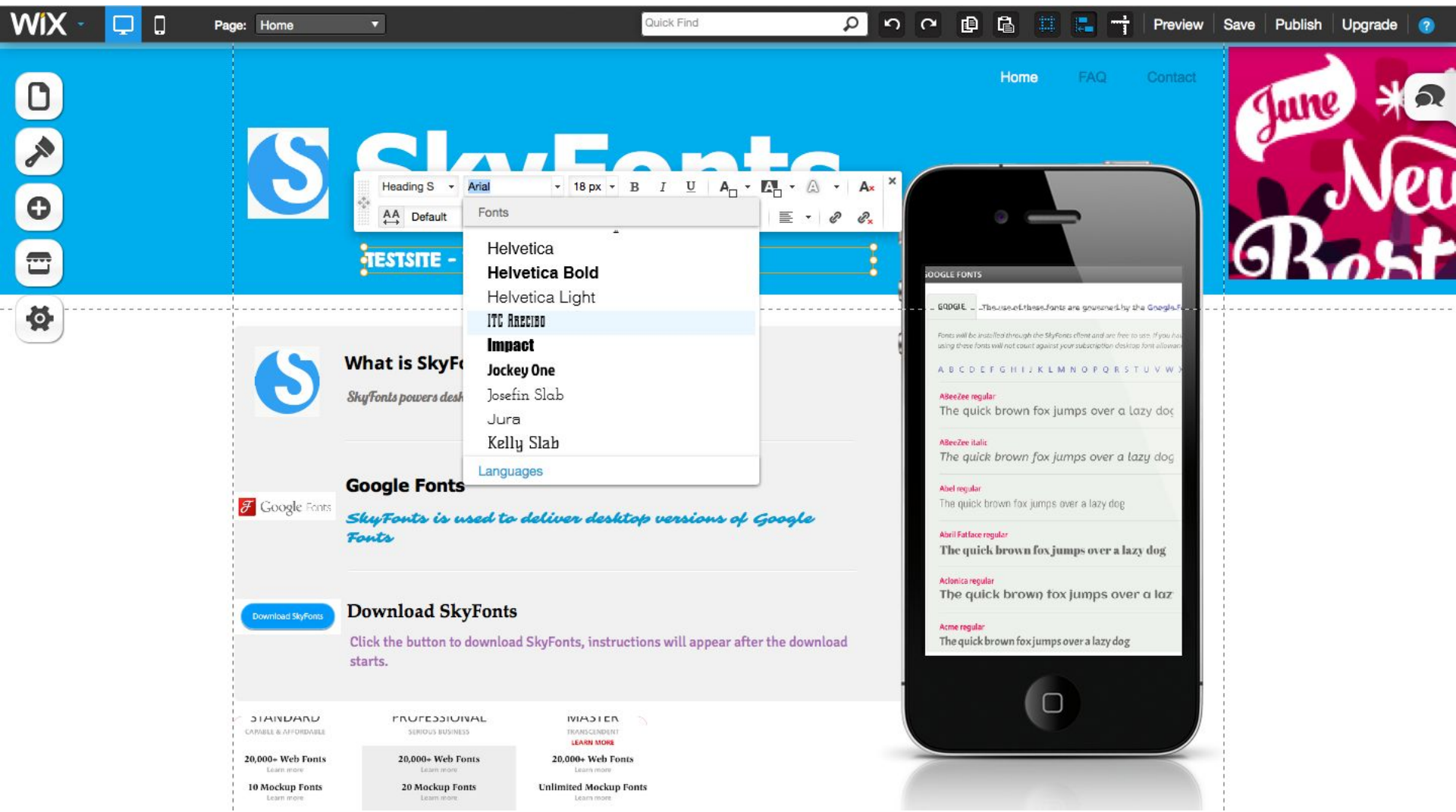
- Traditional
  - File size / Latency / minimizing HTTP requests
  - End user education
- Some new... especially in digital advertising
  - Cross-screen, responsive, dynamic content optimization engines... personalized ads
  - Web fonts miss-understood outside the WWW
    - 4th Party @font-face calls
    - Page View Tracking pixels
    - What about Ad Blockers?
    - URL domain restrictions will not work in digital advertising



