

CAN WE SAVE THE OPEN WEB?

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Hey, I'm
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Founder & Project Lead, **Drupal**

Co-Founder and CTO, **Acquia**



I invented Drupal in my dorm room in 2001



A milestone birthday:
DRUPAL TURNED 15



WHEN DRUPAL WAS BORN IN 2001...

Only 7% of the population had internet access

There were only 20M websites (compared to 1B today)

Text messaging was just introduced

Google was still a small, private company

50% of people in the US had a cell phone

Google AdWords, now a \$65B business, had less than 500 customers

Facebook and Twitter didn't exist until 4-5 years later

Proprietary software vendors started to feel threatened by open source



THE INTERNET HAS CHANGED DRASTICALLY
over the last decade



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over the last decade





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What I'll cover
TODAY

1

Defining
open vs. closed

2

A brief history
of the web

3

Trends driving
the web today

4

Building the
web we want

A person in a white shirt is silhouetted against a vibrant night city skyline, holding up a smartphone to capture a photo. The skyline is filled with illuminated skyscrapers in various colors like blue, red, and yellow. A white rectangular box is overlaid on the center of the image, containing a large teal number '1' and the text 'Defining open vs. closed'.

1

Defining
open vs. closed

The idea of the web as an open platform with greater choice & transparency ...

Outside the box

... as opposed to a walled garden.

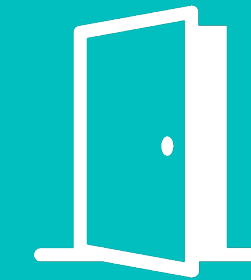
PRIVATE

PRIVATE

Creative
FREEDOM

Serendipitous
DISCOVERY

OPEN WEB QUALITIES



CONTROL
over your own
experience and privacy

DECENTRALIZED
as in not limited by the
boundaries of a single
organization's system
or platform

