

# Kursintroduction

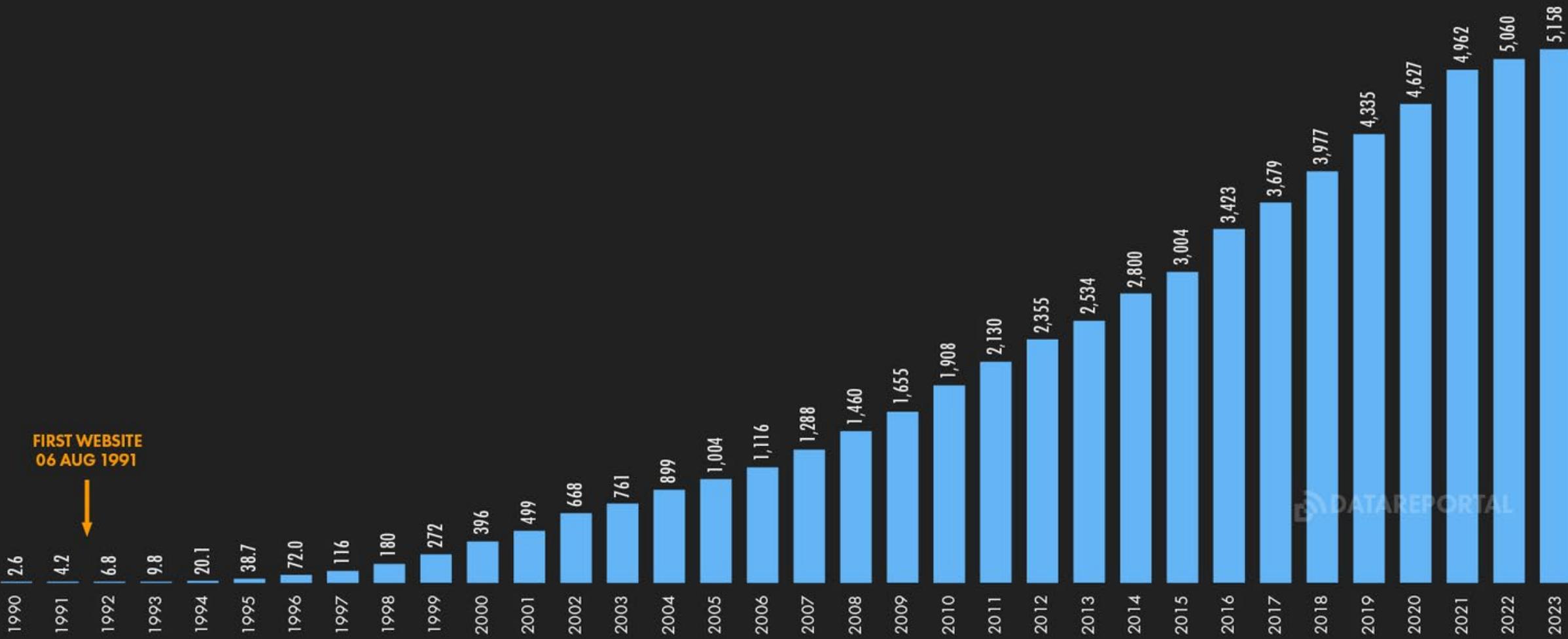
## DA395A

Nästan 2 miljarder  
webplatser

5.16 miljarder användare av internet

# INTERNET USERS: TIMELINE

NUMBER OF INTERNET USERS BY YEAR (IN MILLIONS)



**SOURCES:** KEPPIOS ANALYSIS; ITU; GSMA INTELLIGENCE; EUROSTAT; WORLD BANK; GOOGLE'S ADVERTISING RESOURCES; CIA WORLD FACTBOOK; CNNIC; APJI; KANTAR & IAMAI; LOCAL GOVERNMENT AUTHORITIES; UNITED NATIONS. **NOTES:** THE TIME REQUIRED TO COLLECT, PROCESS, AND REPORT INTERNET USER RESEARCH DATA MAY MEAN THAT USER FIGURES AND GROWTH TRENDS FOR RECENT PERIODS UNDER-REPRESENT ACTUAL VALUES. SEE [NOTES ON DATA](#) FOR FURTHER DETAILS. **COMPARABILITY:** SOURCE AND BASE CHANGES, FIGURES MAY NOT MATCH OR CORRELATE WITH FIGURES PUBLISHED IN PREVIOUS REPORTS. ALL FIGURES USE THE LATEST AVAILABLE DATA, BUT SOME SOURCE DATA MAY NOT HAVE BEEN UPDATED IN THE PAST YEAR. SEE [NOTES ON DATA](#) FOR DETAILS.