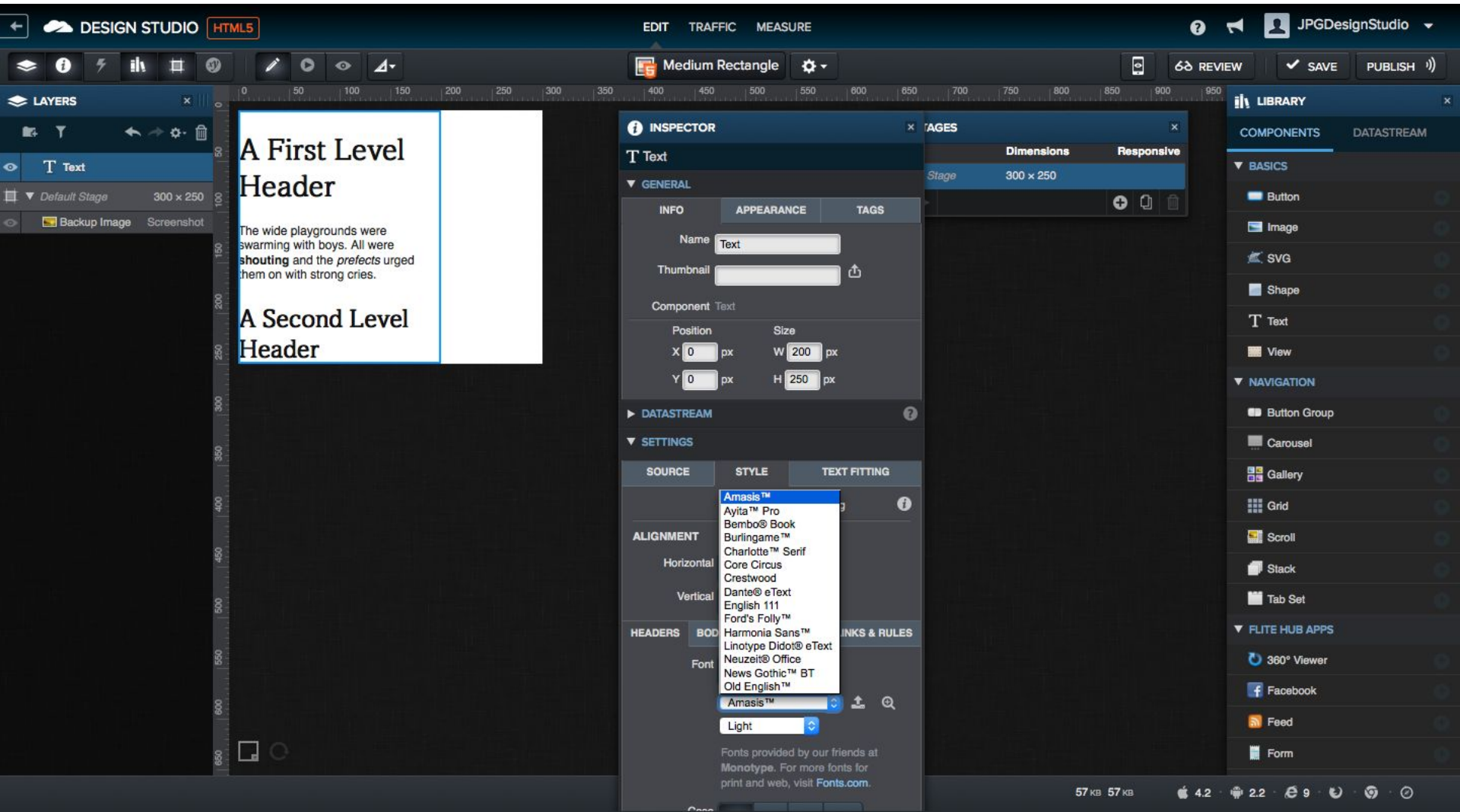
# HTML5 Rich Media Authoring Tools

- Offer “*in-app*” web font support
  - Website Builders - WIX, Squarespace, Adobe Muse
  - Digital Ads - Celtra, Flite, ResponsiveAds.com, Adcade
  - HTML5 Animation Tools - Adobe Edge, Tumult Hype3
  - eMail Marketing - Constant Contact
  - Browser-based graphic design tools - Sketch, Canva
- Broader market “hand coding” HTML5 content
  - Convert desktop fonts to web font formats
  - Use lots of “free” or “open source” tools
  - Mixed results
  - Users don’t understand / respect font licensing