TEMPLATES

dictate your
creative license

ALGORITHMS

determine what you
see, often without
your knowledge



CLOSED WEB QUALITIES

PRIVACY IN QUESTION

and tracking is
rampant

SILOED INFORMATION

held within companies
with no discovery of
content between apps

ad →

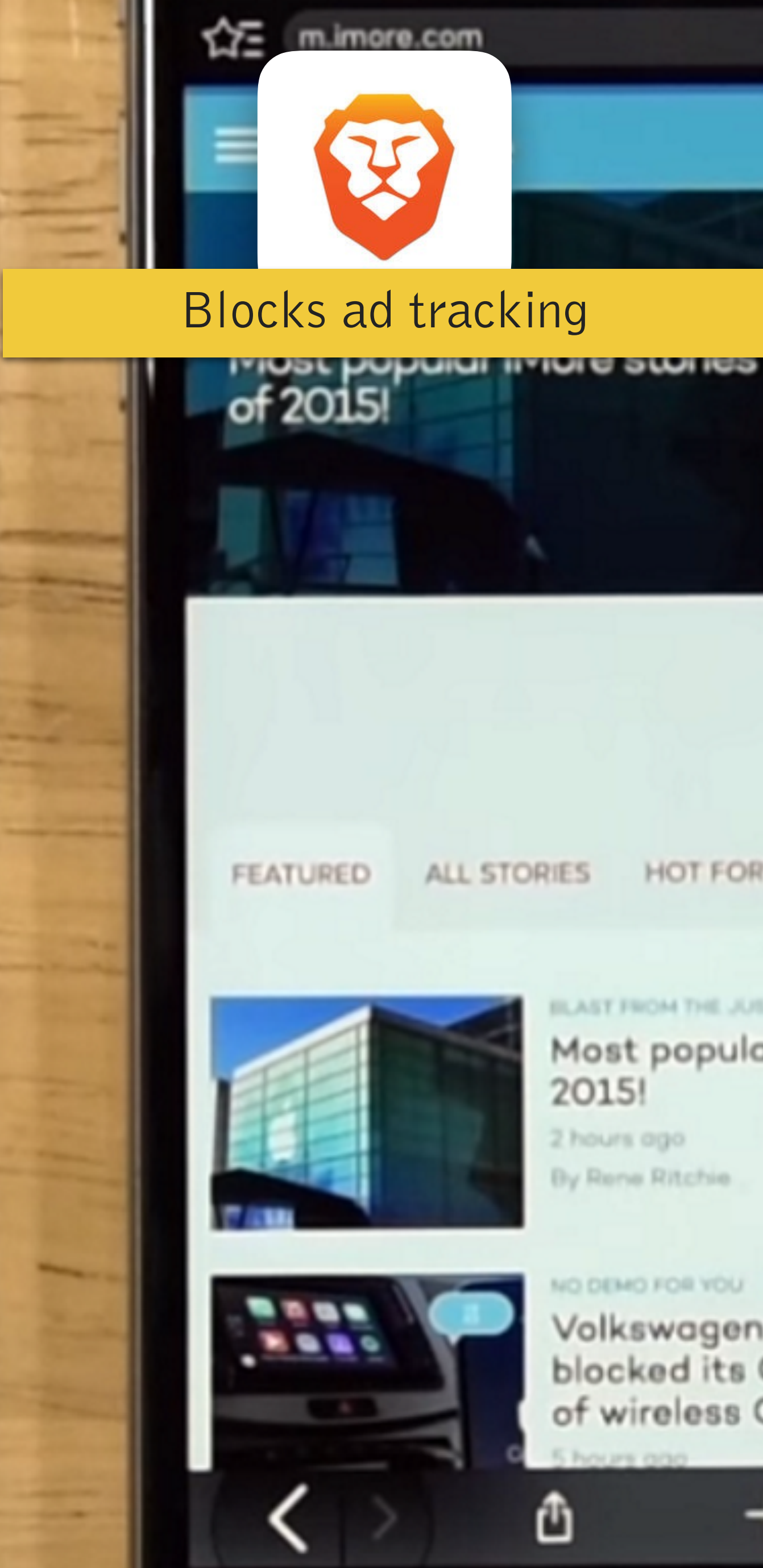
TOWARD
OPEN



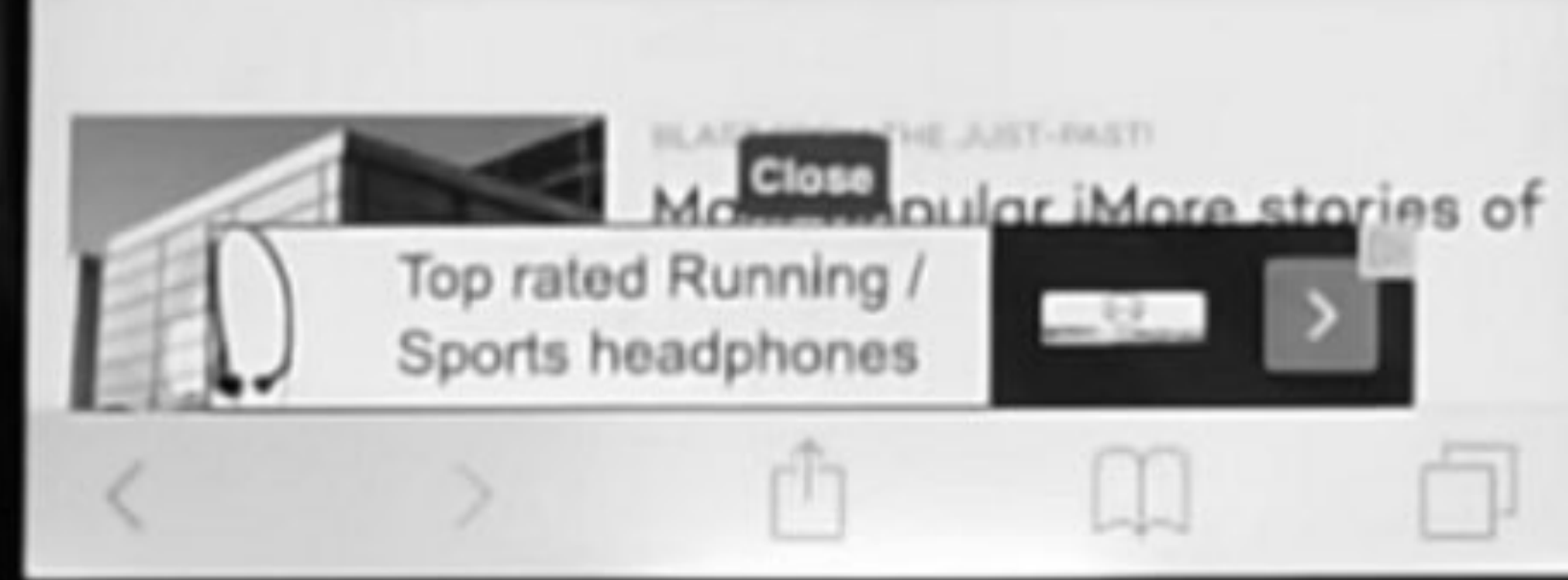
ad →

ad →

ad →

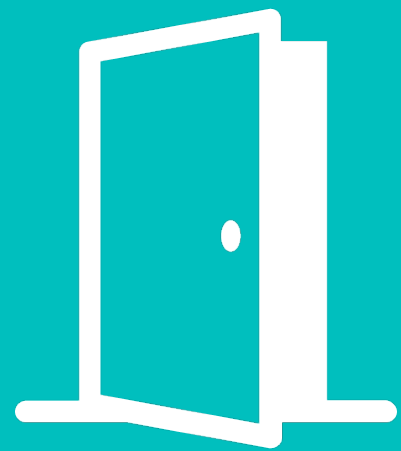


ad →



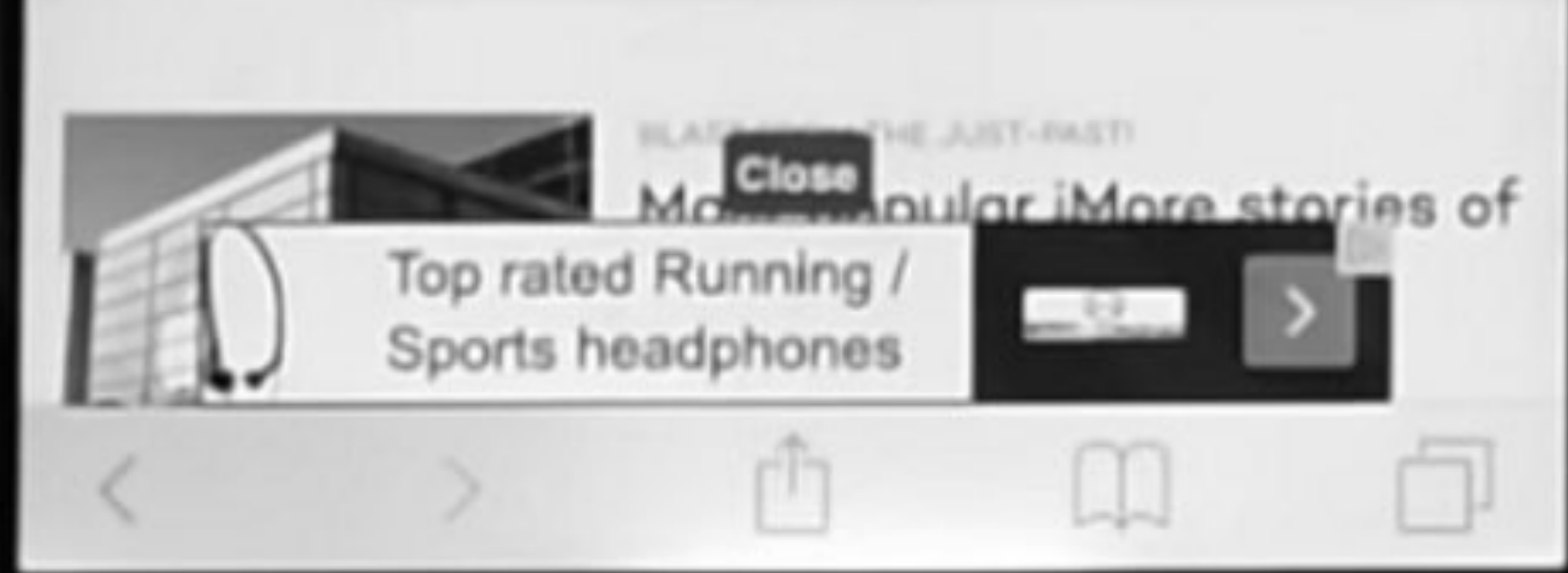
Blocks ad tracking

TOWARD
OPEN



Communicate across platforms

ad →

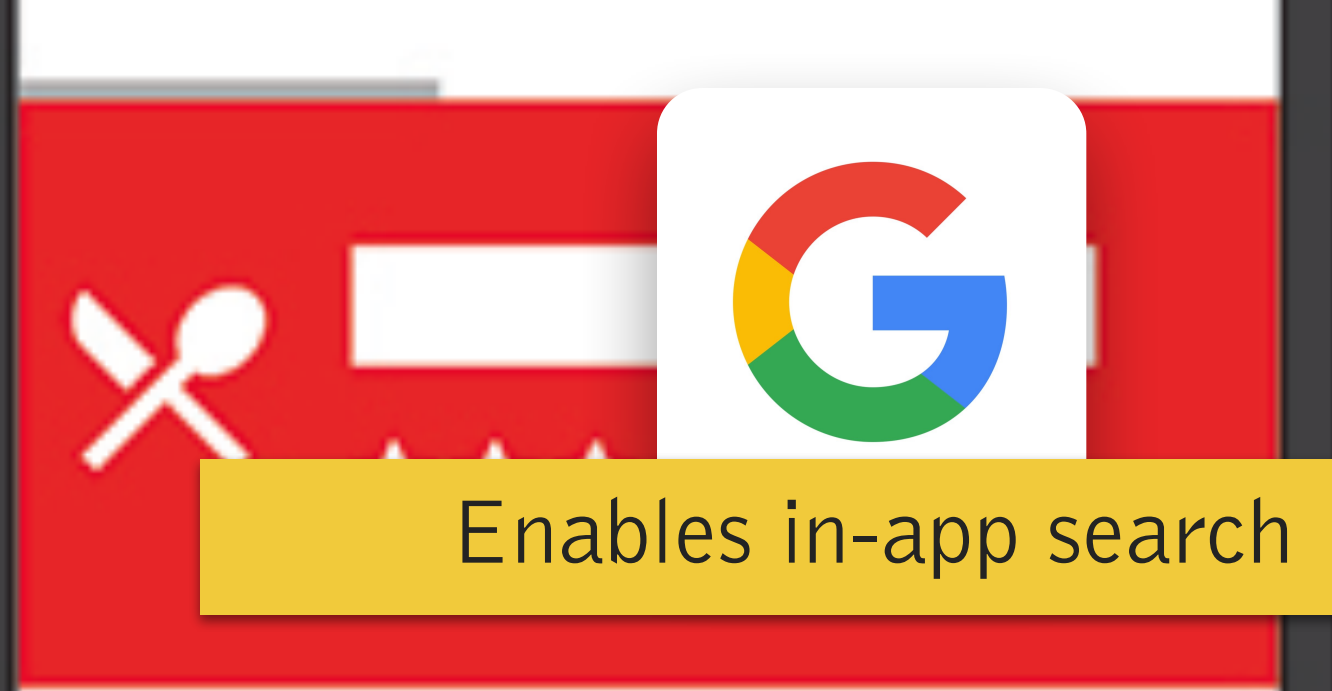


Blocks ad tracking

TOWARD OPEN

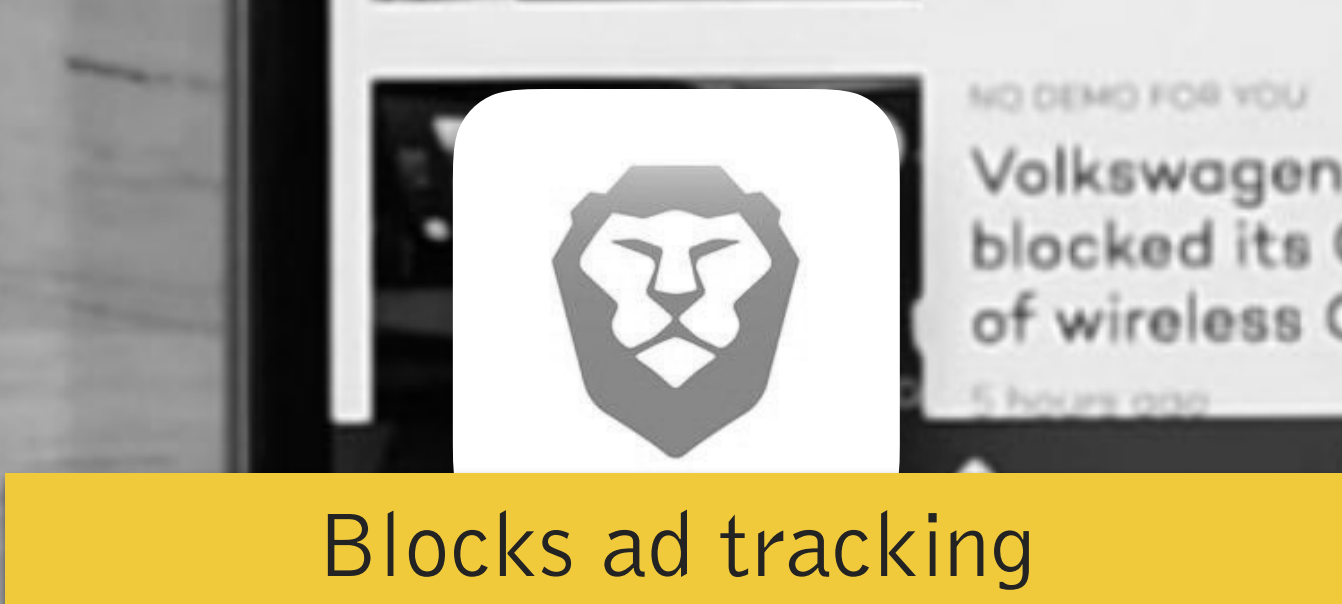
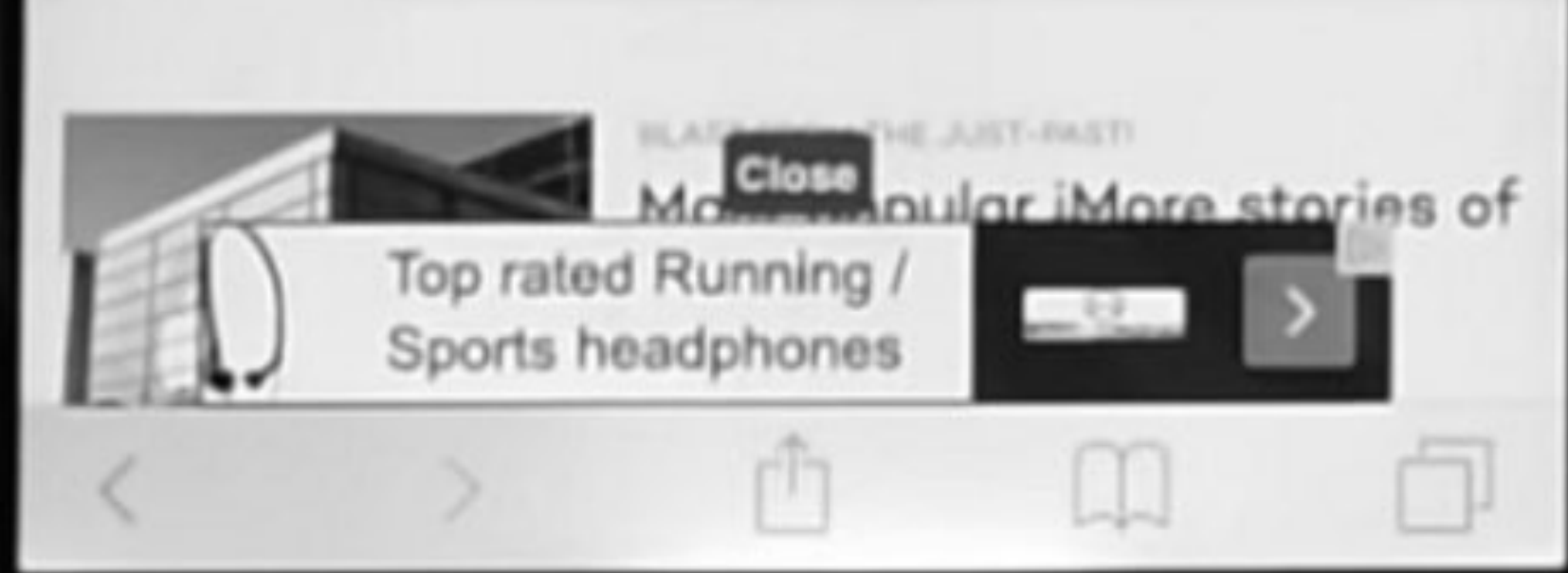