# Dagens Agenda



# Dagens Agenda

- Projekt - Hybridutbildning
- Vilka lärare håller i kursen?
- Upprop?
- Vem läser denna kurs?
  - Mentimeter
- Kursplanen
- Översikt av kursen
  - Kommunikation
  - Moment
  - Examinationsmoment
- Introduktion / repetition om webben

# Projekt - Hybridutbildning

Grupper presenteras på Canvas

# Lärare i kursen



- Anton Tibblin (kursansvarig)
  - [anton.tibblin@mau.se](mailto:anton.tibblin@mau.se)
  - 040-66 57672



- Johan Holmberg
  - [Johan.holmberg@mau.se](mailto:Johan.holmberg@mau.se)
  - 040-6657376



# Upprop



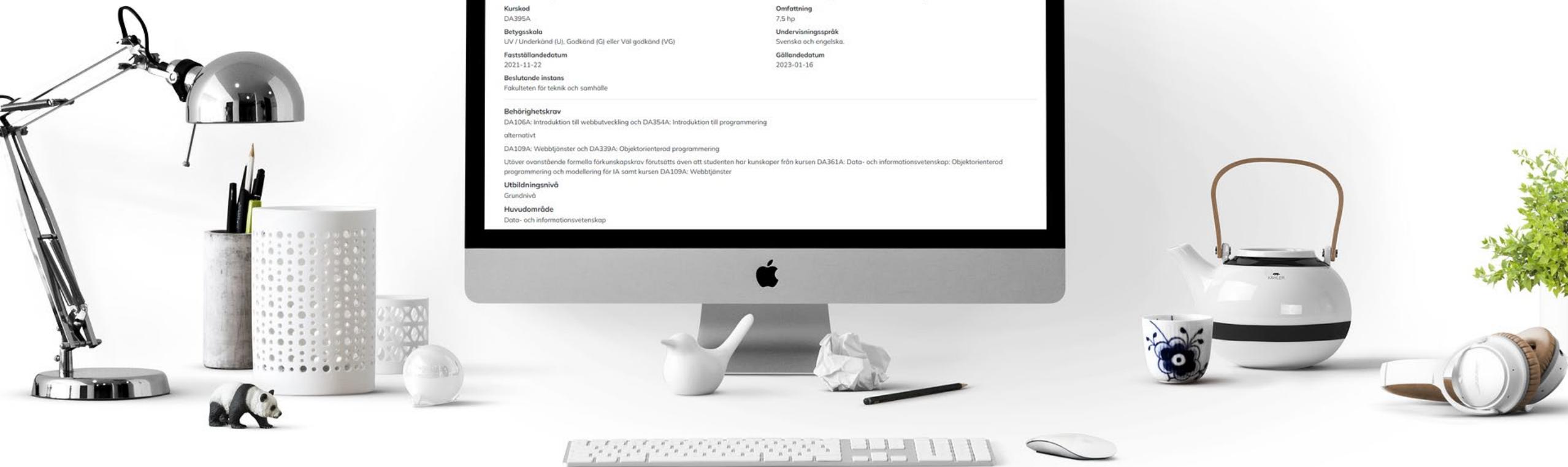
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# Vem läser kursen?

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- Informationsarkitekt (termin 4)
- Systemutvecklare (termin 6)
- Samläsning innebär
  - Olika förkunskaper
  - Olika perspektiv på applikationer
  - Samma mål med kursen
  - Samma examinerande uppgifter







[Sök program och kurser](#) / [DA395A](#) / Kursplan våren 2024

## Kursplan våren 2024

**Benämning**

Flerplattformsapplikationer med webbtekniker

**Kurskod**

DA395A

**Betygsskala**

UV / Underkänd (U), Godkänd (G) eller Väl godkänd (VG)

**Fastställandedatum**

2021-11-22

**Beslutande instans**

Fakulteten för teknik och samhälle

**Engelsk benämning**

Cross-platform Applications with Web Technologies

**Omfattning**

7,5 hp

**Undervisningsspråk**

Svenska och engelska.

**Gällandedatum**

2023-01-16

**Behörighetskrav**

DA106A: Introduktion till webbutveckling och DA354A: Introduktion till programmering

alternativt

DA109A: Webbjänster och DA339A: Objektorienterad programmering

Utöver ovanstående formella förkunskapskrav förutsätts även att studenten har kunskaper från kursen DA361A: Data- och informationsvetenskap: Objektorienterad programmering och modellering för IA samt kursen DA109A: Webbjänster

**Utbildningsnivå**

Grundnivå

**Huvudområde**

Data- och informationsvetenskap

**Fördjupningsnivå**

G1F

**Fördjupningsnivå i förhållande till examsfordringarna**

## Syfte

Kursen syftar till att studenten utvecklar kunskap och färdigheter för att konstruera webbapplikationer anpassade för flera typer av enheter, med fokus på mobila plattformar.