# Web fonts in action - WIX HTML5 Editor

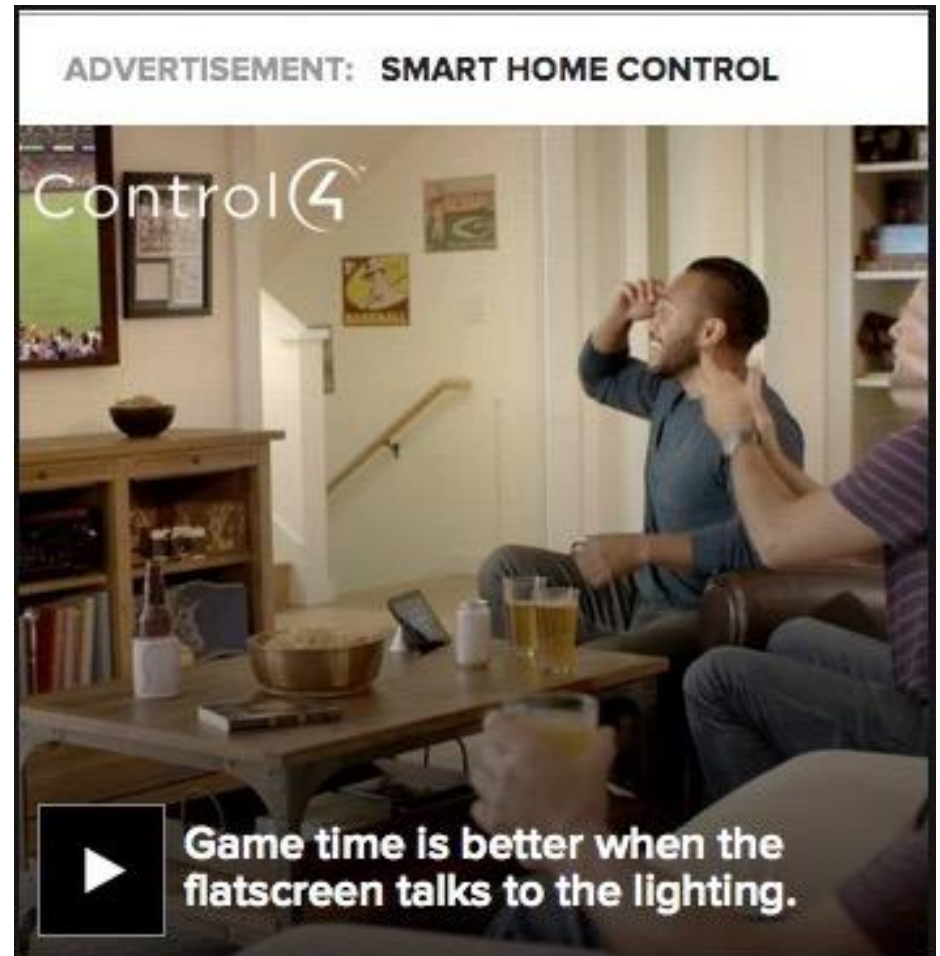


# Web fonts in action - Flite Ad Design Studio



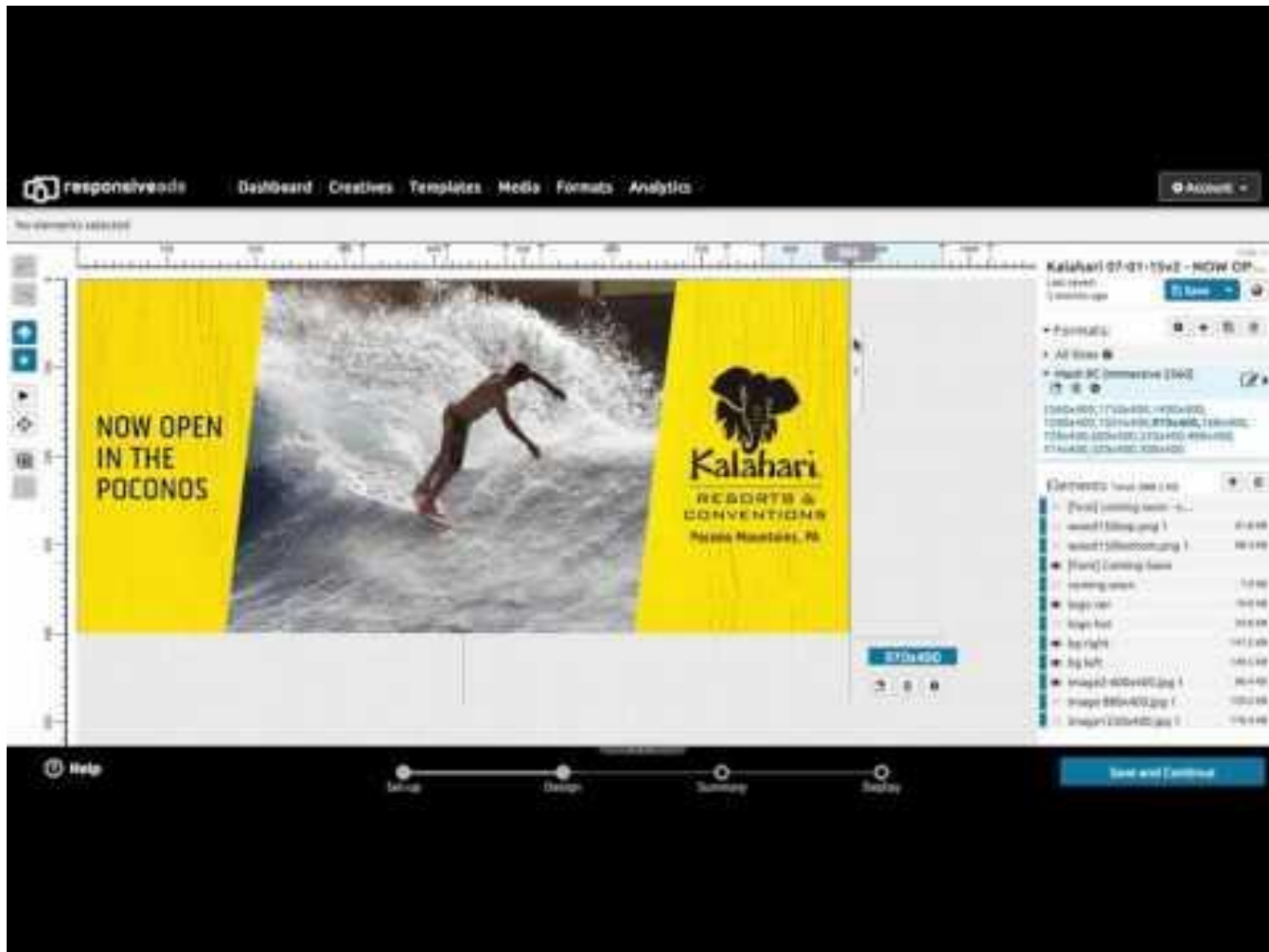
# HTML5 Ad Example

- Flite Studio Ad
- Leverage static web font subsetting



# Responsive Ad Unit Authoring

<https://youtu.be/DP-9KJIKI-I>





# Web fonts in action - Tumult Hype3

## Nakuru

Flora and fauna of Lake Nakuru.