Communicate across platforms



Enables in-app search

ad →



Blocks ad tracking

TOWARD OPEN



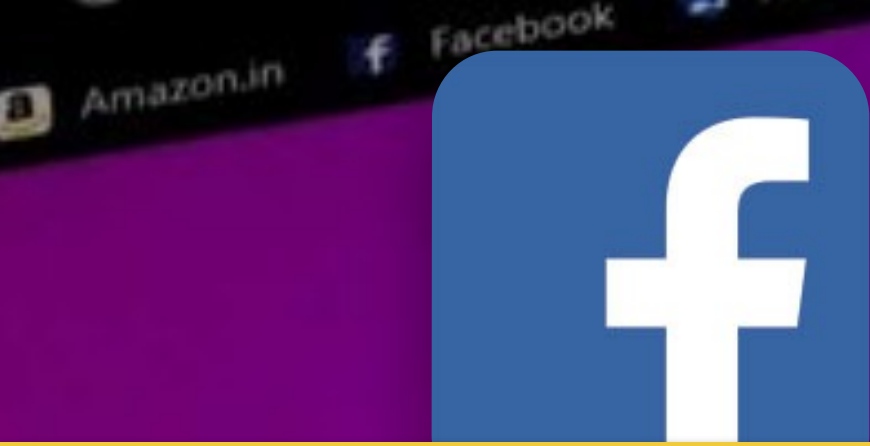
Communicate across platforms



Enables in-app search



Unlocks creative freedom



Controls web experience

free basics by facebook

लोकप्रिय वेबसाइटों को फ्री में ब्राउज़ करने के लिए, Free Basics डाउनलोड करें या अपने फ़ोन पर PaidFbsIn के सिम कार्ड से जाएँ.
Free Basics के बारे में



TOWARD CLOSED





free basics by facebook

Free Basics

Controls web experience



Restricts user choice



TOWARD CLOSED





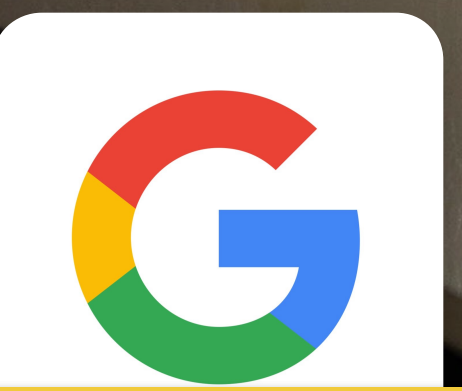
free basics by facebook

Free Basics

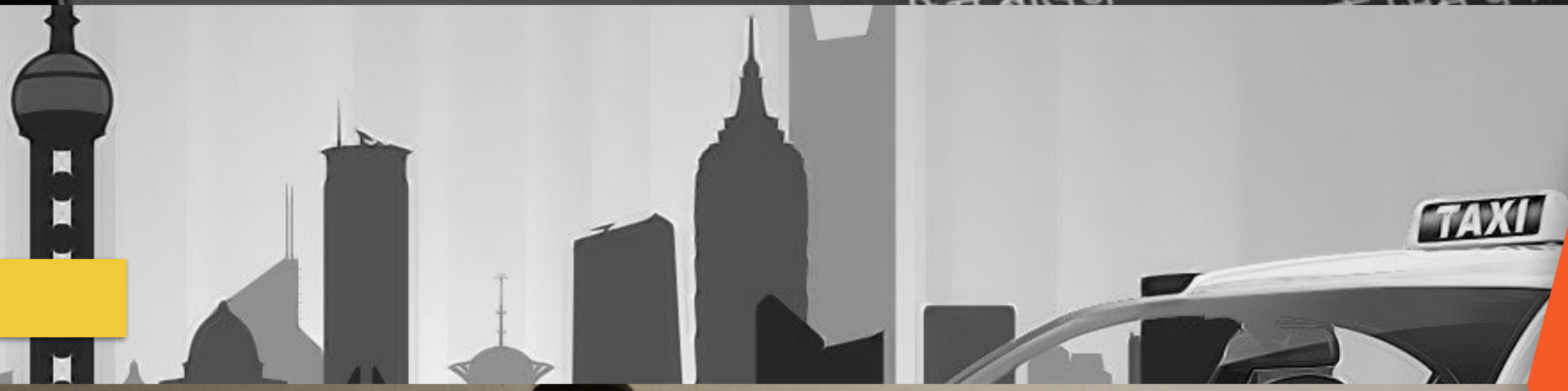
Controls web experience



Restricts user choice

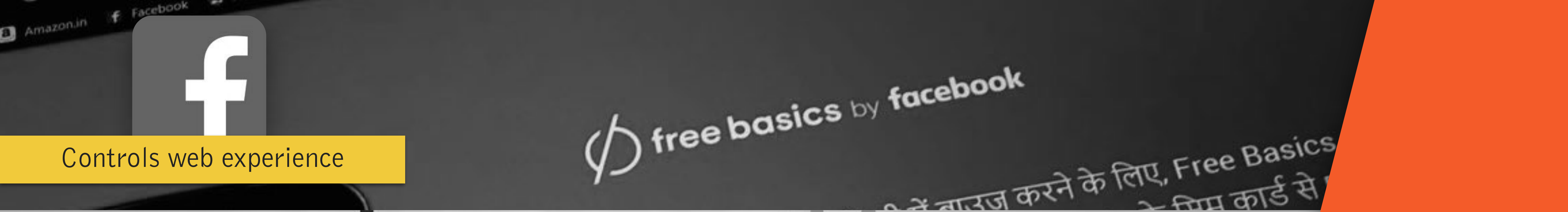


Potential to influence elections



TOWARD CLOSED





Controls web experience



Restricts user choice



Potential to influence elections

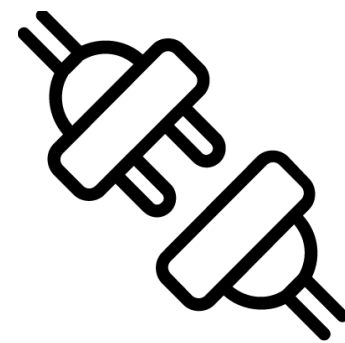


Prioritized revenue over choice

**TOWARD
CLOSED**

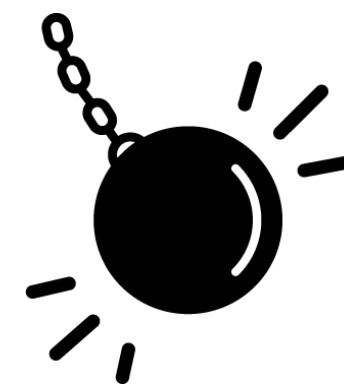


ARE WALLED GARDENS ALL BAD?



CONNECTION

Brought billions of people to the web



BIG IMPACT

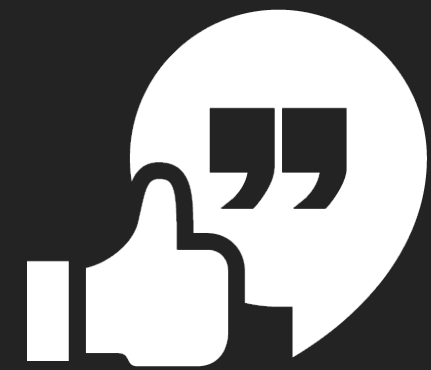
on human rights and civil liberties



DEMOCRATIZATION

Provided a forum for people to share information

CONCERNS ABOUT SCALE



GOOGLE & FACEBOOK

Over 1 billion
users each



APPLE

over 1 billion
active iOS devices

A silhouette of a person's head and shoulders in profile, looking towards the right. They are sitting at a desk with a laptop open in front of them. The scene is dimly lit, with a soft light source from the left creating a glow behind the person's head and highlighting the laptop screen. The background is dark and out of focus.

They **SHAPE** the news that most of the world sees.

A black and white photograph of a man in a white lab coat standing in a control room, operating a large, complex panel of dials and switches. The panel is filled with numerous analog gauges, knobs, and levers, arranged in a grid-like fashion. The man is positioned on the right side of the frame, facing left, and appears to be adjusting one of the controls. The lighting is dramatic, with strong highlights and deep shadows, creating a sense of a high-tech, industrial environment. The overall mood is serious and focused.

They **RECORD** data about our behavior.



They won't stop until they know **EVERYTHING** about us.



Calendar

Purchase history

Email

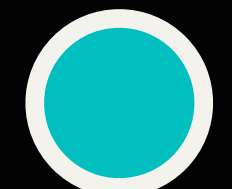
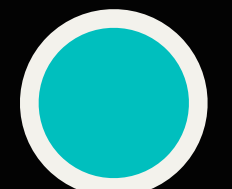
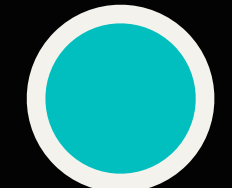
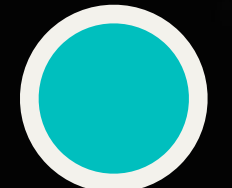
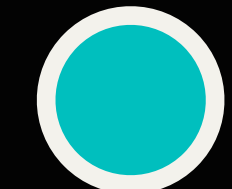
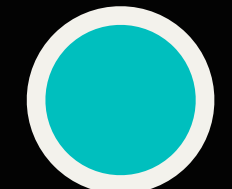
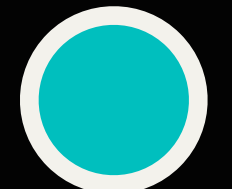
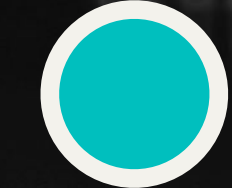
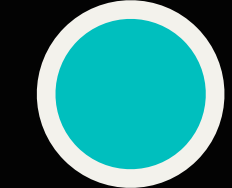
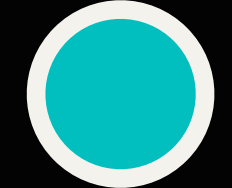
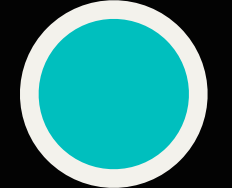
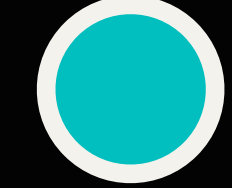
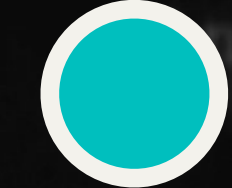
Viewing history