## Innehåll

Kursen behandlar:

- Översikt av aktuella webbtekniker
- Möjligheter och begränsningar med webbapplikationer
- Utvecklingsmiljö och arbetsställ
- Konstruktion av webbapplikationer
- Designprinciper och användargränssnitt
- Användning av enhetens hårdvarufunktionalitet

## Lärandemål

### Kunskap och förståelse

För godkänd kurs ska studenten kunna visa förståelse för:

- grundläggande byggestenar och begrepp vid utveckling av webbapplikationer
- begränsningar och möjligheter för webbapplikationer
- designprinciper och utformning av användargränssnitt för webbapplikationer

### Färdighet och förmåga

För godkänd kurs ska studenten kunna:

- konstruera webbapplikationer som uppfyller principer för flerplattformsdesign
- använda enhetens resurser i praktisk tillämpning
- använda lämpliga utvecklingsmiljöer vid konstruktion av webbapplikationer
- söka, samla, värdera och kritiskt tolka information relevant för egna utvecklingsprojekt

## Arbetsformer

Föreläsningar/workshops, laborationer, projekthandledning samt självstudier.

## Bedömningsformer

Krav för godkänd: Godkända inlämningsuppgifter (5 hp) och godkänt projekt (2.5 hp).

Krav för väl godkänd: Väl godkänd på inlämningsuppgifterna (5 hp) samt godkänt projekt (2.5 hp).

## Kurslitteratur och övriga läromedel

- Levin, Michal (2014) Designing Multi-Device Experiences, O'Reilly Media, Sebastopol.
- Weyl, Estelle (2013) Mobile HTML5, O'Reilly Media, Sebastopol.



# PRAKTIKALITETER

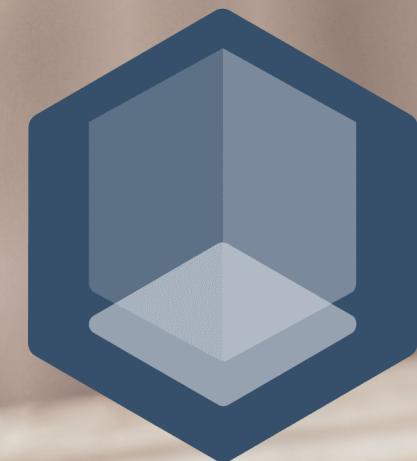




canvas



DISCORD



MAU Webb



# DISCORD



# Planering

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Hur är kursen uppbyggd?

Kursen är  
uppb byggd av

Föreläsningar

Inlämningsuppgifter  
(med laborationstillfälle)

Peer-reviewing

Projekt

# Planering

Nedan kommer en snabb översikt av kursens planering. Vårt schema (med salar) [hittar ni här](#).

- **F** = Föreläsning
- **L** = Laboration
- **D** = Deadline

V.	Måndag	Tisdag	Onsdag	Torsdag	Fredag	L	S
13		F: Kursintro	F: Video: HTML/CSS F: Repetition JS	L: Repetition HTML/CSS & JS			
14	F: JavaScript & DOM	D: R1 & R2	L: JavaScript & DOM				
15			F: RWD & CSS-ramverk D: Inl. 1	L: RWD & CSS-ramverk	D: Peer-review (Inl. 1.b)		
16	F: jQuery & Ajax		D: Inl. 2	L: jQuery & Ajax	D: Peer-review (Inl. 2.b)		
17	F: Store & Locate		D: Inl. 3	L: Store & Locate	D: Peer-review (Inl. 3.b)		
18			F: Utvecklingsmetodik D: Inl. 4	L: Utvecklingsmetodik	D: Peer-review (Inl. 4.b)		
19	F: JS-Ramverk		D: Inl. 5	L: JS-Ramverk			
20	Projekthandledning		Projekthandledning D: Inl. 6				
21	Projekthandledning		Projekthandledning				
22			Projektredovisning (1)	Projektredovisning (2)		D: Projekt	

V.17 2023	Måndag 24 Apr	Tisdag 25 Apr	Onsdag 26 Apr	Torsdag 27 Apr	Fredag 28 Apr	Lördag 29 Apr	Söndag 30 Apr
08:00							
09:00							
10:00			Jobba med uppgift "b"				
11:00							
12:00							
13:00	13:15 TGIAA21h DA395A-20231- 38318-, DA395A- 20231-TS189- 15:00	Läs igenom uppgifter & börja		13:15 TGIAA21h DA395A-20231- 38318-, DA395A- 20231-TS189- AAC8647, TSANTI OR:C477, OR:E323 Labb: Cookies, LocalStorage & Geolocation	Ge peer- feedback		
14:00							
15:00		Jobba med uppgift "a"			Slutför uppgifterna		
16:00							
17:00							
18:00							
19:00							



# Kursplan – Bedömningsformer

## **Krav för godkänd**

- Godkända inlämningsuppgifter (5 hp) och godkänt projekt (2.5 hp).

## **Krav för väl godkänd**

- Väl godkänd på VG-grundande inlämningsuppgift samt godkänt på inlämningsuppgifter & projekt.

Språk?



