

Hyperlight Sites for Global Scalability

June 23, 2016



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MAP THE ATMOSPHERE

62 MILES

0:36

The
Weather
Company
a Sun Life Company

The
Weather
Channel

wu

DATA

ES



BARCODES



SMARTPHONES



TRAINS



WEATHER STATIONS



NATURE



SATELLITES



BUILDINGS

PLANES



Our real-time forecasting delivers forecasts
for your exact location, no matter where you are in the world

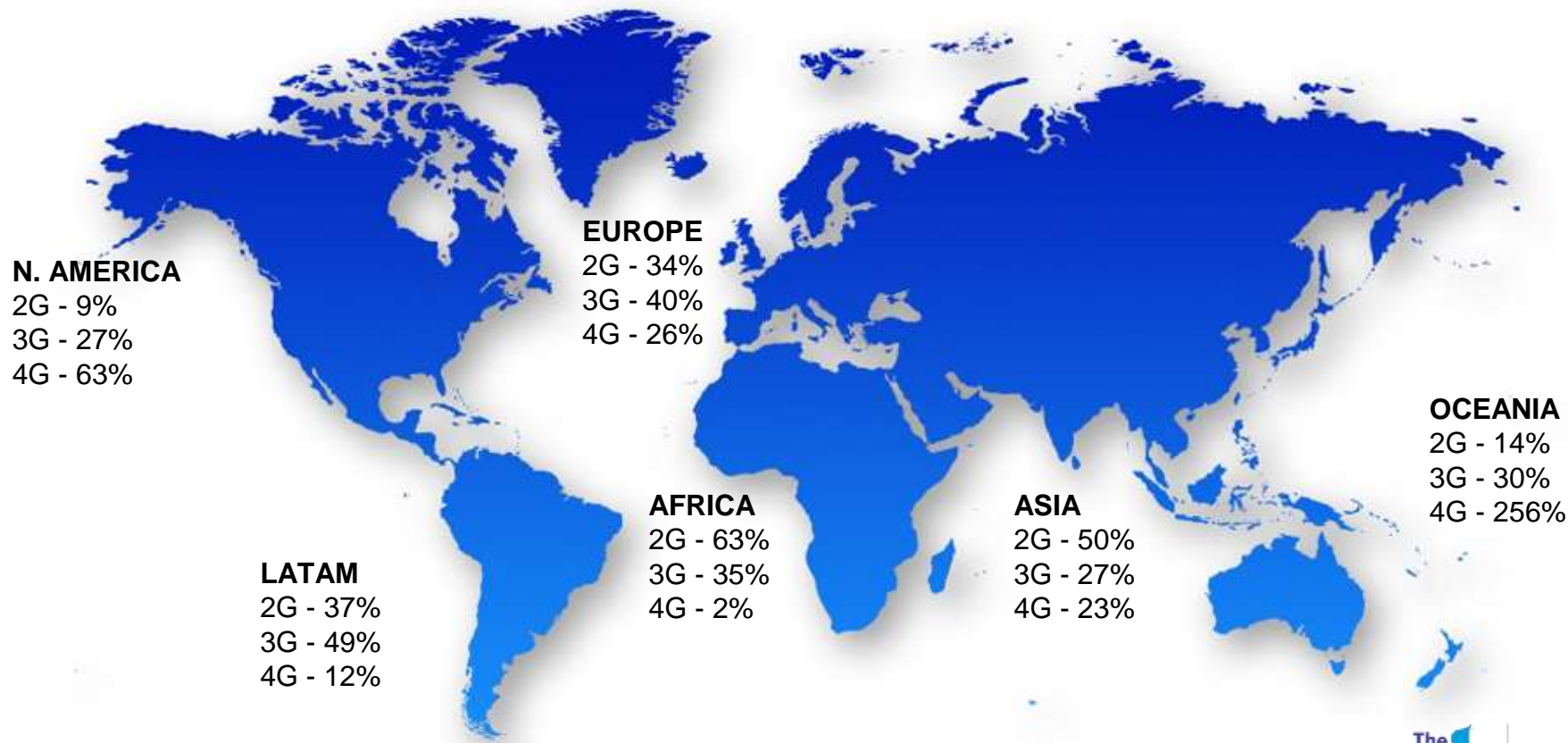
2.2B locations + every 15 min = 22B forecasts per day

A woman with blonde hair and sunglasses is shown in profile, looking down at a smartphone held in her hand. The background is a bright, out-of-focus outdoor scene with green foliage and a bokeh effect from light sources. A semi-transparent grey box is overlaid on the left side of the image, containing text.