Location

Social graph

Address, phone #

Interests





Calendar

Purchase history

Email

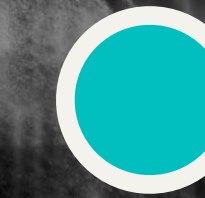
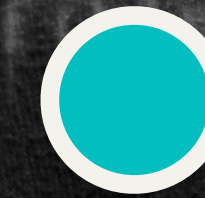
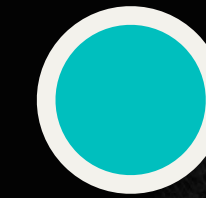
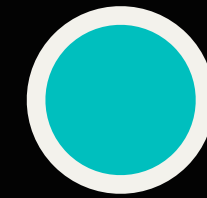
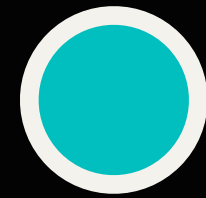
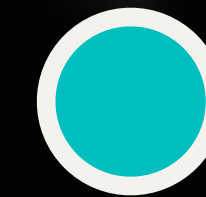
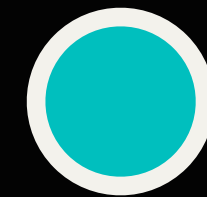
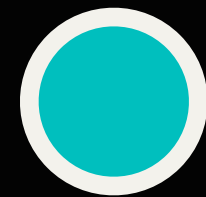
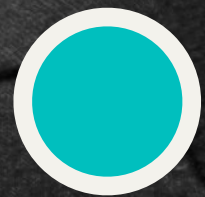
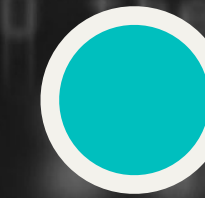
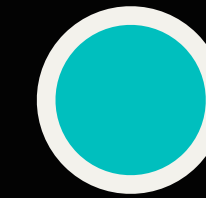
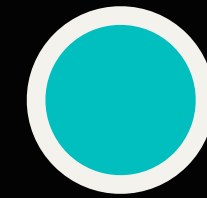
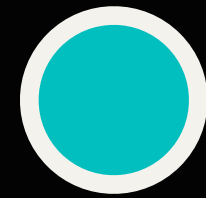
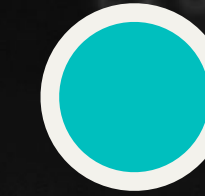
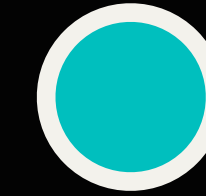
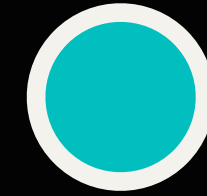
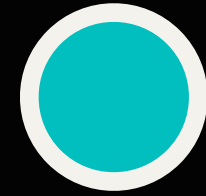
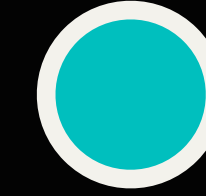
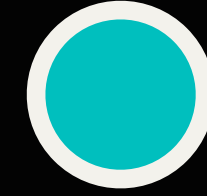
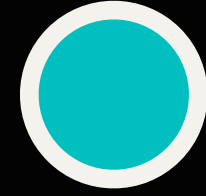
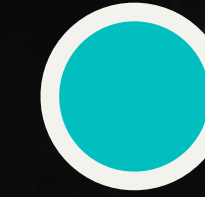
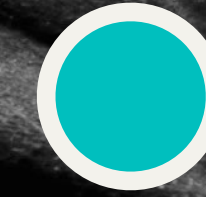
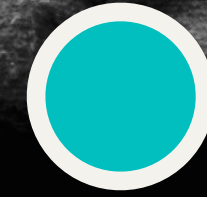
Viewing history

Location

Social graph

Address, phone #

Interests



The background of the slide features a close-up, shallow depth-of-field photograph of several network cables. The focus is on the RJ45 connectors, which are translucent plastic with visible gold-colored metal contacts. The cables are arranged in a way that creates a sense of depth, with some connectors in sharp focus and others blurred in the foreground and background. The lighting is soft and even, highlighting the textures of the plastic and metal.

2

A brief history of the web



MORE OPEN

THEORY

MORE CLOSED



Over its history, the web has alternated between periods of more and less "openness"

OPEN

CLOSED

Invention era



1980s

1990s

2000s

2010s

TIME



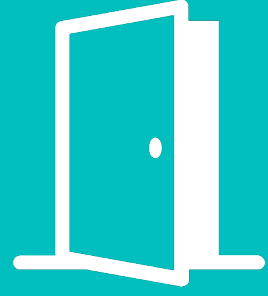
EARLY ADOPTER PC



DESKTOP & LAPTOP



MOBILE, TABLET, IoT



INVENTION ERA

DECENTRALIZED

No one company was dominating. The web was brand new!

