

HORIZONS

WEB USER EXPERIENCE IN 2021



DREW GORTON

Perspectives

- Developer
- CEO
- Product Owner
- Agency & Community Outreach

Connect

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- [@dgorton](#)



3 MINUTE VERSION

- The world is getting more web-ish
- The web is getting less web-ish
- There's a LOT of change coming
- Connected world has won
- We know the connected world
- Opportunity abounds

WHAT WE'RE COVERING

Forces changing our medium

- Hardware
- Interfaces
- Software
- Open Web
- Big Data

Awareness, Possible Outcomes,
Changing Skills



NOT COVERING

UI design techniques

UX process

UX techniques

Content strategy

...



FOR EACH FORCE

What's Happening

Analogy / Example

Implications / Predictions

Get Ready Now



PREDICTING THE FUTURE CAN BE TRICKY

LET'S LOOK AT SOME EXAMPLES



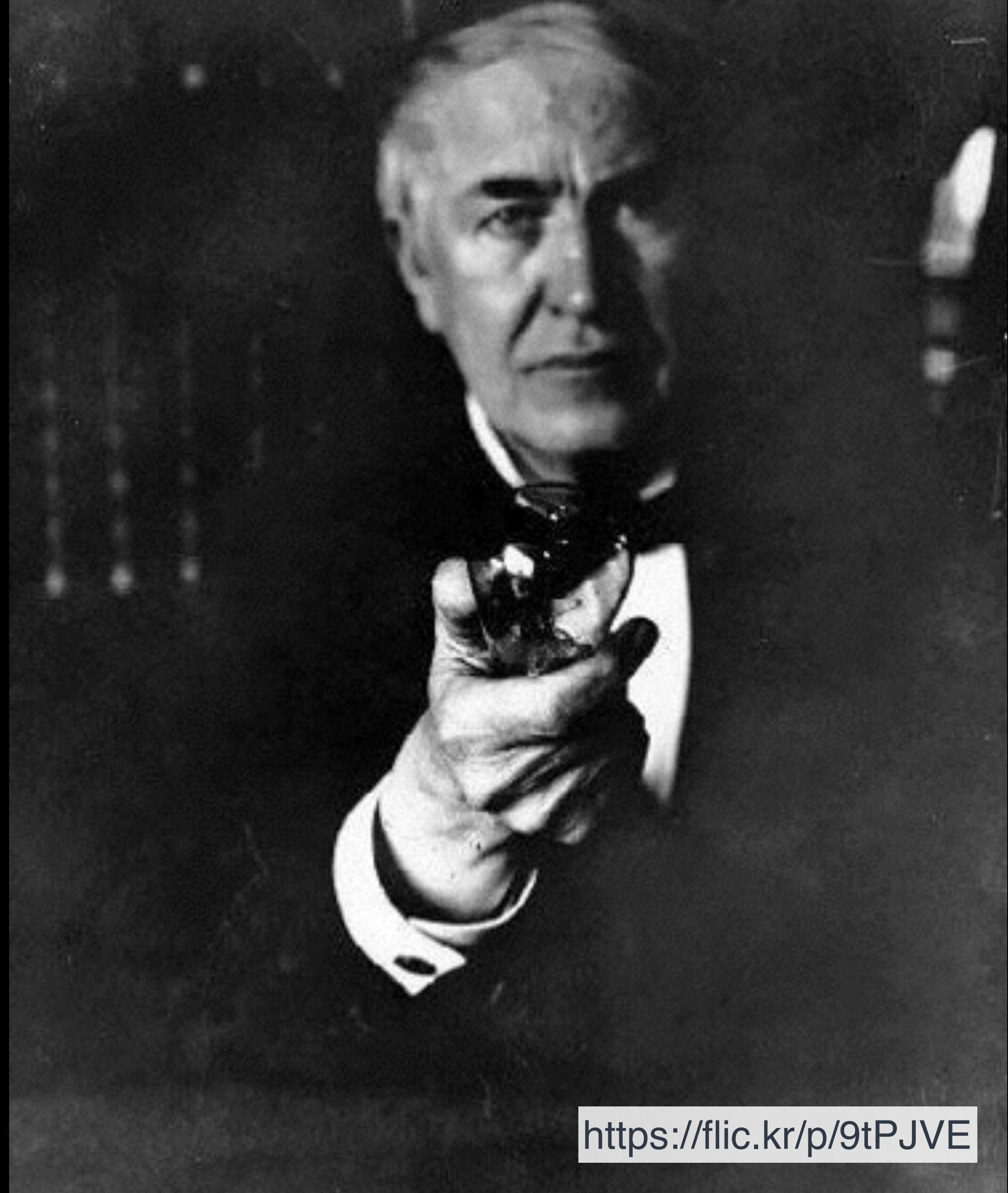
DANGER
ZOMBIES
RUN.