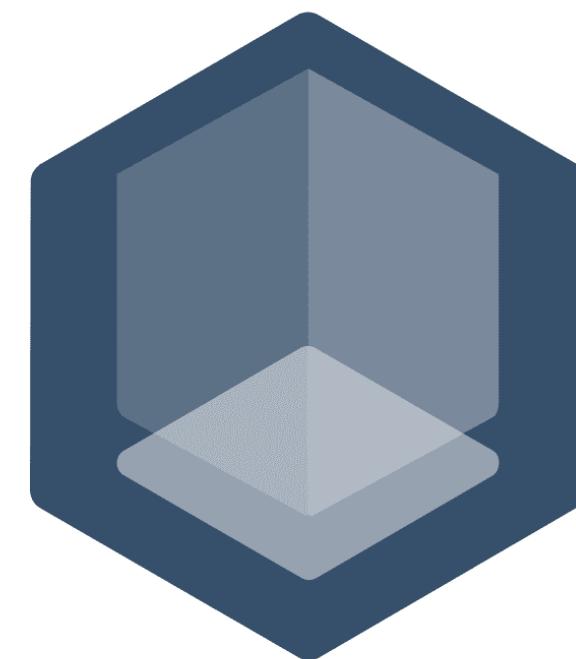


# Resurser

- Weyl, Estelle (2013) Mobile HTML5. Using the latest today, O'Reilly Media
- Internetbaserade resurser

<https://mau-webb.github.io/resurser/da395a-vt23/>

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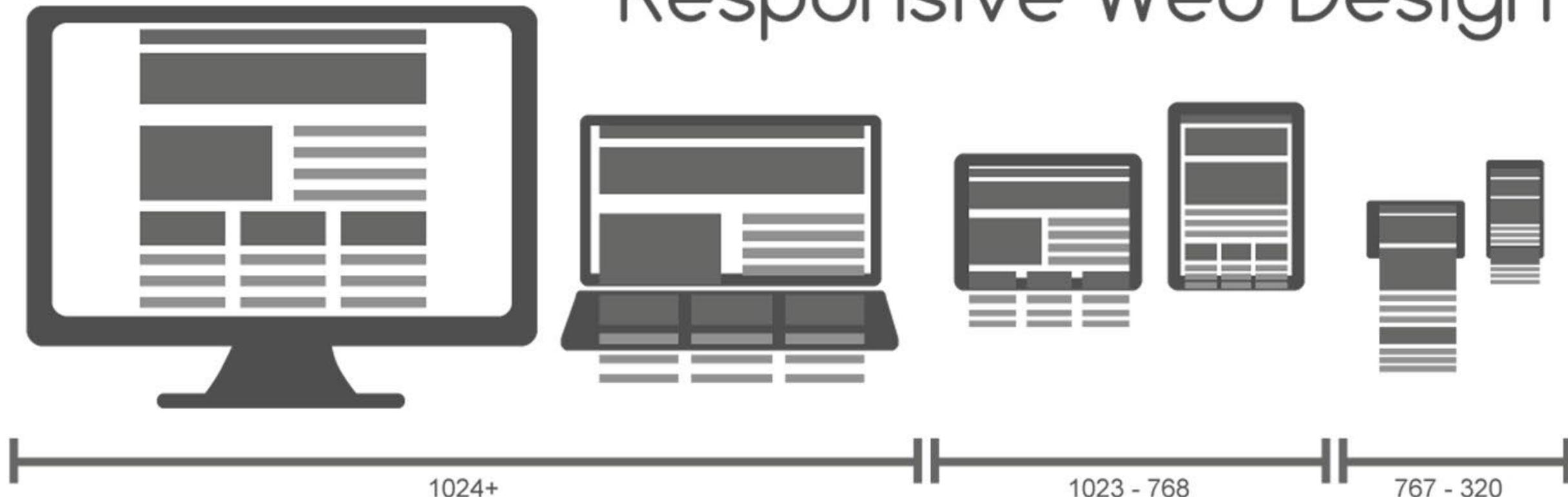
**MAU Webb**