CREATIVE FREEDOM

to connect with others in this fascinating new technology

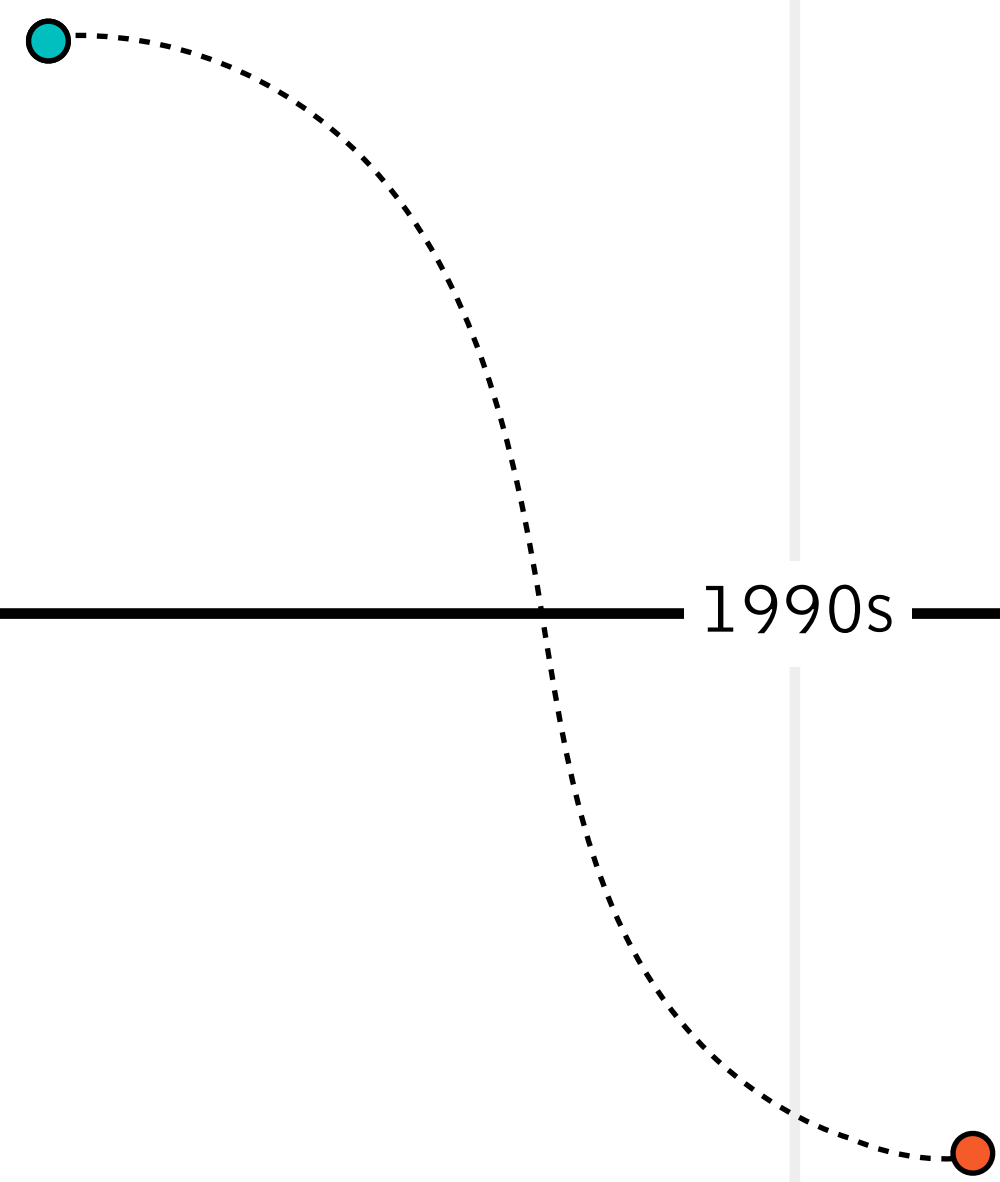


Tim Berners-Lee, inventor of the World Wide Web

OPEN

CLOSED

Invention era



1980s

1990s

2000s

2010s

TIME

AOL "walled garden" era



EARLY ADOPTER PC

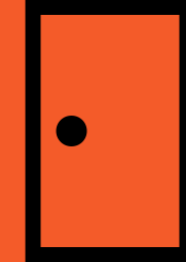


DESKTOP & LAPTOP



MOBILE, TABLET, IoT

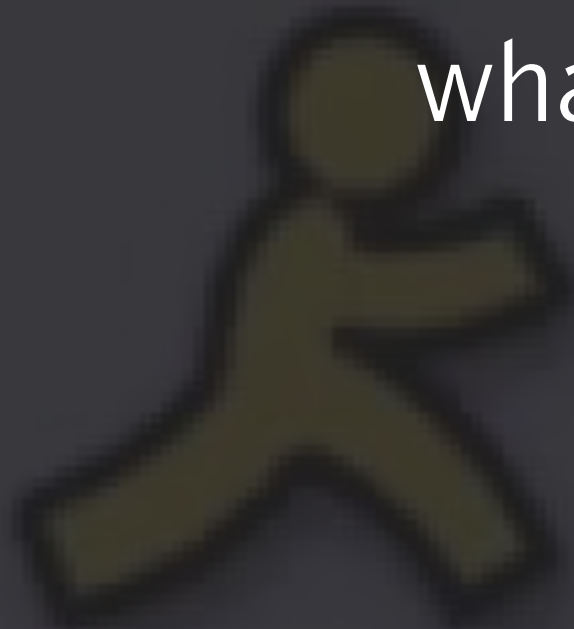
AOL "WALLED GARDEN" ERA



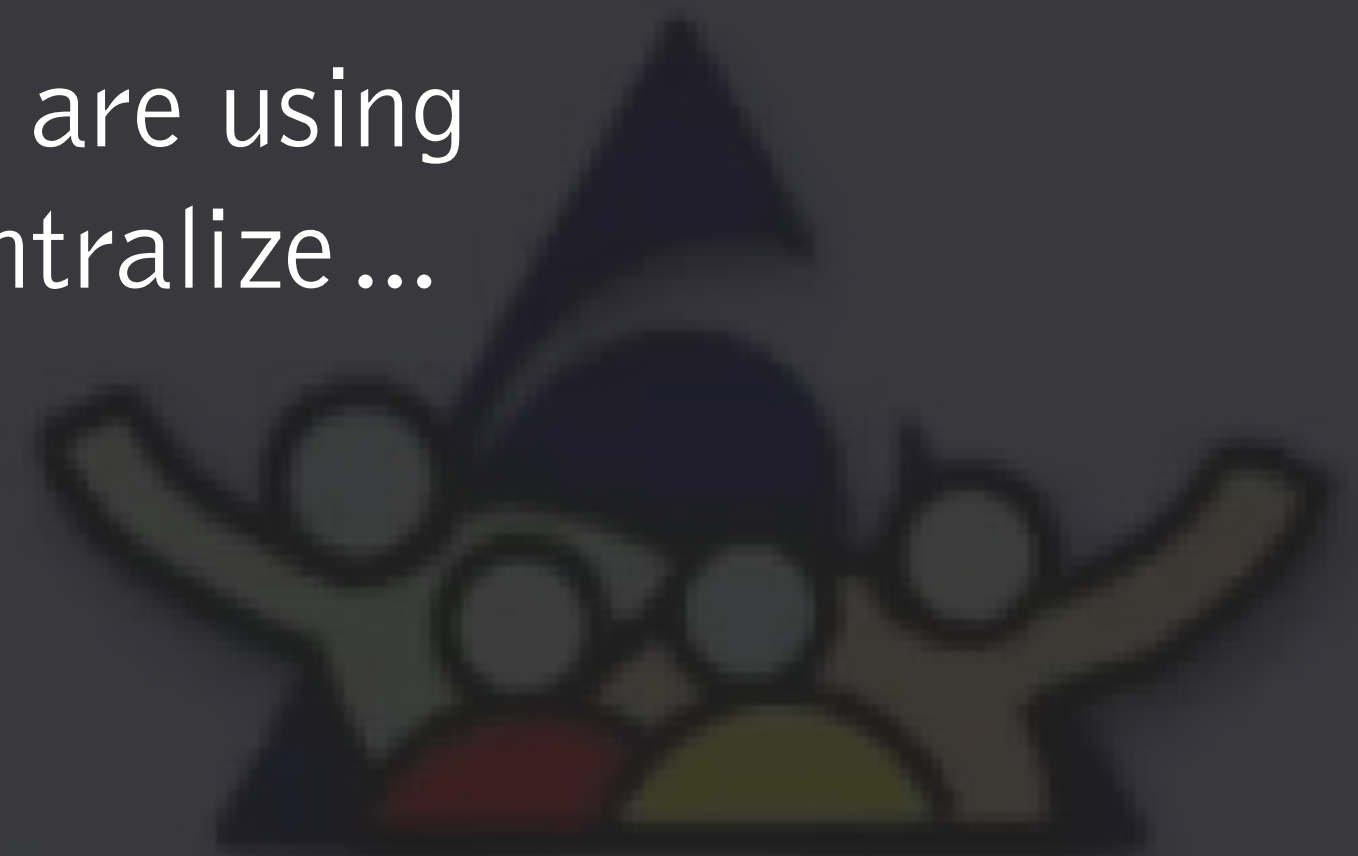
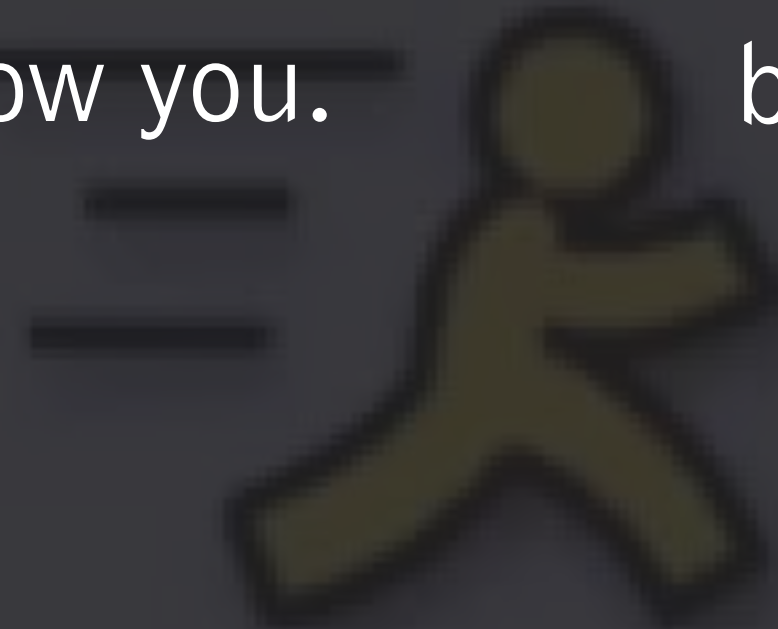
Most people's initial experience of the web is a **SILOED EXPERIENCE** through ISP and other portals.



Experience was dictated largely by what a portal chose to show you.



Meanwhile, geeks are using browsers to decentralize ...



OPEN

CLOSED

Invention era

Search engine era

AOL "walled garden" era

1980s

1990s

2000s

2010s

TIME



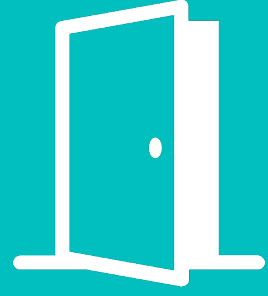
EARLY ADOPTER PC



DESKTOP & LAPTOP



MOBILE, TABLET, IoT



SEARCH ENGINE ERA

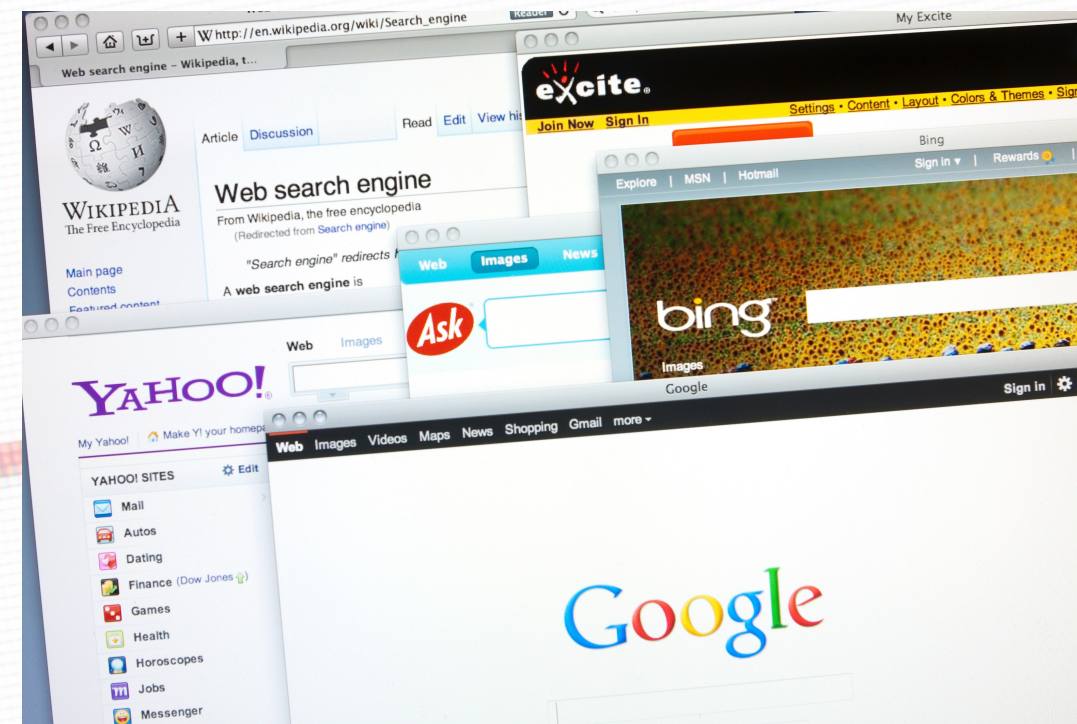
[News](#)

[Shopping](#)

[Gmail](#)

[more](#)

[iGoogle](#) | [Search](#)