Here's our Problem:

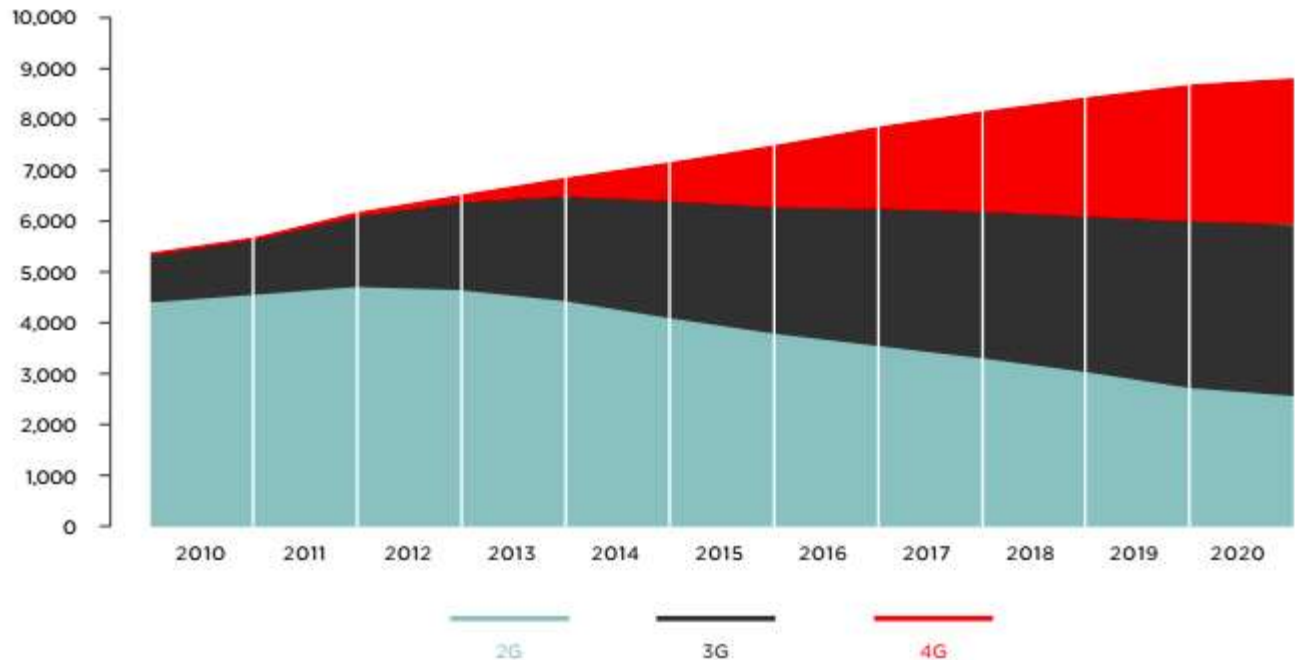
3G and 4G technologies = ~50% of the connections worldwide at the end of 2015

Mobile Connection Penetration by Country - Q1 2017



Shift to 4G by 2020

Global connections by technology
(millions, excluding M2M)





CLOSE THE GAP

Lite Site. 2G Connections

Provide our users with the weather data they need without limitations around technology or connection

The Opportunity

Grow the Global Footprint

User Experience

Provide a better user experience with a site that performs

Data Collection

Gather valuable location data to use for insights and analytics

Brand Expansion

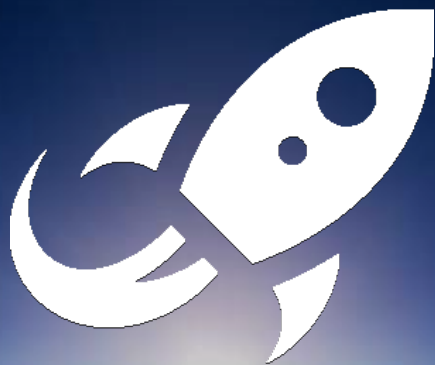
Introduce the brand to all mobile users, growing market share

Monetization

Online and offline revenue possibilities

How do we get there?





***Moving our 2G experience
from extremely slow...
to insanely FAST!***

2G Users

A **2G Persona** is either a user who is limited by available bandwidth, typically in developing countries OR a user who is limited to a slower handset (Galaxy Y) by hardware and cost limitations.

Galaxy Y

- Android OS, v2.3.5 (Gingerbread)
- CPU, 830 MHz ARMv6
- 240 x 320 pixels (~133 ppi pixel density)
- Internal Memory 180 MB, 290 MB RAM



Framework

Current

- Bloated with content
- Many inter-dependencies
- Tightly coupled with CMS
 - Content modules
 - Page Layouts
- Client-side rendering with JavaScript