**SO, WHAT IS IT YOU WOULD SAY**

**YOU DO HERE?**

# Responsive Web Design



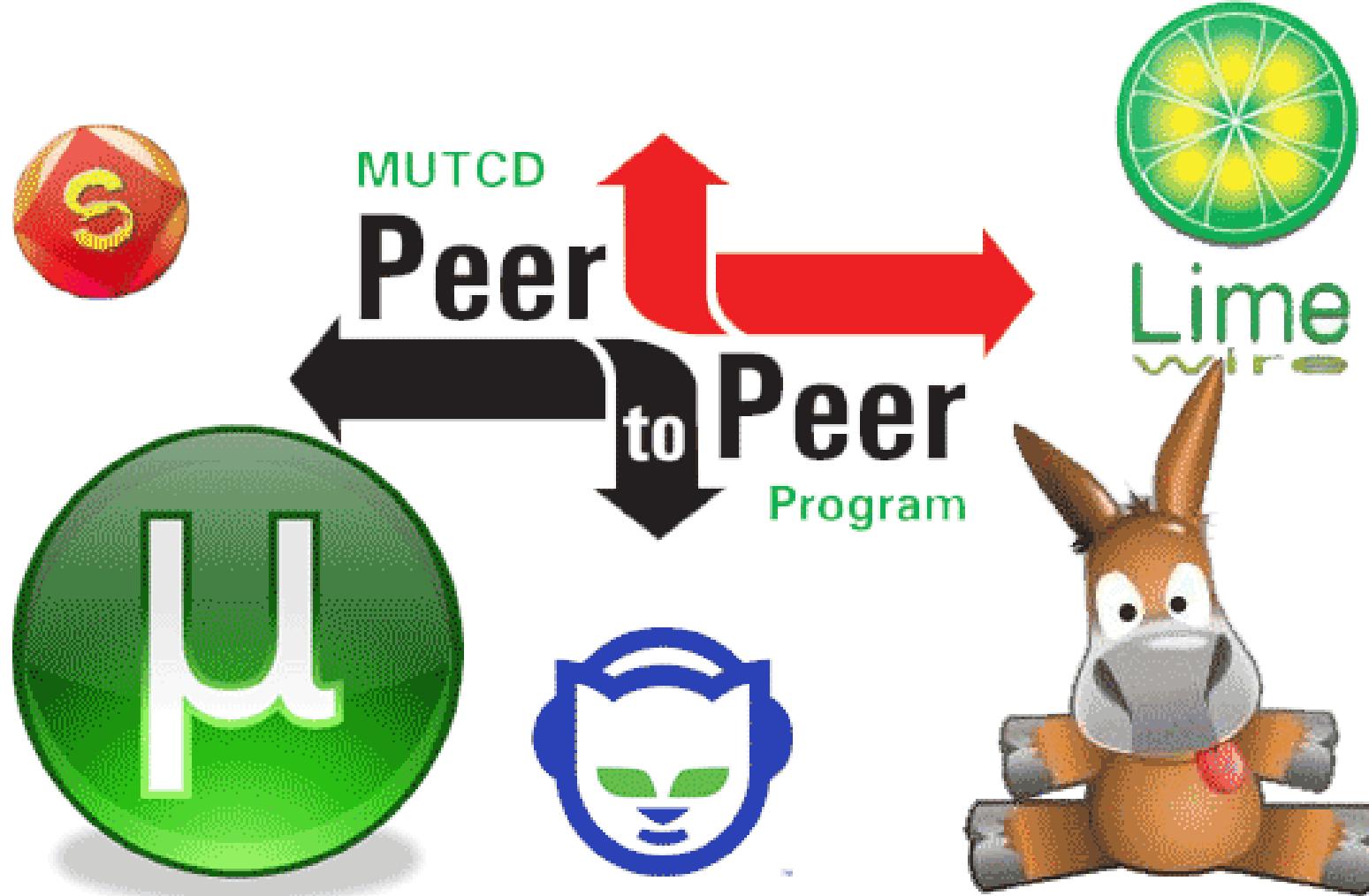


Internet != WWW







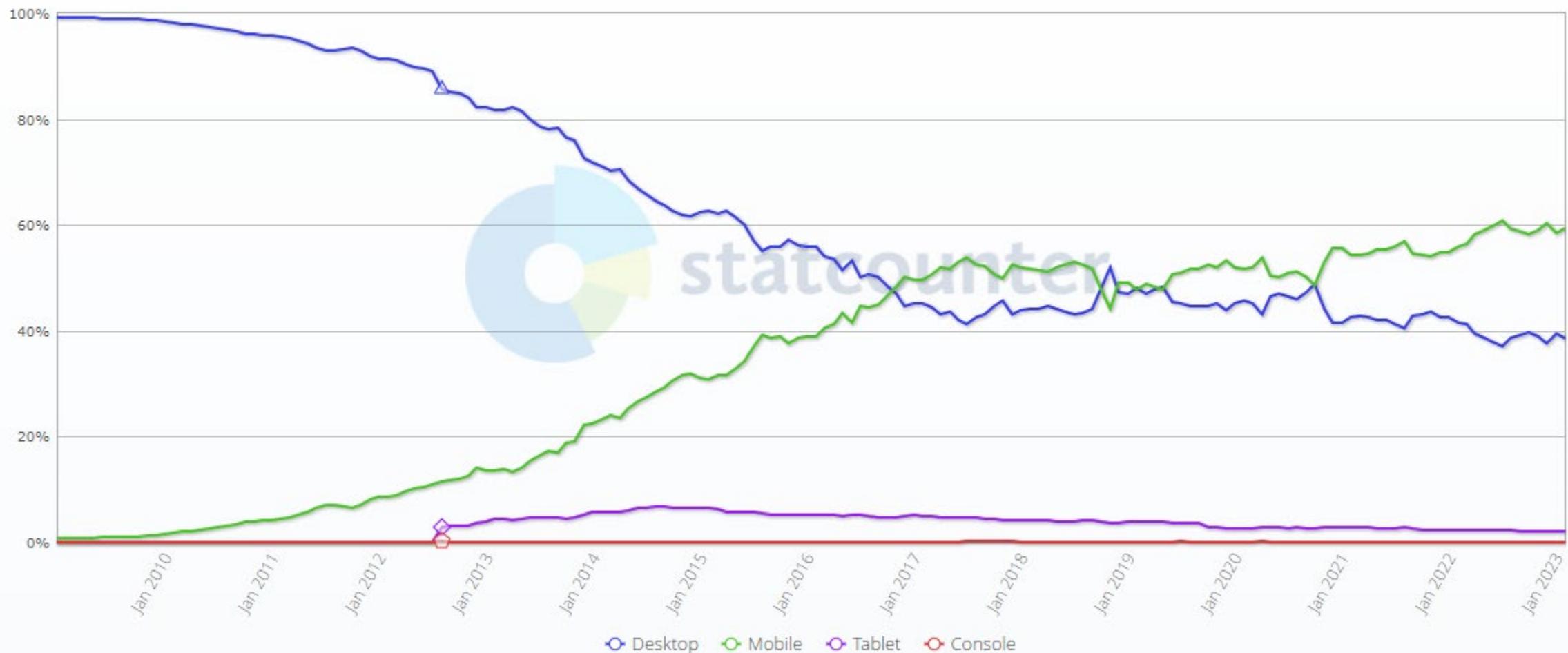


*http://www.*