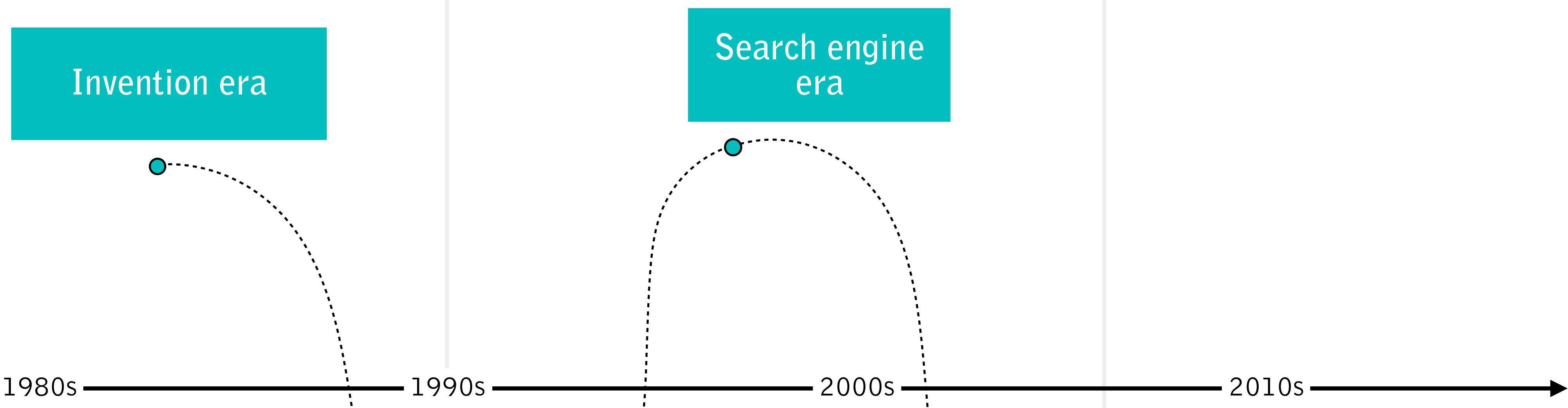
OPEN STANDARDS

BROWSERS

AFFORDABLE HOSTING

OPEN

CLOSED



1980s

1990s

2000s

2010s

TIME

Invention era

Search engine era

AOL "walled garden" era

Facebook + mobile era



EARLY ADOPTER PC

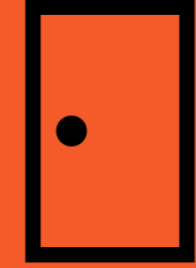


DESKTOP & LAPTOP



MOBILE, TABLET, IoT

FACEBOOK AND MOBILE ERA



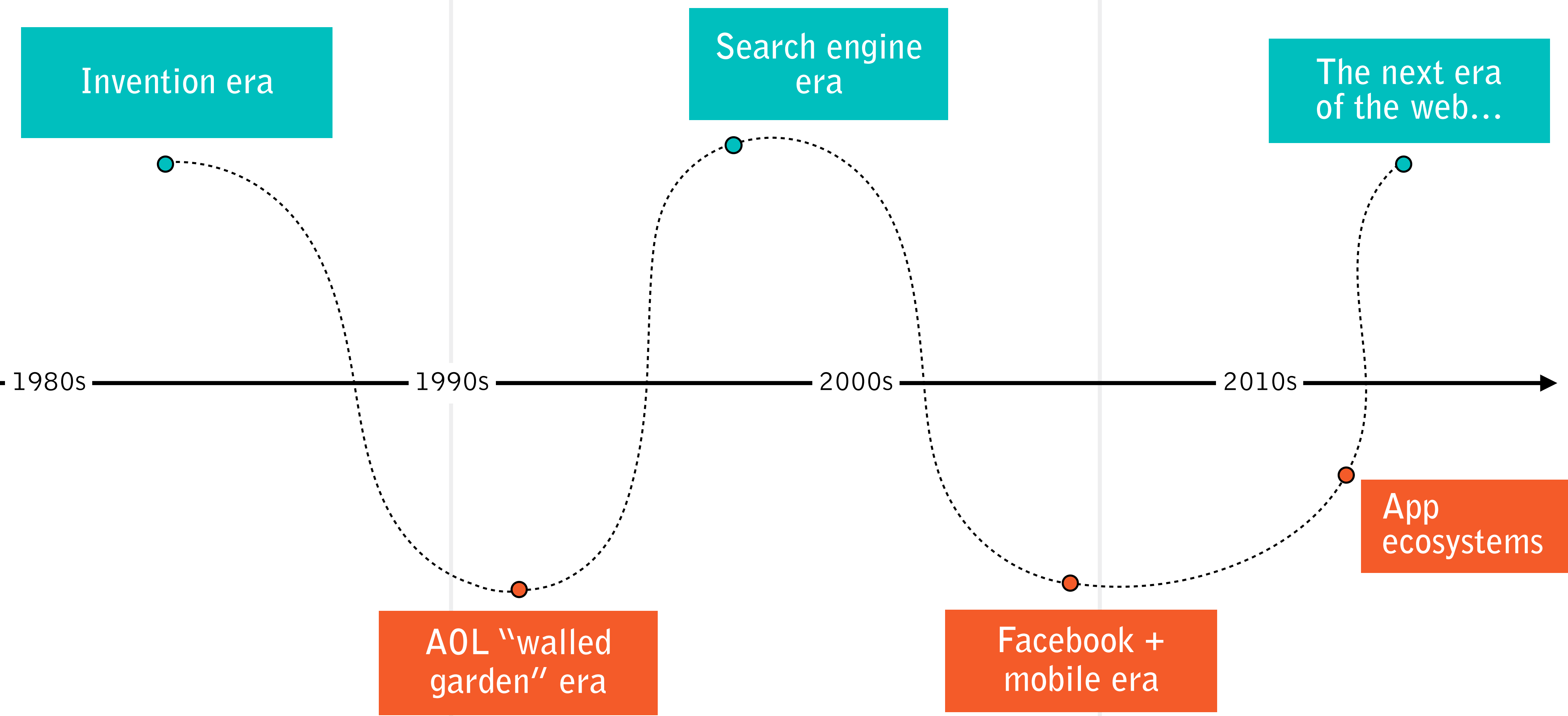
Facebook **TEMPLATE** replaces the creative license of the early web.

Rise of **SILOED** ecosystems like apps that have no standard for search and discovery between them.



OPEN

CLOSED



1980s

1990s

2000s

2010s

TIME

Invention era

Search engine era

The next era of the web...

AOL "walled garden" era

Facebook + mobile era

App ecosystems



EARLY ADOPTER PC



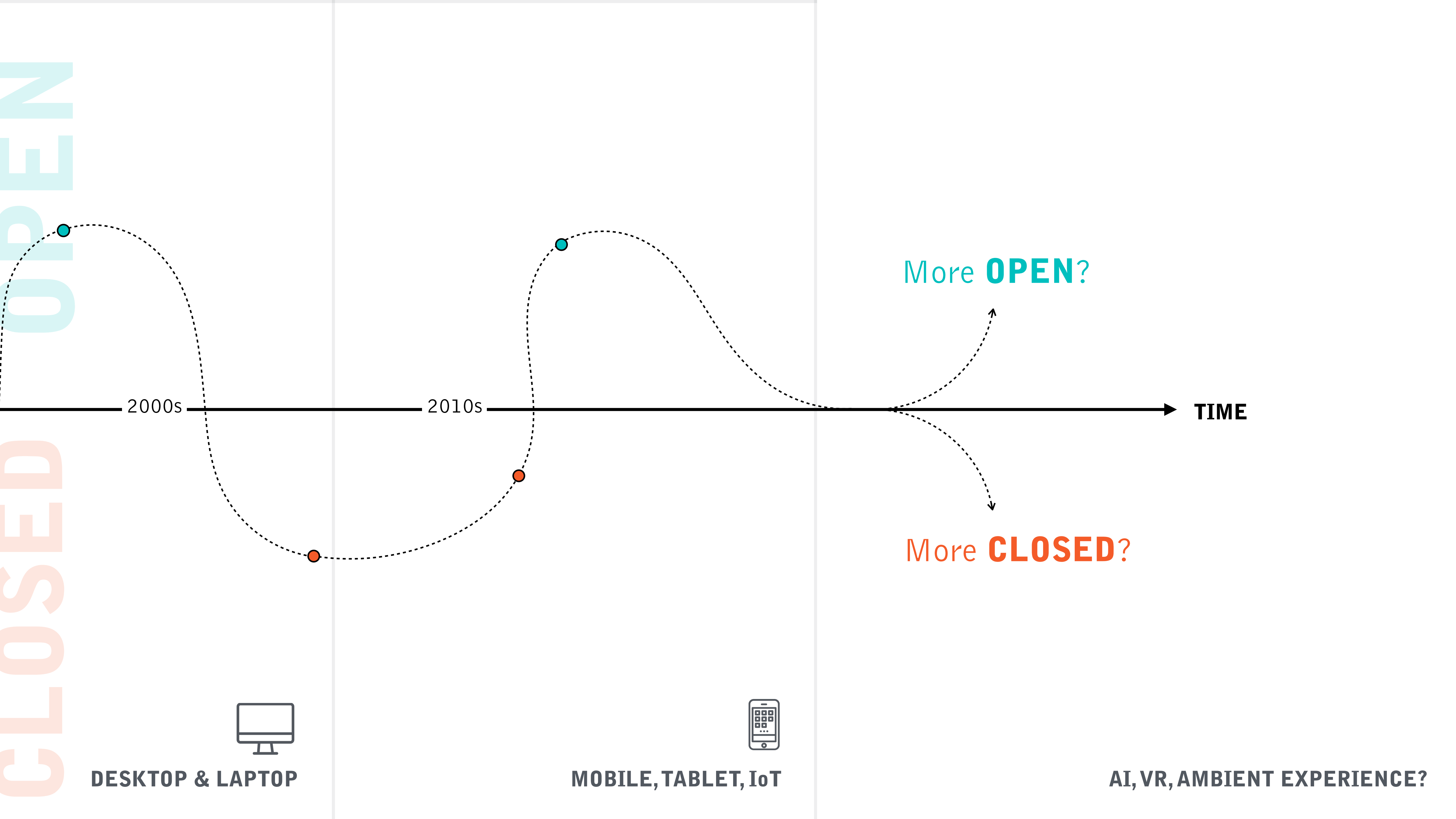
DESKTOP & LAPTOP



MOBILE, TABLET, IoT

OPEN

CLOSED



2000s

2010s

TIME

DESKTOP & LAPTOP



MOBILE, TABLET, IoT



AI, VR, AMBIENT EXPERIENCE?

More **OPEN?**

More **CLOSED?**

BECAUSE IT'S SO EASY TO USE.



3

Trends driving
the web today

TODAY, THERE ARE 3 MAJOR TRENDS THAT WE CAN'T IGNORE:



TREND 1:

Data is eating
the world



TREND 2:

Rise of the
machines



TREND 3:

Devices and the
Internet of Things

Allow "Tweetbot" to access
your location while you use
the app?

Tweetbot uses your location to Geotag
your Tweets

Don't Allow

Allow



DATA IS THE NEW CURRENCY OF TECH



AI WILL DRIVE THE USER EXPERIENCE



MORE DEVICES THAN EVER BEFORE

THE COMBINATION OF THESE TRENDS TRANSLATES TO A **BETTER USER EXPERIENCE**



TREND 1:

Data

+



TREND 2:

AI

+



TREND 3:

Mobile & IoT

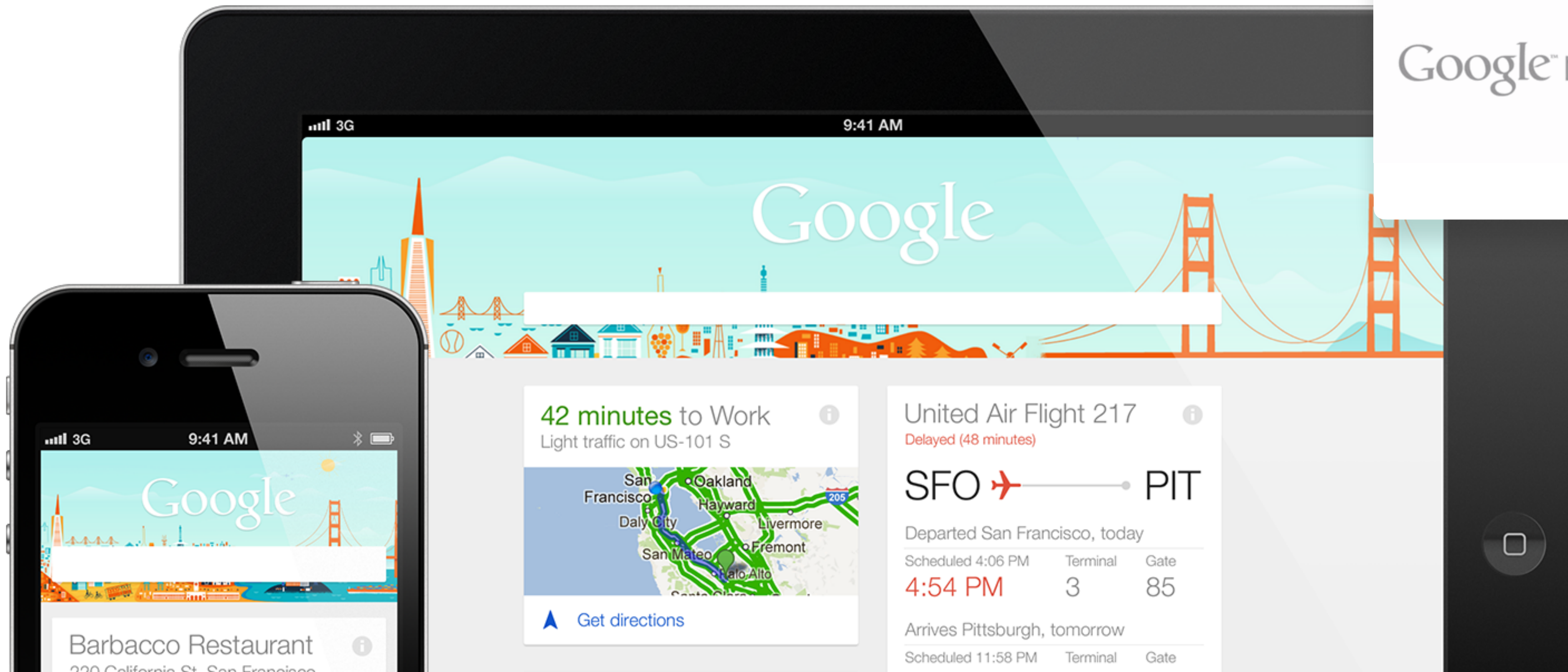
USER EXPERIENCE ALWAYS WINS.



CONTENT WILL FIND US

“THE BIG REVERSE OF THE WEB”

Google now



Invite friends to Pinterest

Stephanie Travis
Invite

Marie Andrade Allison
Invite

Maiko James
Invite

Find friends

Katie Gustainis Vela
Follow

kris ammons
Follow

Drew Levin
Follow





on Sunday

- 👤 Became friends with Rory Hunter and 9 other people
- 📁 Co-Founder and CTO at Acquia and Founder and project lead Drupal at Drupal
Past: Mollom and Universiteit Gent
- 🎓 Studied at Antwerp University
Started in 1996

⋮

Write something...



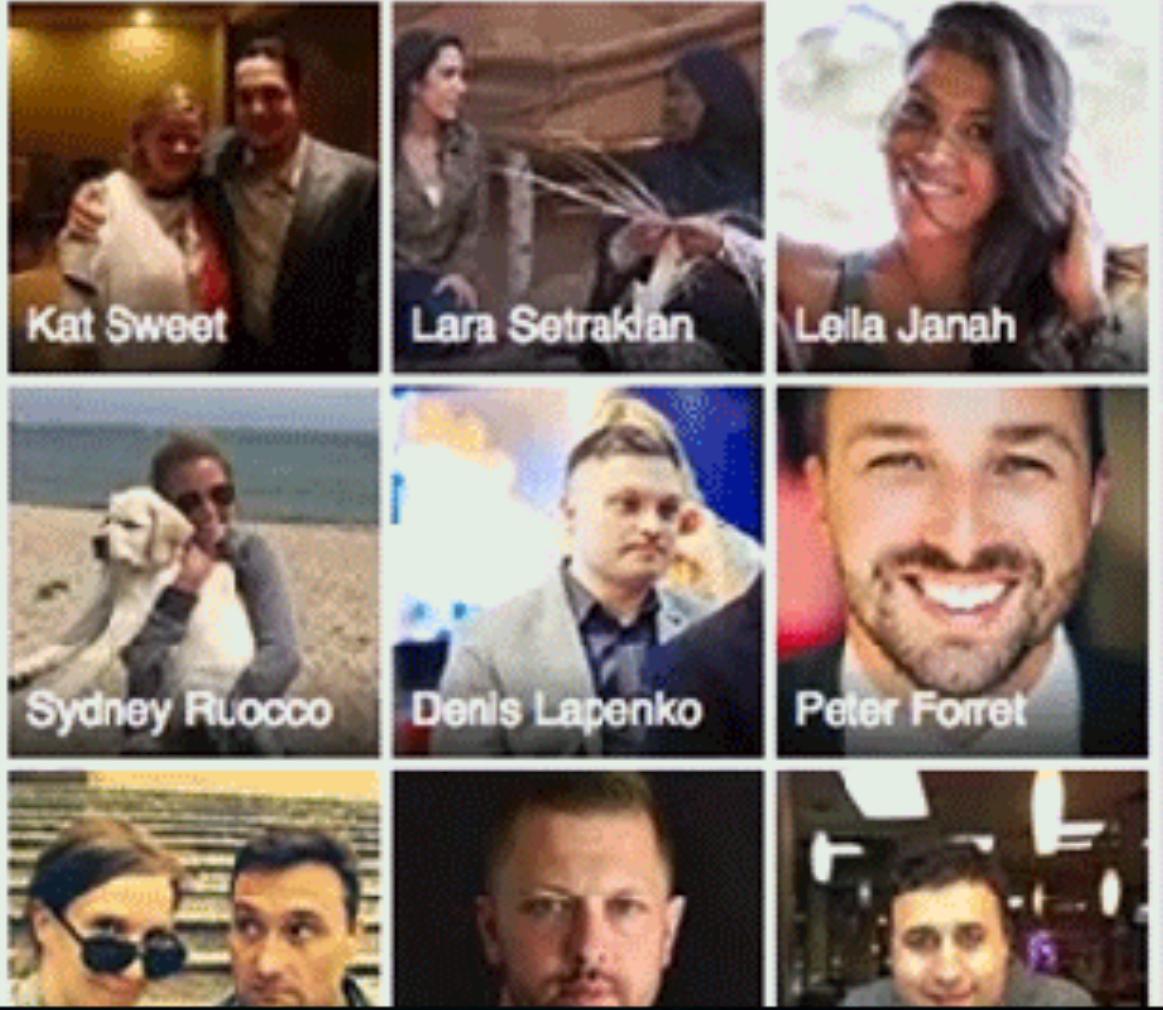
Dries Buytaert shared SBS 2's video.
7 hrs · 👤



👍 Like 💬 Comment ➦ Share

9 people like this.

FRIENDS · 1,238



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FREE for small





WHAT DO THESE HAVE IN COMMON?



ALL CLOSED WEB EXPERIENCES



TREND 1:

+

TREND 2:

+

TREND 3:

Data

AI

Mobile & IoT

A grayscale photograph of a construction site. Several large tower cranes are visible, their long jibs extending across the frame. In the lower portion, the skeletal steel framework of a building is under construction. The sky is a uniform, light gray, providing a high-contrast background for the dark silhouettes of the machinery and structure.

4

Building the
web we want

The image features a dark, monochromatic background of construction cranes and building structures. The cranes are silhouetted against a light grey sky, creating a complex geometric pattern of lines and shapes. A prominent yellow horizontal bar is centered across the image, containing the text 'SO HOW DO WE BUILD THE WEB WE WANT?' in a bold, black, sans-serif font.

SO HOW DO WE BUILD THE WEB WE WANT?

If user experience wins, can we ...

have
**TRANSPARENT
ALGORITHMS?**

**TAKE BACK
CONTROL**
over our
**PRIVACY
& DATA**

break
SILOES
and
DECENTRALIZE

**AND STILL CREATE A
SUPERIOR USER EXPERIENCE?**

NEED: ALGORITHM OVERSIGHT



How do self-driving cars decide on life and death?



Can we trust DNA tests for convictions?

The background of the slide features a faded, grayscale version of the official seal of the United States Department of Health and Human Services. The seal depicts an eagle with its wings spread, holding a shield on its chest and a bundle of arrows in its talons. A banner draped across the eagle's chest contains the Latin motto "E PLURIBUS UNUM".

Possible solution:

FDA FOR DATA AND ALGORITHMS?

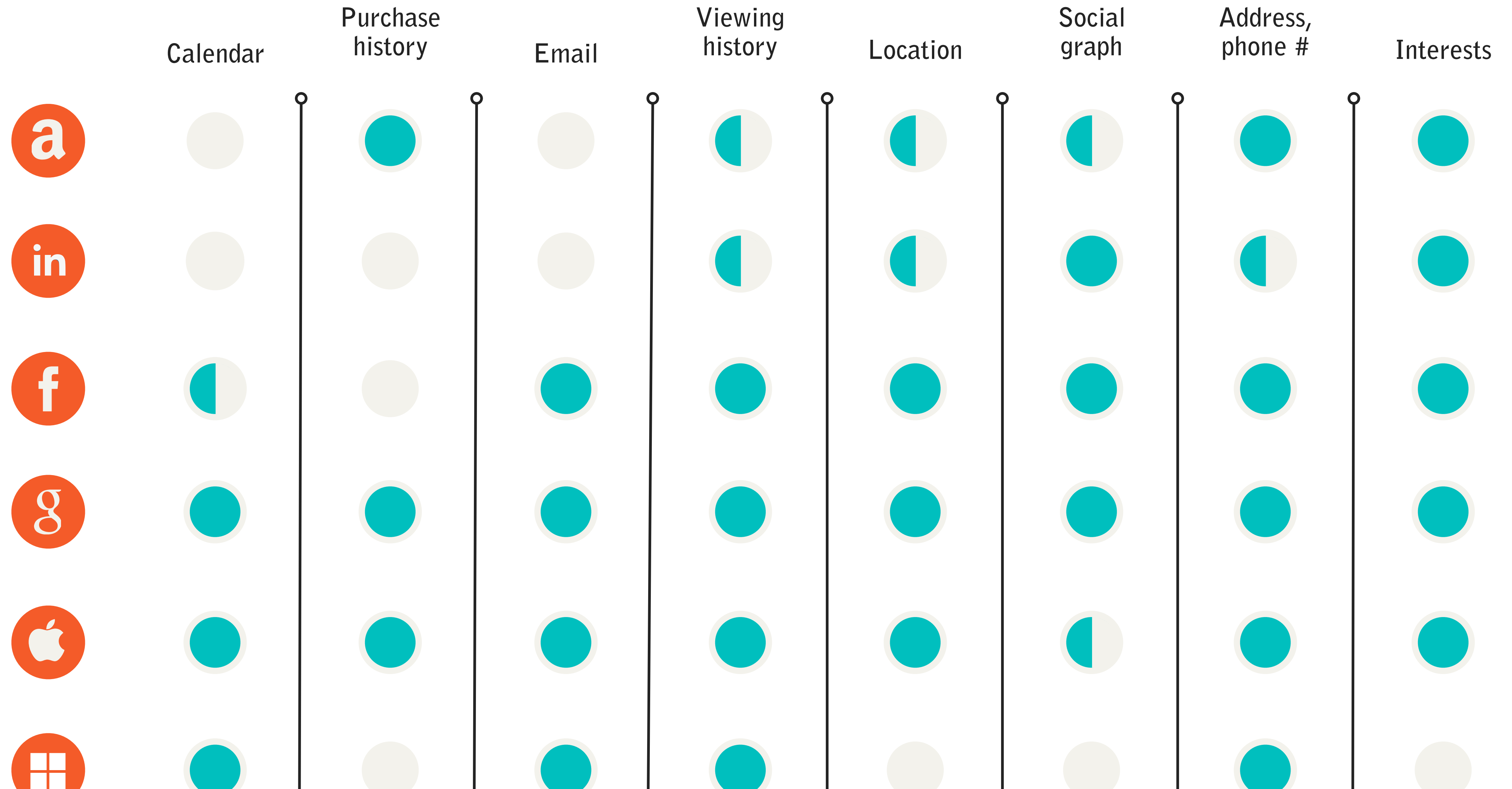
Should government have a role in companies' private algorithms?