<https://flic.kr/p/d42urN>



Fooling around with alternating current (AC) is just a waste of time. Nobody will use it, ever.

— Thomas Edison, 1889





Nuclear powered vacuum cleaners will probably be a reality within 10 years.

— Alex Lewyt, 1955



Alex Lewyt cleans up 102,318 orders in one day with telegrams

Mr. Alex Lewyt, a man in a suit and glasses, is seen in a room, surrounded by several people whose heads are visible in the foreground. He is pointing towards a large piece of machinery, which appears to be a large industrial vacuum or cleaning device. The machinery is complex and has various pipes and components. The scene is set in what looks like a factory or a large office space.

WESTERN UNION
TELEGRAM

<https://goo.gl/images/bCJmTR>



There is no reason for any individual to have a computer in his home.

— Ken Olson, CEO DEC, 1977





I predict the Internet will soon go spectacularly supernova and in 1996 catastrophically collapse.

— Robert Metcalfe, Founder 3Com, 1995





There's no chance that the iPhone is going to get any significant market share.

— Steve Ballmer, CEO Microsoft, 2007





Something really dumb.

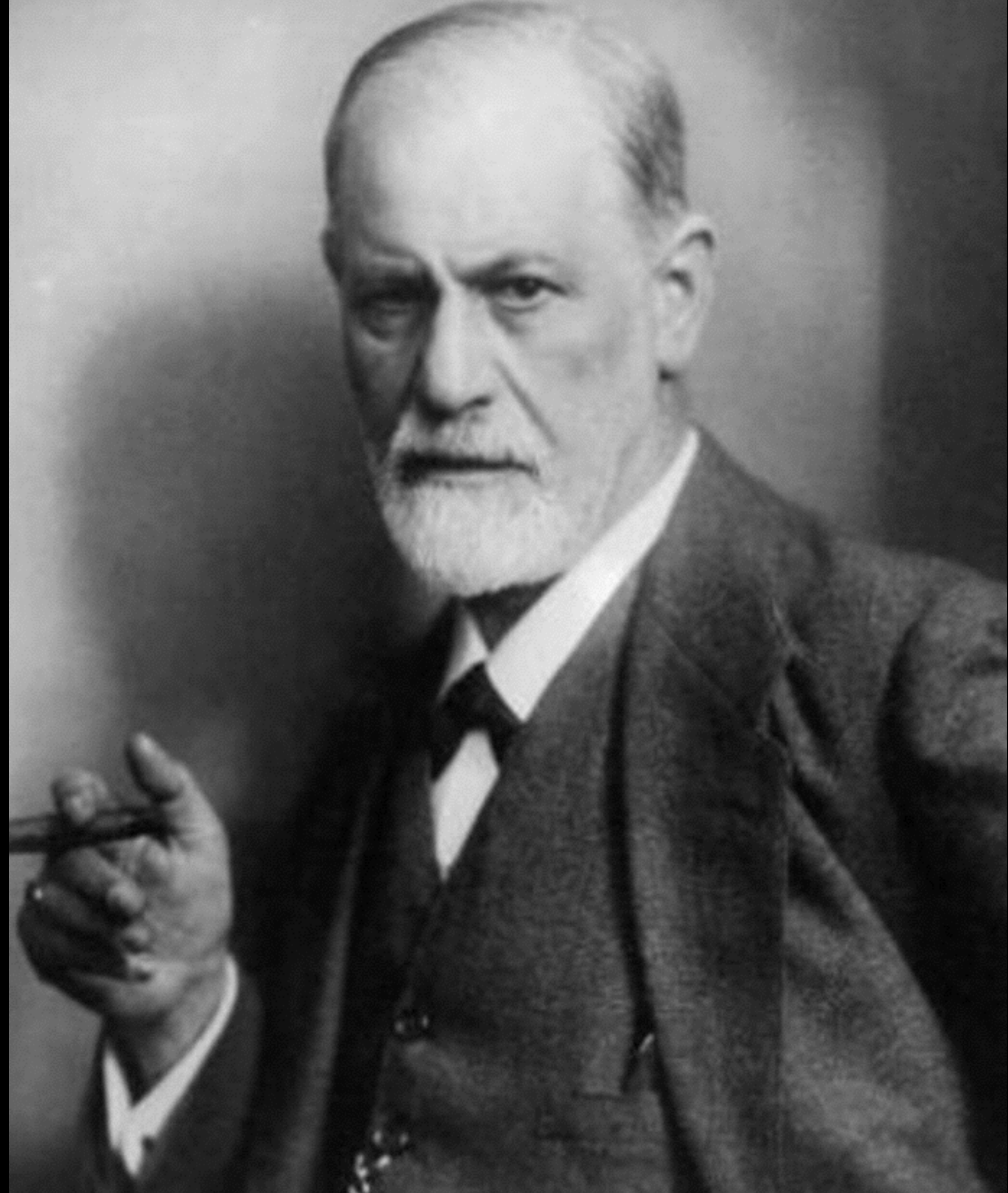
— Drew Gorton, 2016





Analogies, it is true,
decide nothing, but
they can make one
feel more at home.

— Sigmund Freud



HARDWARE IN 2021

HARDWARE SLOWS

Moore's Law is broken

- Physics
- Good enough



ANALOGY

AIRPLANES

Know All Ye by These Presents that

Etta B. Richards

has become a certified member of Pan Am's

“FIRST MOON FLIGHTS” CLUB