New

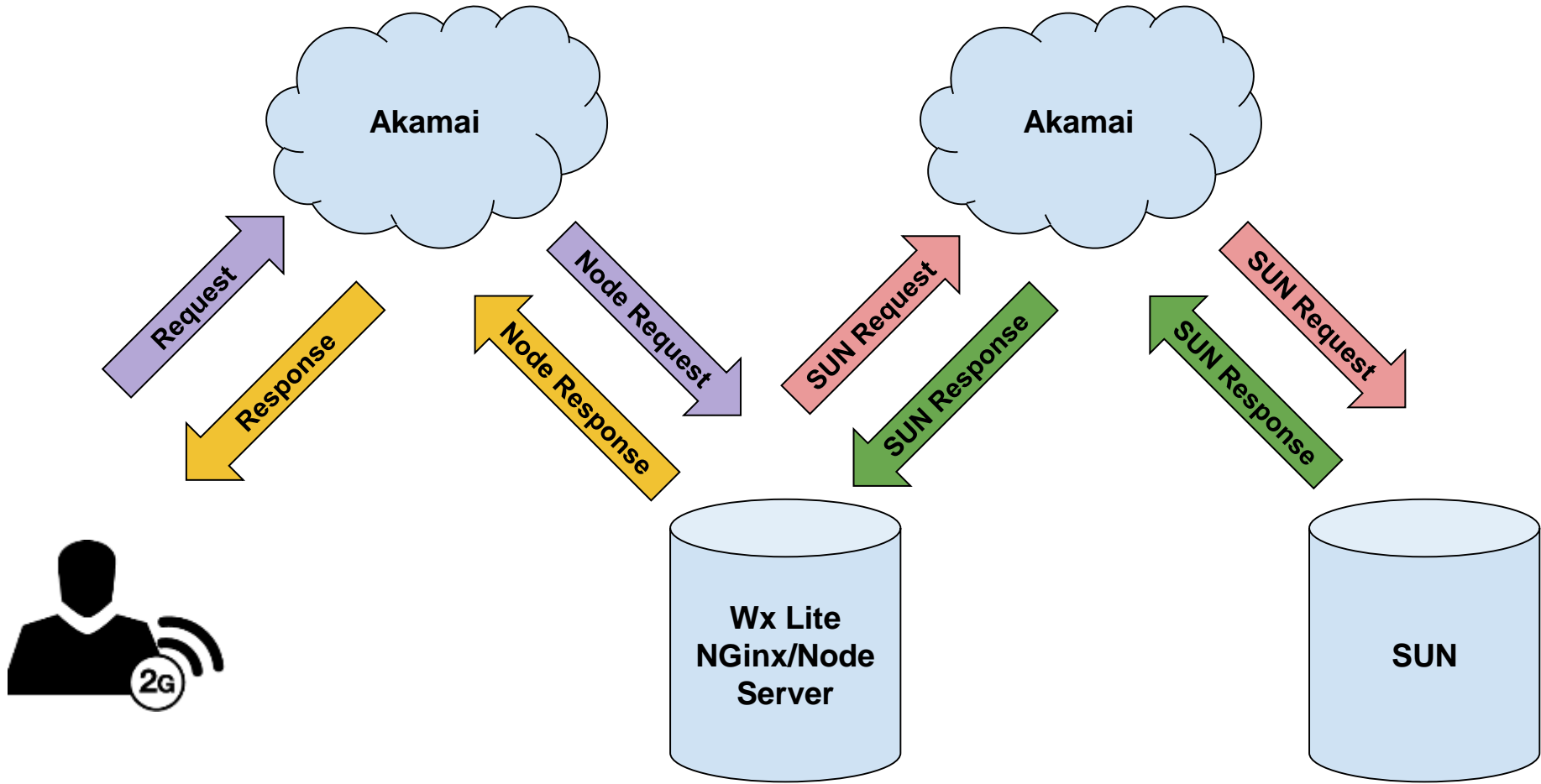
- 2s load time
- Page weight ~38k
- No JavaScript
- Server-side rendering

Interim



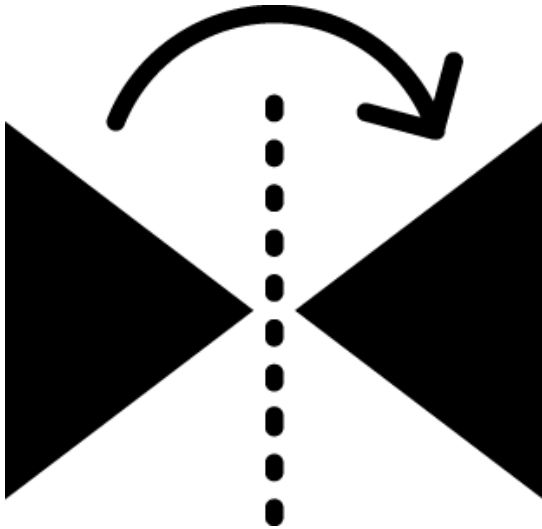
Goal: Improve initial load time, Load what is needed, and Load on demand

- Middle-tier
 - Node
 - Nginx
- Selective rendering
 - Server side
 - Client side*
- Boost performance (*coming soon*)
 - Server push
 - Service Worker
 - Web Worker



Interim Solution

Future



Goal: Feature parity across sites

- Microservices framework
- High availability
- Scalable
- Performant PWA



Questions?