# Desktop vs Mobile vs Tablet vs Console Market Share Worldwide

[Edit Chart Data](#)

Jan 2009 - Feb 2023

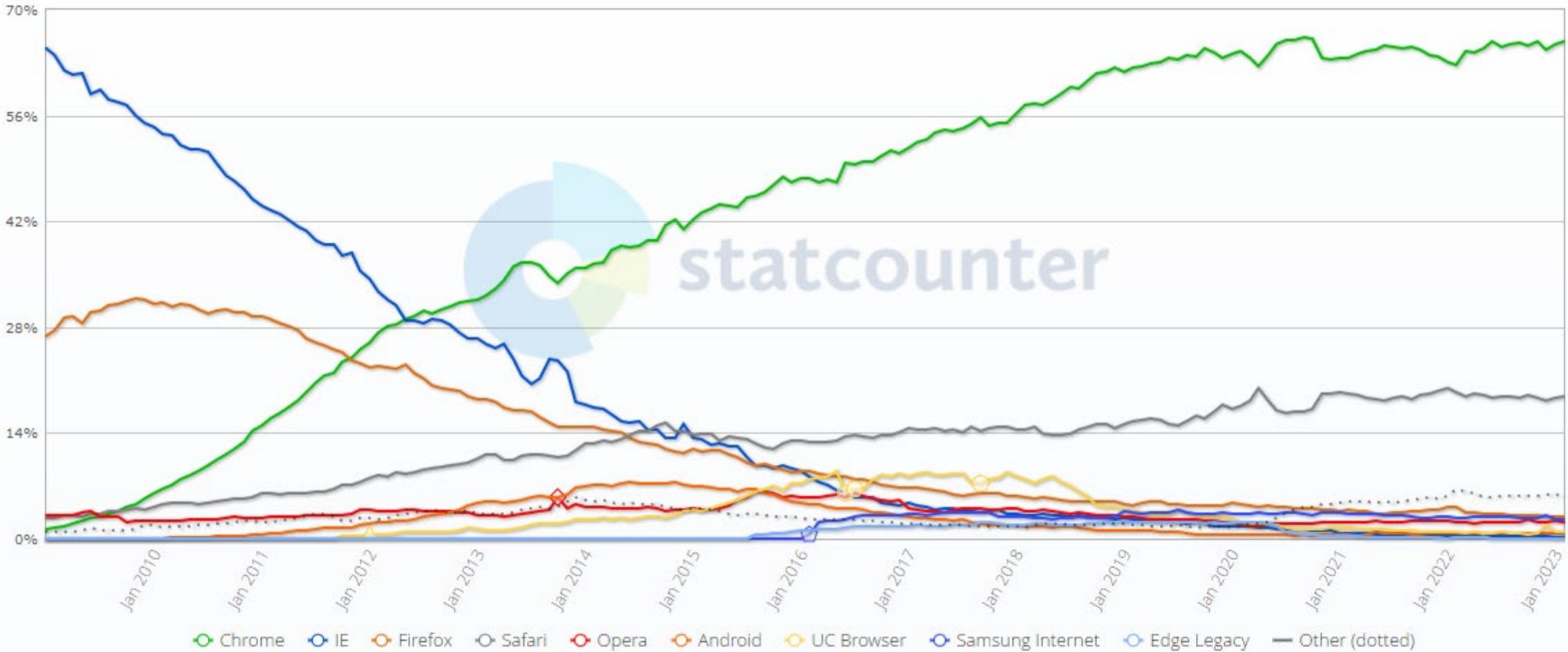
[Save Chart Image \(.png\)](#)[Download Data \(.csv\)](#)[Embed HTML](#)