Maciej Cegłowski, Webstock 2014, idlewords.com

IMPLICATIONS / PREDICTIONS

HARDWARE

- 2x speed no longer the focus
- CPUs, GPUs, (x)PUs, ...
- Efficiency, connectivity, power...
- Specialized chips, specialized problems, specialized devices
- Internet of Things (IOT) accelerates



GET READY NOW
HARDWARE

- World gets more web-ish
- We know this world
- Our web-ish skills are strong
- Optimism!

INTERFACES IN 2021

BEYOND SCREENS
INTERFACES
MULTIPLY

- Audible
- Visual Overlay (AR)
- APIs
- ...



INTERFACE EXAMPLE

AUGMENTED REALITY

- Google Glass (and successors)
- Mobile devices
- Location + context aware
- Task oriented



INTERFACE EXAMPLE

AUDIBLE

ANALOGY

MOBILE SITES

- “View Mobile Site”
- m.example.com
- “Optimized Experience”
- #FAIL

The image shows a side-by-side comparison of the American Airlines mobile app interface and its mobile website. On the left, the app interface is shown with a blue background and white text. It includes a menu with options: "About this App", "AAdvantage®", "AA.com", "aa.com", "Book Flights", and "Help". The "Help" button is highlighted with a red border. On the right, the mobile website is shown with a white background and blue accents. It includes a header with "AA.com", a language selector for "English", the "American Airlines" logo, and a message: "This feature is not available yet." Below this, a larger message states: "This page has not yet been mobile enabled. Please visit [full HTML site version.](#)" A red arrow points from the "Help" button in the app to the "Full HTML" link in the website's footer.