### An incredible biodiversity

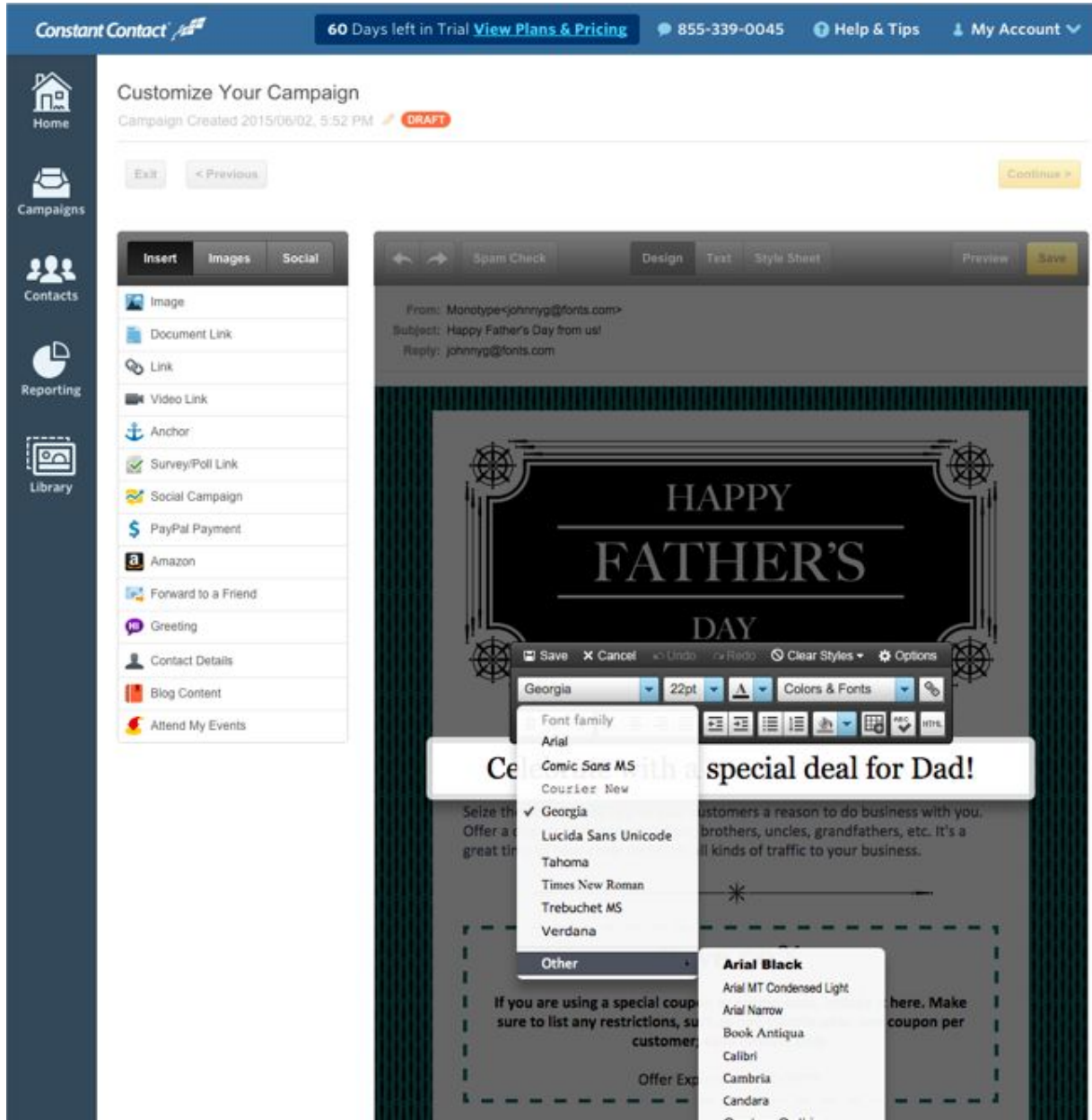
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis lobortis massa nec turpis vulputate, at eleifend sem tincidunt. Vivamus id ligula sed orci faucibus finibus eu nec magna. Nullam a libero placerat, varius risus sed, cursus eros. Morbi condimentum orci quis sem commodo porta. Aliquam pharetra sem ac massa auctor, pharetra tempus nisi consectetur. Nulla faucibus lacus. Sed ac dapibus sem.

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# Web fonts in action - eMail editors



# The tide is rising for everyone!

- Addressable markets are growing
- More use cases means more fonts are required
- Most of the discussions have been around USA / Europe
- APAC cares very much about web font use
  - Font file sizes are a major concern and an opportunity
  - Optimization techniques like Subsetting
- Digital ad impressions could be 100x those on the web
- We've been on a multi-year journey together
- Today is a good snapshot that things are looking up
- But... we are not quite done yet!!
  - Latency, 4th Party Calls being blocked, education



