

INTERNET BUSINESS CONCEPTS

WEEK #1:

THE HISTORY OF THE MODERN INTERNET

HOW DID WE GET TO TODAY'S INTERNET?

You're enrolled in a course that will teach you the latest web development technology including:

- How to design the best visual elements of a website
 - How to create a great user experience
 - How to code a website
- An understanding of SEO & different ways to use internet marketing

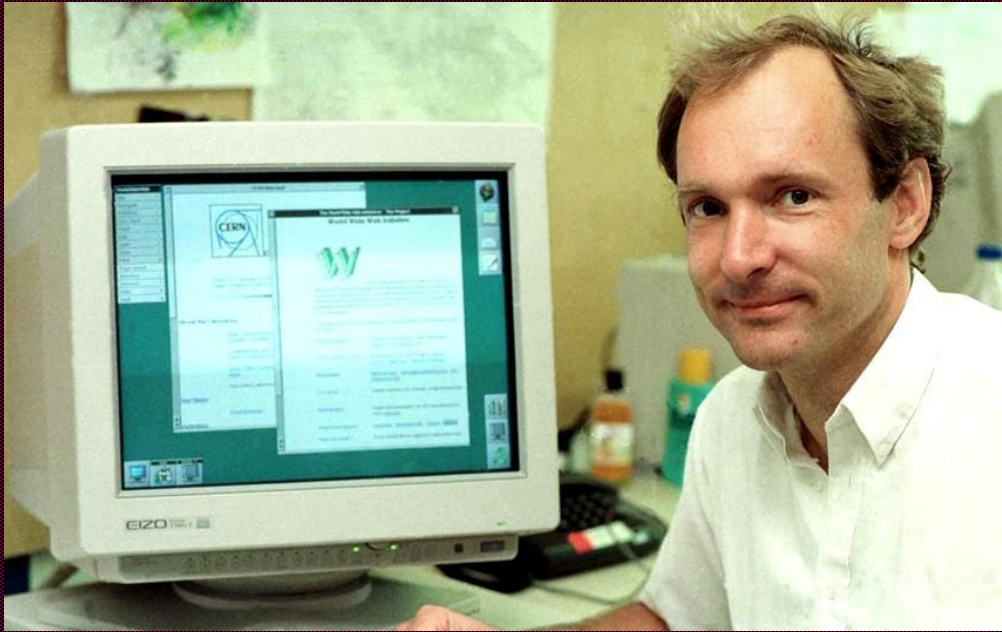
But let's take a moment to understand how we got to today's modern web practices

INTERNET HISTORY: 1960-1989

- **1960s:** The US military begins awarding contracts to computer manufactures for “packet system networks”, to enable military installations & laboratories to remain connected in peace & wartime situations
- **1982-1986:** Standard internet communication protocol practices begin to be implemented. More interconnectivity between hubs.
- **1989:** Tim Berners-Lee introduces the concept of Hypertext Protocol Transfer (HTTP) – the birth of a webpage.
- **1990:** First web server launched in CERN.



1990 IS IMPORTANT LIKE 1903 IS IMPORTANT



1993: MOZILLA ARRIVES

In 1993 Marc Andreessen creates & releases Mozilla, which redefines the Web browsing experience.

1993-1995: The World Wide Web rapidly enters the mainstream, with new terminology entering pop culture: website, browsers, surfing the web.