IMPLICATIONS / PREDICTIONS

INTERFACES

- Central content hubs win
- Multi-channel delivery is normal delivery
- Web
- Apps
- Overlays
- ...



GET READY NOW

INTERFACES

- Headless Drupal
- Integrations and APIs
- Web applications
- Get your content elsewhere
- Talk to other systems
- Started? Double down!
- Not yet? Get moving!



SOFTWARE IN 2021

SOFTWARE GROWS

- Cloud is new normal
- SAAS increases
- Services commoditized



primary results

All News Shopping Videos Images More Search tools

About 1,030,000,000 results (0.28 seconds)



Presidential primaries

Last updated Mar 3, 2016 at 2:47 PM CT

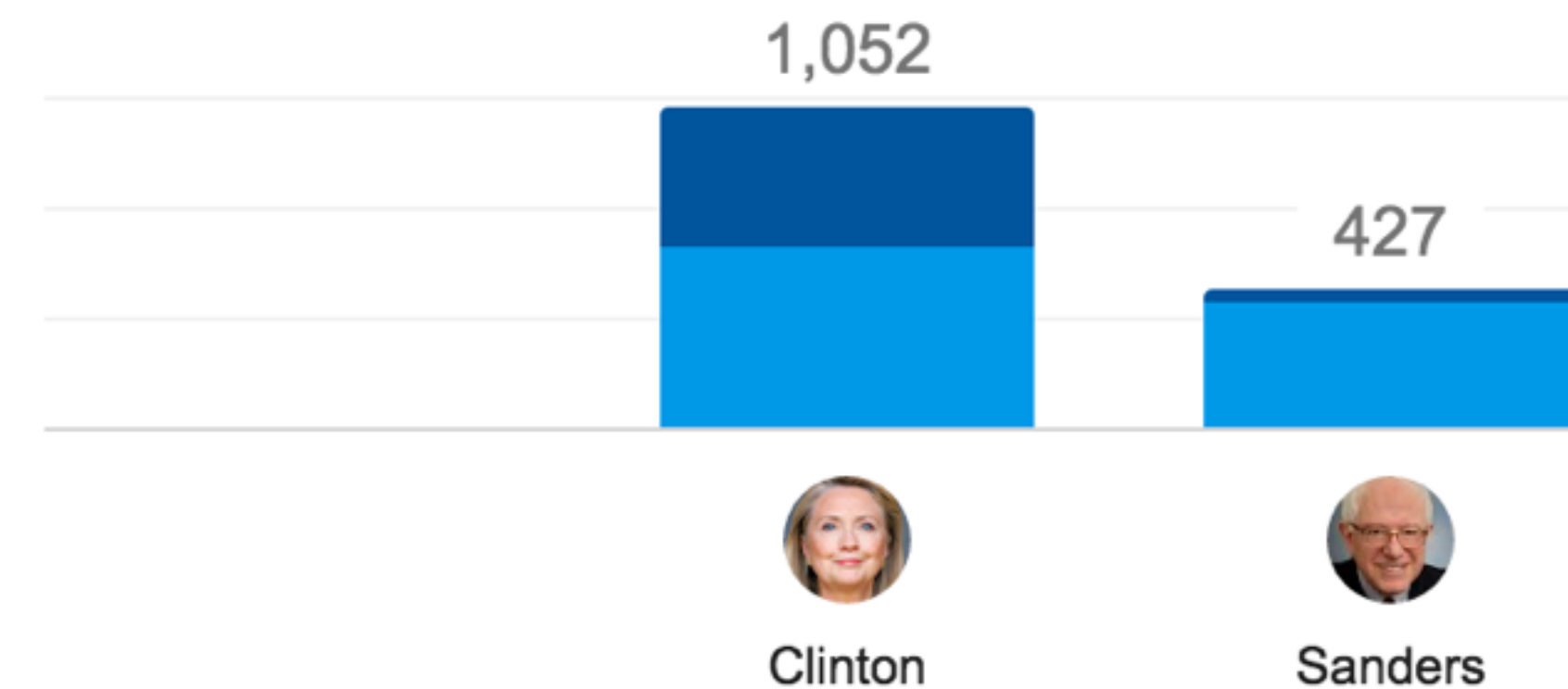
REPUBLICAN

DEMOCRATIC

Delegates won

2,383 needed for nomination · 3,286 available

Pledged delegates Superdelegates



Pledged delegates are based on state primary results, while superdelegates can support a candidate. Delegate results aren't final until the convention in July.

Dropped out: Chafee, Lessig, O'Malley, Webb

EXAMPLE SEARCH

The website features a dark red header with a logo on the left that says "Mekong River" above a stylized tent icon and "Thai Curry House" below it. On the right of the header is the phone number "952-808-8159" and a navigation menu with buttons for "HOME", "MENU", "REVIEWS", "GALLERY", and "DIRECTIONS". The main content area has a large image of a dining table with two place settings, each with a white plate, glass, and silverware. To the left of the image is a text block: "Welcome to Thai Curry House Restaurant. We specialize in Thai Cuisines. Cooking is our passion, using our secret recipes that our community can enjoy without going very far for great tasting food." At the bottom of the page are two buttons: "Welcome" and "Contact Now".