Would regulation actually favor the large platforms and drive out smaller innovators?

With the internet being global, how do we do this across countries?

NEED:

DATA PRIVACY & CONTROL



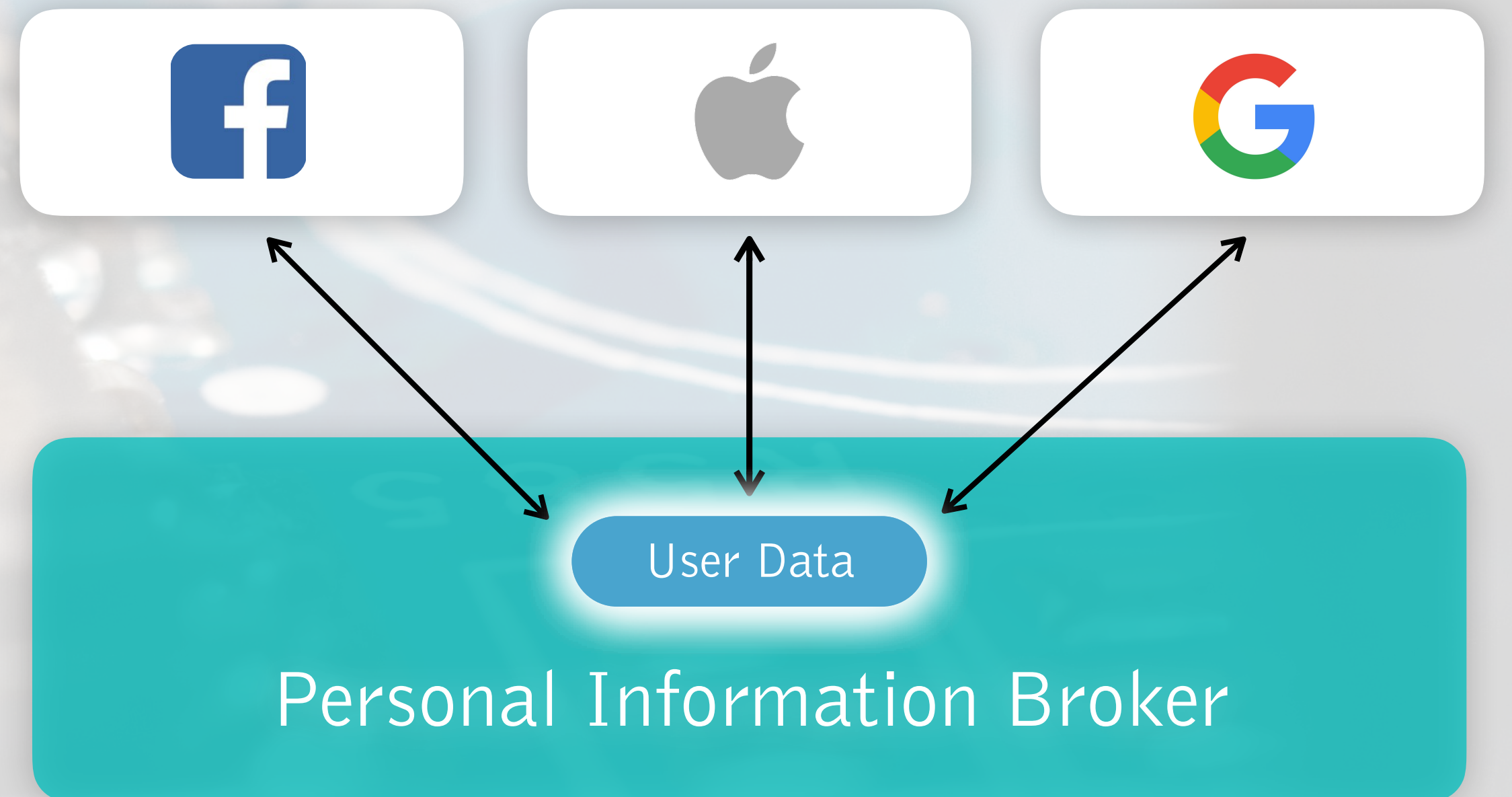
Possible solution:

BUILD PERSONAL INFORMATION BROKER

NOW



FUTURE



Possible Solution:

BUILD PERSONAL INFORMATION BROKER

How do we convince walled gardens to participate?

How will this impact current business models, such as advertising?

Who will build this?

NEED:

DECENTRALIZATION & BETTER UX

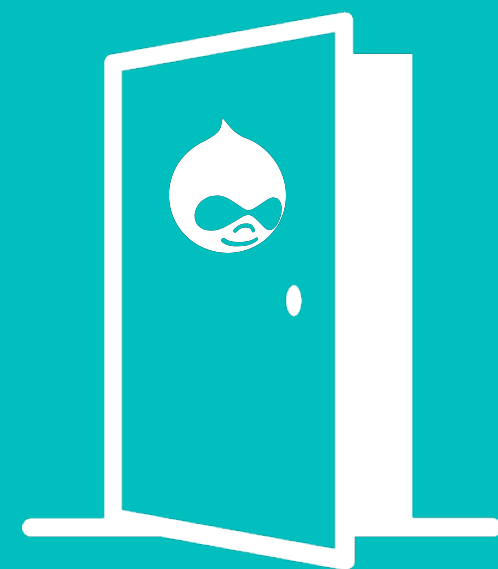




Possible solution:

OPEN SOURCE + OPEN STANDARDS

How do we secure the same or more resources as the walled gardens?



1 in 30

of the world's
websites use
Drupal

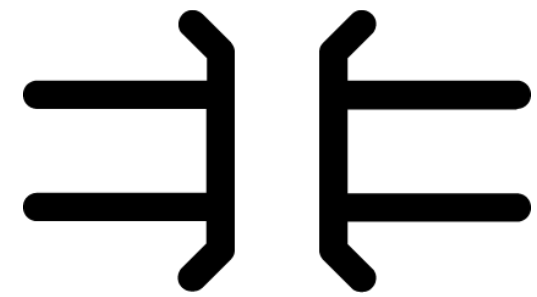
**MILLIONS
OF SITES**

Major brands,
organizations,
governments
and more

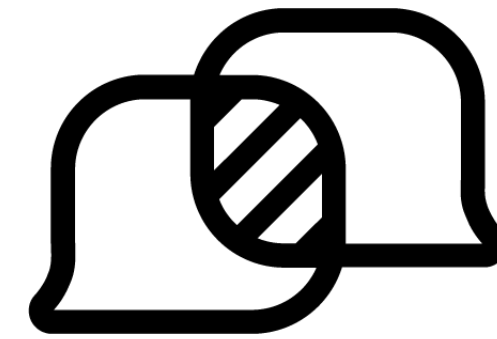
35,000

active
contributors
to Drupal

WITH DRUPAL, WE WANT TO WORK TO



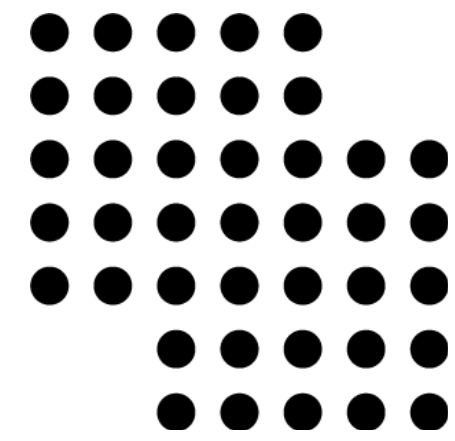
BUILD BRIDGES
across technologies



COLLABORATE
with different thinkers,
leaders and coders



CHAMPION
a more open web



Connecting
the dots

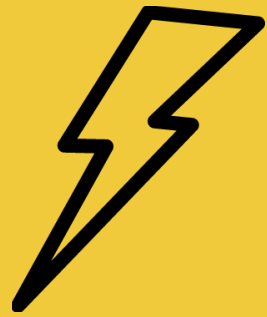
SO WALLED GARDENS AREN'T ALL BAD

They do good things, but they've grown so large we must think critically about them.



A photograph of four women sitting in a row against a white lattice wall. From left to right: a woman in a yellow sari uses a tablet; a woman in a black and pink outfit uses a smartphone; a woman in a red patterned sari uses a laptop; and a woman in a blue and white patterned sari uses a smartphone. A yellow banner with black text is overlaid across the middle of the image.

THE WEB IS A DAILY EXPERIENCE FOR BILLIONS



MASSIVE DISRUPTION AHEAD

Disrupting every business model, industry, country, and every life on earth



IT IS OUR RESPONSIBILITY TO BUILD THE WEB RIGHT



THE FUTURE OF THE WEB:

Open or Closed?



**FDA FOR DATA +
ALGORITHMS**

**PERSONAL
INFORMATION
BROKER**

**OPEN SOURCE +
OPEN STANDARDS**

have
**TRANSPARENT
ALGORITHMS?**

**TAKE BACK
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**PRIVACY
& DATA**

break
SILOES
and
DECENTRALIZE

THANKS FOR LISTENING.

@Dries

dries@**buytaert.net**

THANKS FOR LISTENING.

@Dries

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for these slides and more!