`<div id="all-comparison-ww-monthly-200901-202302" width="600" height="400"></div>`

# Browser Market Share Worldwide

Jan 2009 - Feb 2023

Edit Chart Data



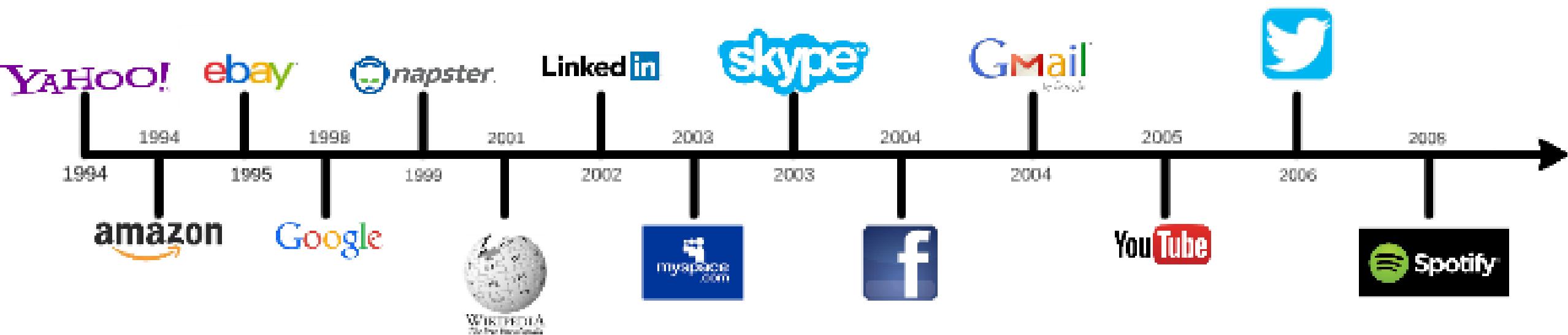
[Save Chart Image \(.png\)](#)

[Download Data \(.csv\)](#)

[Embed HTML](#)

```
<div id="all-browser-ww-monthly-200901-202302" width="600" height="400"></div>
```

# Internet History Timeline



# 2021 This Is What Happens In An Internet Minute





# 2021 This Is What Happens In An Internet Minute





# 1991 – World wide web

## World Wide Web

The WorldWideWeb (W3) is a wide-area [hypermedia](#) information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an [executive summary](#) of the project, [Mailing lists](#), [Policy](#), November's [W3 news](#), [Frequently Asked Questions](#).

### [What's out there?](#)

Pointers to the world's online information, [subjects](#), [W3 servers](#), etc.

### [Help](#)

on the browser you are using

### [Software Products](#)

A list of W3 project components and their current state. (e.g. [Line Mode](#), [X11 Viola](#), [NeXTStep](#), [Servers](#), [Tools](#), [Mail robot](#), [Library](#))

### [Technical](#)

Details of protocols, formats, program internals etc

### [Bibliography](#)

Paper documentation on W3 and references.

### [People](#)

A list of some people involved in the project.

### [History](#)

A summary of the history of the project.

### [How can I help ?](#)

If you would like to support the web..

### [Getting code](#)

Getting the code by [anonymous FTP](#), etc.

# 1994 - Yahoo



- [Arts and Humanities](#) - [Architecture](#), [Photography](#), [Literature](#)...
- [Business and Economy \[Xtra!\]](#) - [Companies](#), [Investments](#), [Classifieds](#)...
- [Computers and Internet \[Xtra!\]](#) - [Internet](#), [WWW](#), [Software](#), [Multimedia](#)...
- [Education](#) - [Universities](#), [K-12](#), [College Entrance](#)...
- [Entertainment \[Xtra!\]](#) - [Cool Links](#), [Movies](#), [Music](#), [Humor](#)...
- [Government](#) - [96 Elections](#), [Politics \[Xtra!\]](#), [Agencies](#), [Law](#), [Military](#)...
- [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](#)...

# 1995 - Altavista



Search  and Display the Results

Tip: To find an old friend or information about someone, try: **Santa Claus** or "**Santa Claus**"

Using a capital letter ensures that only that capitalization will be found.

## ALTAVISTA

AltaVista gives you access to the largest Web index: 30 million pages found on 275,600 servers, and four million articles from 14,000 Usenet news groups. It is accessed over 20 million times per weekday.