VS

The Google Maps listing for Thai Curry House includes a top row with a photo of a plate of food and a "See photos" button, and a map snippet with a "See outside" button. The main listing area shows the name "Thai Curry House" with a star icon, a "Website" button, and a "Directions" button. Below this is a 4.7-star rating with 22 Google reviews and the category "Thai Restaurant". The listing provides the following information: "Address: 1916 MN-13, Burnsville, MN 55337", "Phone: (952) 808-8159", "Hours: Open today · 11AM–10PM", and "Menu: thaicurryhousemn.com". There are also links for "Suggest an edit" and "Own this business?". A "Popular times" section shows a bar chart with a peak on Friday, and a "Fridays" dropdown menu is visible.

IMPLICATIONS / PREDICTIONS

SOFTWARE

- Search and Social are regulated
- Commoditizable clients + markets have cheap and easy solutions
- Shallow projects have less value



GET READY NOW

SOFTWARE

- Commoditizable clients, content?
Get out or go deep!
- Restaurant 'deep' example:
 - Forecast demand
 - Order supplies
 - Mobile ordering
 - ...
- Specialize. Find a vertical.
Understand it deeply.

OPEN WEB IN 2021

OPEN WEB WINS

Too big to lose:

- Google
- Apple
- Facebook
- Amazon
- ...



ANALOGY

WEB STANDARDS PROJECT

- 1998: Browser Wars
- Netscape vs IE
- IE pulls ahead
- Netscape jumps on board



IMPLICATIONS / PREDICTIONS

OPEN WEB

- 'Losers' gang up on Winner
- Don't sweat proprietary formats
- AMP
- FIA
- ...
- Be cautious of single vendor solutions