Would
later
become



INTERNET USER GROWTH OVER LAST 20 YEARS

1993: 14 million

2005: 1.03 billion

1995: 44 million

2008: 1.5 billion

1998: 188 million

2011: 2 billion

2000: 414 million

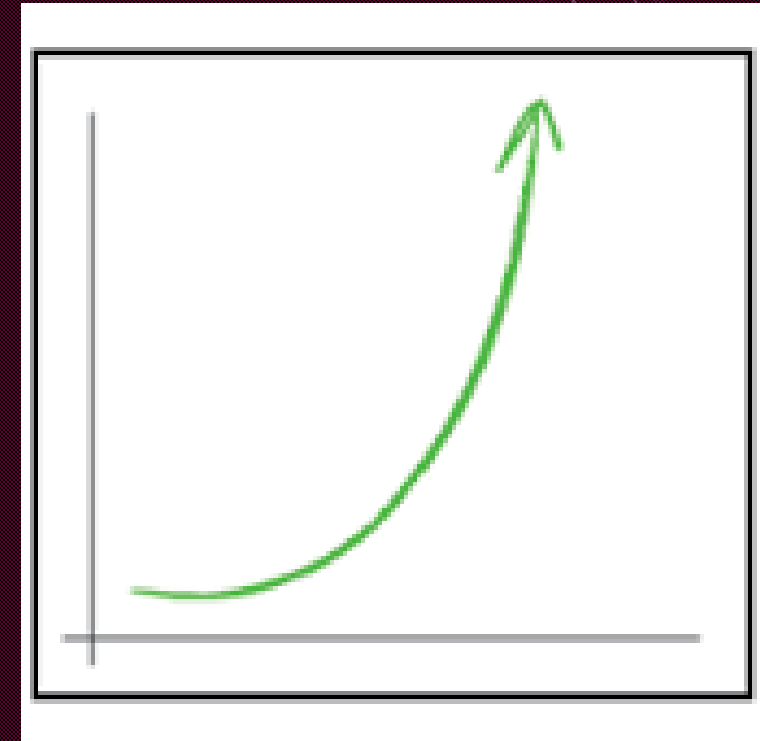
2013: 2.7 billion

2001: 502 million

2015: 3.18 billion

2003: 781 million

2016: 3.42 billion



THE BIRTH OF GOOGLE

March 1996: The first Google web crawler program appears. It begins to index webpages on the Internet as a research attempt by 2 university students. The program assigns a value to a page by its “importance” – links to it, server accessibility, how many times a search term appeared on the page.

While other “link directories” exist at the time, Google changed the game with its approach, grading of webpages and simplicity.

Google!

Search the web using Google!

10 results ▾

Google Search

I'm feeling lucky

Index contains ~25 million pages (soon to be much bigger)

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Google homepage screenshot from 1997

THE IMPORTANCE OF GOOGLE'S INTRODUCTION

- Instead of having to manually submit your website to a link directory (Yahoo, Ask Jeeves, DMOZ), Google went out and looked for links on websites it already knew about – and then followed those links & added those websites to its directory
- This was the first concept of a search engine
- Online ads were in their infancy, and Google wasn't in the ad game at this stage of their business
- Other competitors were building gated communities (AOL), link directories, or independent website portals