# Improvements in Performance

# **Speed is a key aspect of user experience**

Faster = better

Ways to reduce file size

Smarter downloading

Make more use of browser's cache

# Reducing file sizes

Brotli compression in WOFF2

- Zopfli for (prebuilt) WOFF files

Removing TrueType hints when not used

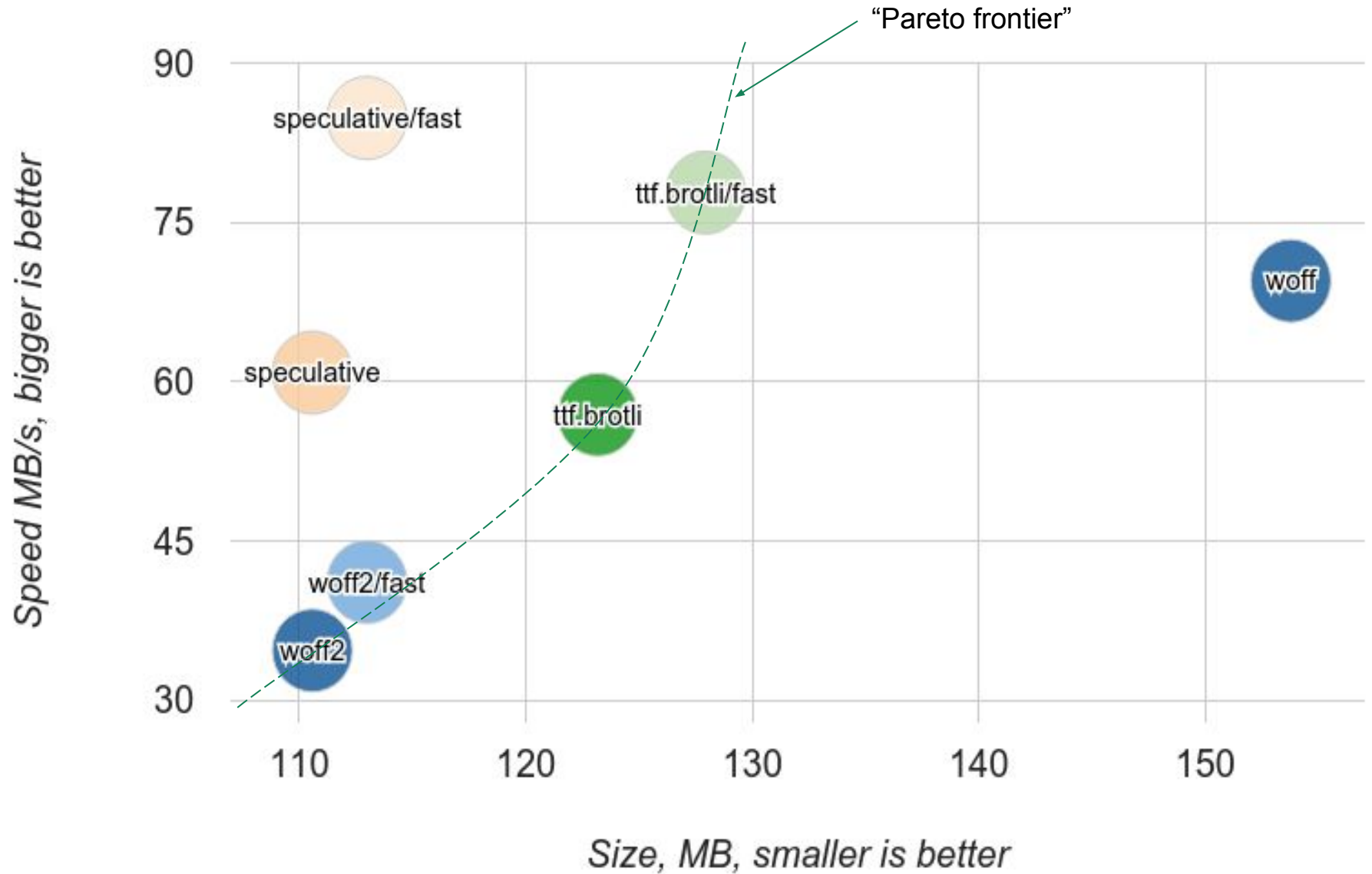
- or serving CFF

Subsetting

- East Asian fonts
- Other fonts

Unicode-range feature in CSS font-face

# WOFF2 smaller & even faster



# Tools for smarter downloading

CSS font loading

- more precise control

Resource hints

- identify key resources up front

HTTP/2

- parallel downloading
- server-controlled push for some resources

# Take advantage of browser's cache

Cross-site font caching

- not for all serving models

Stale-while-revalidate

# Beyond subsetting

demo

Opportunities  
Ahead...



# Opportunities Ahead

Now that (Latin) web fonts are established, need better browser support for OpenType layout

Address “Next Billion Users”

- Asian fonts better
- Need more work on non-Latin, RTL, complex scripts

Need simpler, more flexible licensing, business models

- End users want Freedom, Flexibility and Choice
- If web fonts are simple, people will use them instead of own solutions

Untapped uses (email, HTML5 ads) also need infrastructure

Adoption will continue explode as technology improves user experience



Adobe Typekit

**fonts.com**



Google Fonts

# Summary

# Key Takeaways

[goo.gl/65f2Pq](https://goo.gl/65f2Pq)

Rate of adoption in the past five years has been tremendous. In mainstream use now!

Inspiring examples of the new web typography

Global adoption has started

Future is very bright for entire industry



Adobe Typekit

**fonts.**com



Google Fonts

# Thank you!

[goo.gl/65f2Pq](http://goo.gl/65f2Pq)

## Reference

Large-scale web font usage analysis

Getting started guide: [goo.gl/5HeqYf](http://goo.gl/5HeqYf)

httparchive.org (Alexa Top 100, 1K)

<http://httparchive.org/trends.php?s=Top1000>

Alexa Top 1M

<http://www.alexa.com/topsites>

State of Web Type (OpenType feature report)

<http://stateofwebtype.com>



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