GET READY NOW
OPEN WEB

- Help build the Open Web movement
- Support it as it emerges



BIG DATA IN 2021

MORE DATA LEAKS

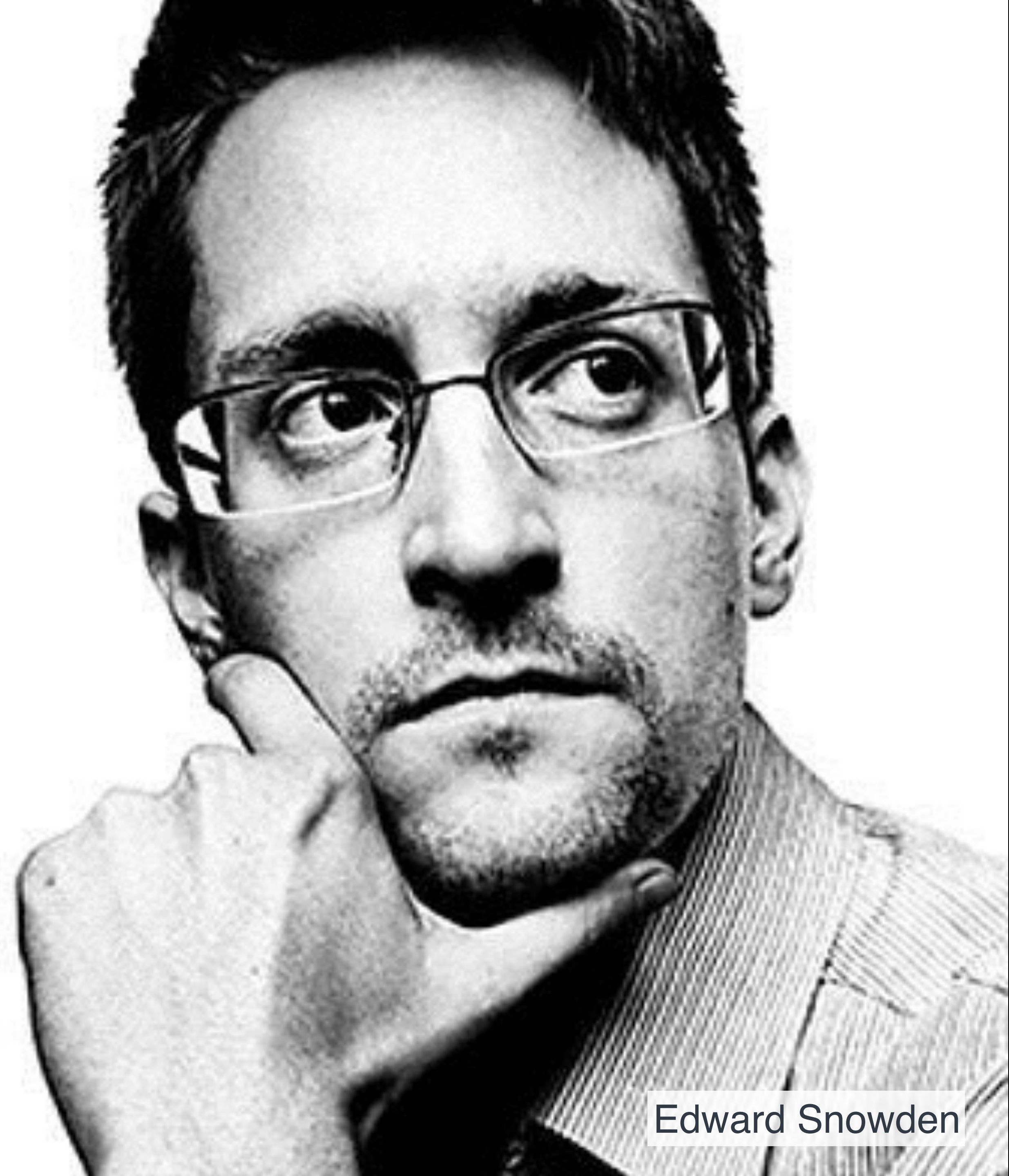
2013: Edward Snowden:
US Gov't

????: Facebook

????: Google

????: Amazon

...



Edward Snowden



Everyone has the
right to the protection
of personal data.