my eBay | site map | sign in

Help | Community

Find It

Smart Search

Live Help

Get Help
Buying or
Selling

IF IT'S IN
TIME, IT'S
ON
EBAY

The Power of
Learning

Technology
 Dell notebooks
 Sony Cyber
 Cameras
 Car CD/MP3
 Players

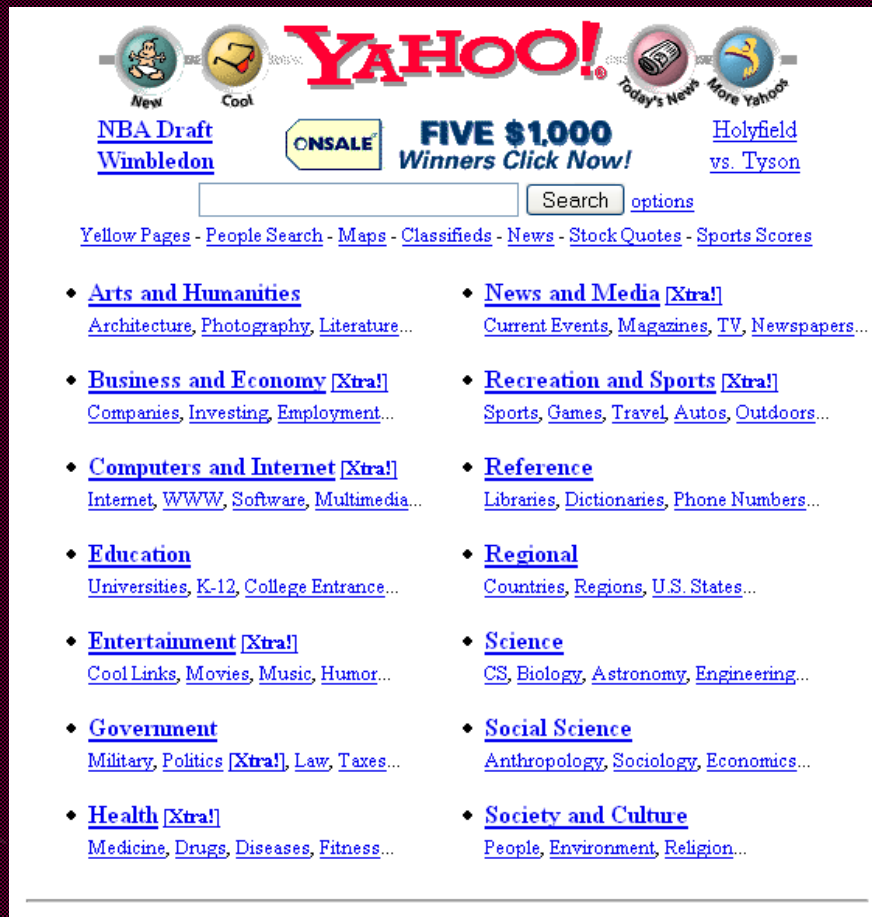
Sports
 Golf bags
 Baseball jerseys
 Football tickets

TIME

Search Diamond Shards



OTHER EARLY PLAYERS THAT BECAME LEADERS IN THEIR INTERNET DOMAINS



YAHOO!

[New](#) [Cool](#) [Today's News](#) [More Yahoo!](#)

[NBA Draft Wimbledon](#) [ONSALE FIVE \\$1,000 Winners Click Now!](#) [Holyfield vs. Tyson](#)

[options](#)

[Yellow Pages](#) - [People Search](#) - [Maps](#) - [Classifieds](#) - [News](#) - [Stock Quotes](#) - [Sports Scores](#)

- [Arts and Humanities](#)
[Architecture](#), [Photography](#), [Literature](#)...
- [Business and Economy \[Xtra!\]](#)
[Companies](#), [Investing](#), [Employment](#)...
- [Computers and Internet \[Xtra!\]](#)
[Internet](#), [WWW](#), [Software](#), [Multimedia](#)...
- [Education](#)
[Universities](#), [K-12](#), [College Entrance](#)...
- [Entertainment \[Xtra!\]](#)
[Cool Links](#), [Movies](#), [Music](#), [Humor](#)...
- [Government](#)
[Military](#), [Politics \[Xtra!\]](#), [Law](#), [Taxes](#)...
- [Health \[Xtra!\]](#)
[Medicine](#), [Drugs](#), [Diseases](#), [Fitness](#)...
- [News and Media \[Xtra!\]](#)
[Current Events](#), [Magazines](#), [TV](#), [Newspapers](#)...
- [Recreation and Sports \[Xtra!\]](#)
[Sports](#), [Games](#), [Travel](#), [Autos](#), [Outdoors](#)...
- [Reference](#)
[Libraries](#), [Dictionaries](#), [Phone Numbers](#)...
- [Regional](#)
[Countries](#), [Regions](#), [U.S. States](#)...
- [Science](#)
[CS](#), [Biology](#), [Astronomy](#), [Engineering](#)...
- [Social Science](#)
[Anthropology](#), [Sociology](#), [Economics](#)...
- [Society and Culture](#)
[People](#), [Environment](#), [Religion](#)...