— General Data Protection Regulation
(GDPR) - EU, 2016



BIG DATA

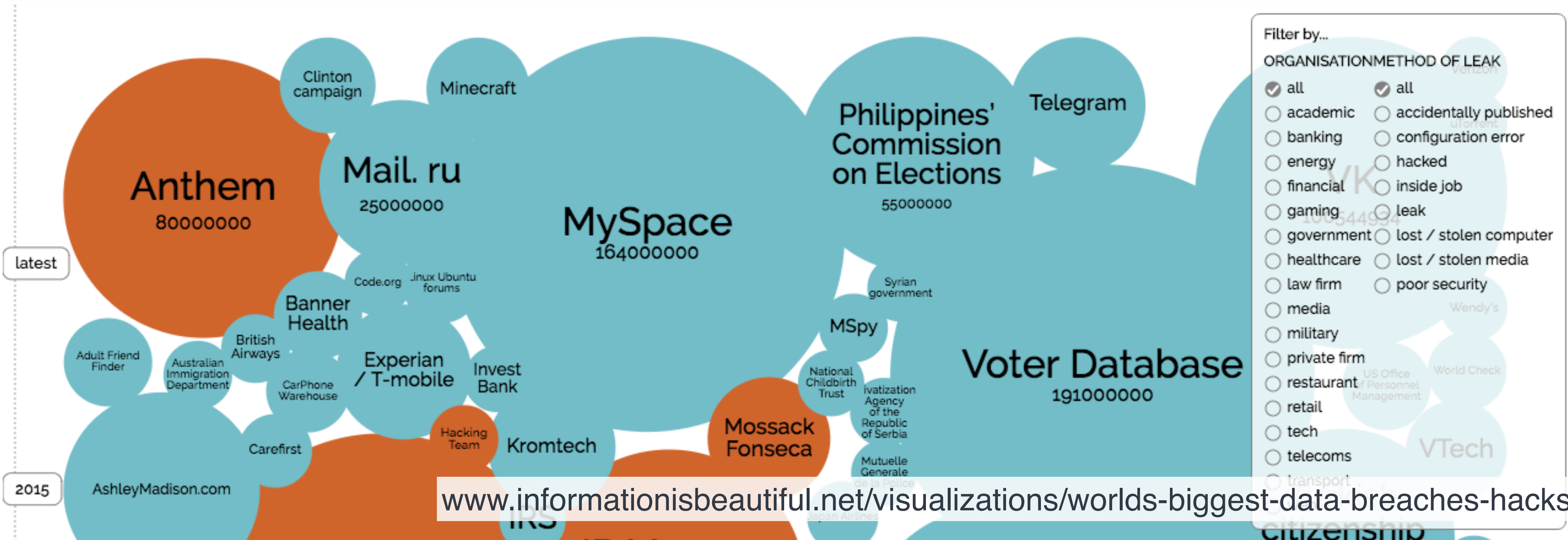
World's Biggest Data Breaches

Selected losses greater than 30,000 records

(updated 4th September 2016)

interesting story

YEAR
 BUBBLE COLOUR
 YEAR
 METHOD OF LEAK
 BUBBLE SIZE
 NO OF RECORDS STOLEN
 DATA SENSITIVITY
 HIDE FILTER



www.informationisbeautiful.net/visualizations/worlds-biggest-data-breaches-hacks

GET READY NOW
BIG DATA

- Educate yourself on security
- Protect Personally Identifiable Information (PII)
- Support data privacy standards



WEB IN 2021

"WEB" IS LESS SPECIAL



REGULAR

<https://flic.kr/p/4bQcR6>

IMPLICATIONS

WEB

We know how to do this

- Deeply understand an interconnected world model
- Assemble around causes (Data, Standards, ...)
- Push technology forward



GET READY NOW

WEB

- Think beyond screens
- Think beyond the 'web'
- Our web-ish skills are strong
- Opportunity!



IN CONCLUSION

- The world is getting more web-ish
- The web is getting less web-ish
- There's a LOT of change coming
- Connected world has won
- We know the connected world
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QUESTIONS?

JOIN US

CONTRIBUTION SPRINTS

- First Time Sprinter Workshop - 9:00-12:00 - Room Wicklow2A
- Mentored Core Sprint - 9:00-18:00 - Wicklow Hall 2B
- General Sprints - 9:00 - 18:00 - Wicklow Hall 2A



EVALUATE - PLEASE!

- <https://events.drupal.org/dublin2016/sessions/web-user-experience-2021>
- Help us all keep getting better



FODDER

BECAUSE SOME OF THIS MIGHT BE USEFUL