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Get \$10 for sending via
Get \$1,000 for sending your friends
[See Us!](#)
- Beam Money**
Send money to anyone with an email address.
- Request Money**
Request payment from someone who owes you money.
- Group Billing**
Collect money for hosting an event or party.
- Auction Payments**
Send and receive payments for online auctions.

Where it's featured:

- "On the money" - The Wall Street Journal
- "Too much money" - Entrepreneur
- "The Deal" - Business Week
- "The Deal" - Financial Times
- "The Deal" - PC World

BUT THERE WERE MISTAKES MADE IN WEB 1.0



- No consistency between different websites (e.g. navigation bars)
- No knowledge of preferred user behavior
- Analytics were basic & didn't cover user functionality

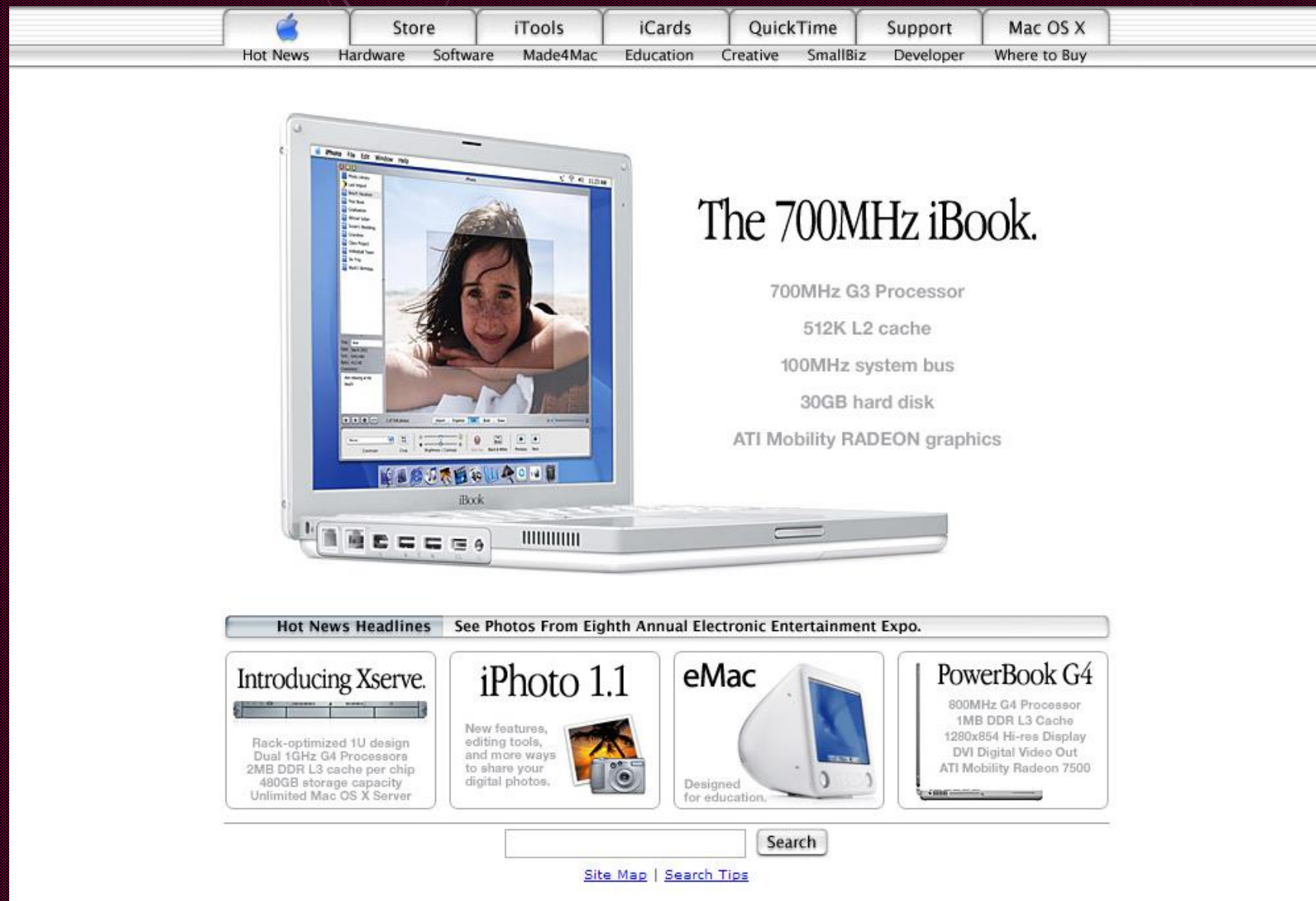
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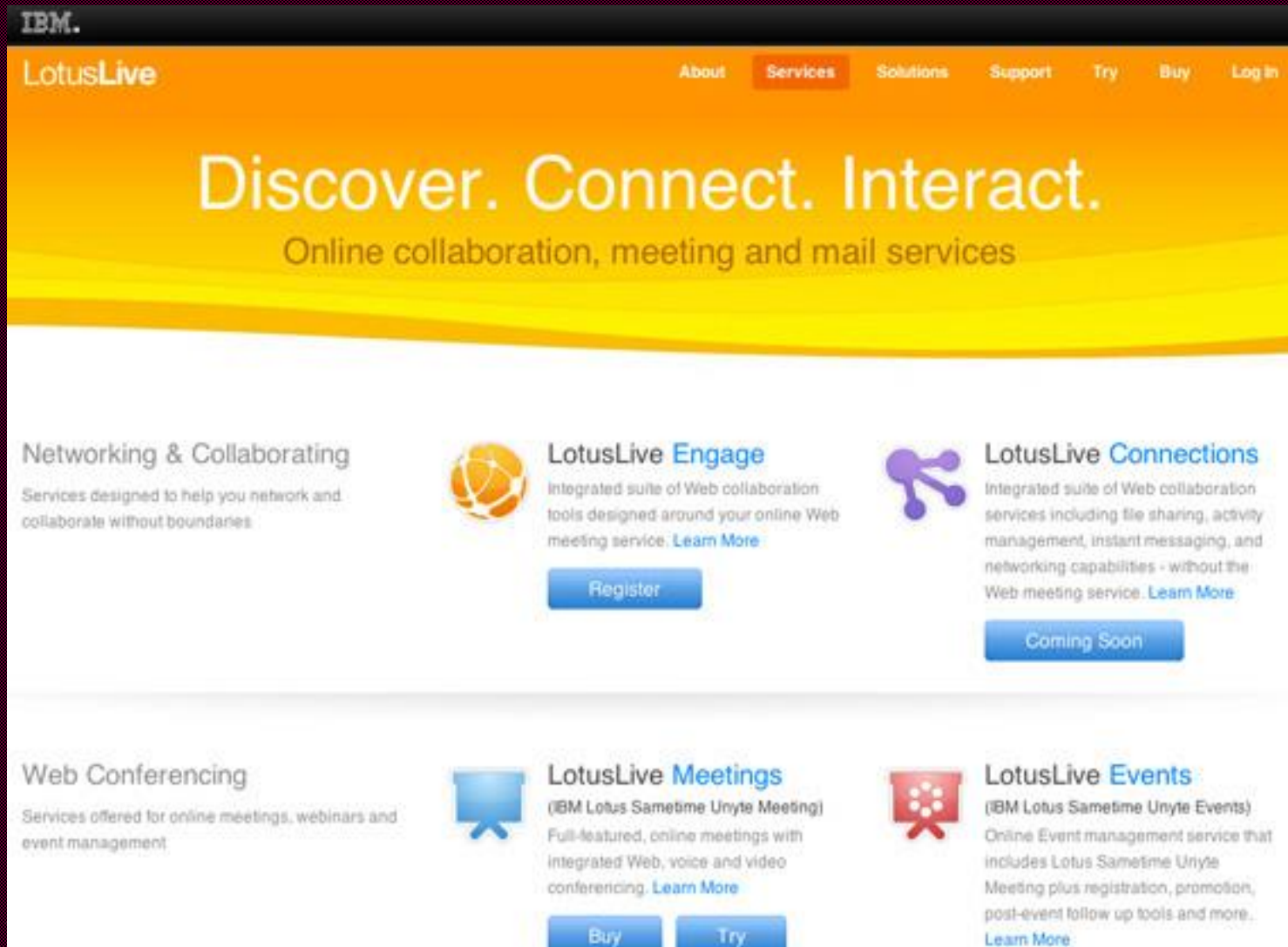
- Static HTML = basic, takes minutes to load homepage
- Internet attention spans – how long were they & why?
- Image optimization? What's that?

EARLY 2000S: WEB 2.0 ARISES

- Richer user experiences, focus on appeasing user's intent
- Deeper analytics uncovered user behavior patterns
- Increased functionality
- No more frames, better HTML, dynamic websites
- Flash allows for more interactivity, but Apple doesn't adopt it
- Move towards using "negative space" in design
- Introduction of "call to action" grid or button



Apple's website circa 2002



IBM's Homepage circa 2004.

Headline is simple (3 words)

4 call-to-action buttons (twice to many by today's standards)

Text isn't overwhelming to reader

Clean navigation bar



Real Estate homepage circa 2005

Nothing fancy, easy to understand page layout.

More text than the IBM homepage example, but that's OK for search engines.

Navigation bar in top strip

Graphics that easily visually identify what kind of site it is – house graphics!



- 1990: 1st website & browser
- 1993: Mosaic launches
- 1994: Yahoo!, Amazon launches
- 1997: Google launches
- 2001: Dotcom bubble bursts
- 2002: Web 2.0
- 2005: YouTube launches
- 2006: Twitter launches
- 2010: Instagram launches
- 2012: Facebook 1B users
- 2014: Alibaba: \$9.3B in 1 day
- 2016: Alibaba: \$17.7B in 1 day



- 1903: 1st powered flight
- 1906: France & Brazil fly
- 1910: 1st seaplane (then called flying boat)
- 1911: 1st military aircraft (scouting)
- 1913: 1st commercial passenger flight
- 1914: 1st gun mounted aircraft
- 1918: Airmail launched
- 1919: 1st parachute jump
- 1924: 1st round-the-world flight
- 1926: 1st polar flight
- 1927: Solo flight across the Atlantic Ocean
- 1929: 1st around the world flight

WHAT USERS WANT FROM WEBSITES TODAY

- **Simplicity:** ease of design, navigation, functionality, one-click away answers
- **Mobile:** Increasing use of mobile devices mean all websites need to be functional for different user experiences (desktop, tablet, phone)
- **Clarity / Understanding of audience:** If a website is a resource (like Wikipedia or a university), loads of content. eCommerce? Clean images, strong call to action. Your website doesn't need to be "shiny" if your audience doesn't expect it.



WHAT USERS WANT FROM WEBSITES TODAY

- Split-second decision making:

Internet users want to know they're on the right kind of website to solve their present problem.

Does your headline communicate that?

Do your images? Does your call to action make them want to take action?



WHAT USERS WANT FROM WEBSITES TODAY

- **Fast-loading time:** Not only does this help keep users on the website, it also now factors into search engine results.

Slower loading sites = on 2nd, 3rd pages of search engine results.



- **Guidance:** Users want to be told by the site what to do – but to not be told overtly or forcefully. Let them take the action naturally.