## NEWS FROM ALTAVISTA

AltaVista Search is **your** favorite search service! Over 2.5 billion hits to date, and a top ten rating from [100 Hot Web Sites](#).  
Mile High Tower rises in Cyberspace. [AltaVista ForumForum](#) is open for business!

## POWERED BY [DIGITAL UNIX](#), [DIGITAL ALPHA](#) AND [ALTAVISTA SEARCH SOFTWARE](#)

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[AltaVista Software](#)

\*\*\* Check out our NEW [Australian Mirror Site](#) \*\*\*

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# 1995 - Amazon



## Welcome to Amazon.com Books!

*One million titles,  
consistently low prices.*

(If you explore just one thing, make it our personal notification service. We think it's very cool!)

### SPOTLIGHT! -- AUGUST 16TH

These are the books we love, offered at Amazon.com low prices. The spotlight moves **EVERY** day so please come often.

### ONE MILLION TITLES

Search Amazon.com's [million title catalog](#) by author, subject, title, keyword, and more... Or take a look at the [books we recommend](#) in over 20 categories... Check out our [customer reviews](#) and the [award winners](#) from the Hugo and Nebula to the Pulitzer and Nobel... and [bestsellers](#) are 30% off the publishers list...

### EYES & EDITORS, A PERSONAL NOTIFICATION SERVICE

Like to know when that book you want comes out in paperback or when your favorite author releases a new title? Eyes, our tireless, automated search agent, will send you mail. Meanwhile, our human editors are busy previewing galleys and reading advance reviews. They can let you know when especially wonderful works are published in particular genres or subject areas. Come in, [meet Eyes](#), and have it all explained.

### YOUR ACCOUNT

Check the status of your orders or change the email address and password you have on file with us. Please note that you **do not** need an account to use the store. The first time you place an order, you will be given the opportunity to create an account.

# 1995 - Ebay

**Auction Web**

[Menu] [\[Listings\]](#) [\[Buyers\]](#) [\[Sellers\]](#) [\[Search\]](#) [\[Contact/Help\]](#) [\[Site Map\]](#)

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Welcome to today's online marketplace...

...the market that brings buyers and sellers together in an honest and open environment...

Welcome to our community. I'm glad you found us. AuctionWeb is dedicated to bringing together buyers and sellers in an honest and open marketplace. Here, thanks to our [auction format](#), merchandise will always fetch its market value. And there are plenty of great deals to be found!

[Take a look at the listings](#). There are always several hundred auctions underway, so you're bound to find something interesting.

If you don't find what you like, take a look at our **Personal Shopper**. It can help you search all the listings. Or, it can keep an eye on new items as they are posted and let you know when something you want appears. If you want to let everyone know what you want, post something on our [wanted page](#).

If you have something to **sell**, start your auction instantly.

Welcome to eBay's AuctionWeb.

**Join our community.** Become a registered user. Registered users receive [additional benefits](#) such as daily updates and the right to participate in our user feedback forum and the bulletin board.

# 1998 - Google



Search the web using Google!

10 results ▾

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

**About Google!**

[Stanford Search](#) [Linux Search](#)

Get Google! updates monthly!

[Archive](#)

Copyright ©1997-8 Stanford University

# 2003 - LinkedIn

**LinkedIn**  
*Your network is bigger than you think*

[Sign In](#)

Already a member?  
[Sign In](#)

Lost Your Invitation?  
Enter your email address here, and we'll send you a replacement:

[Send Replacement](#)

**LinkedIn makes your professional network faster and more powerful.**



You're already connected to the people you need to reach your business goals — through the business connections you already have.

Make contact with thousands of professionals, [through trusted connections](#), and help yourself and your colleagues get it done.

**Join Today**

# 2004 - thefacebook

The screenshot shows the homepage of thefacebook.com. At the top right, there's a blue header bar with the text "[thefacebook]" in white, and links for "login", "register", and "about". On the left side, there's a sidebar featuring a small profile picture of a person with blonde hair, followed by fields for "Email:" and "Password:", and buttons for "register" and "login". The main content area has a large title "[ Welcome to Thefacebook ]" in bold black text. Below it, a paragraph reads: "Thefacebook is an online directory that connects people through social networks at colleges. We have opened up Thefacebook for popular consumption at **Harvard University**. You can use Thefacebook to: • Search for people at your school • Find out who are in your classes • Look up your friends' friends • See a visualization of your social network To get started, click below to register. If you have already registered, you can log in." At the bottom of the page, there are links for "about", "contact", "faq", "terms", and "privacy", followed by the text "a Mark Zuckerberg production Thefacebook © 2004".

[thefacebook]

login register about

Email:

Password:

register

login

Welcome to Thefacebook!

**[ Welcome to Thefacebook ]**

Thefacebook is an online directory that connects people through social networks at colleges. We have opened up Thefacebook for popular consumption at **Harvard University**.

You can use Thefacebook to:

- Search for people at your school
- Find out who are in your classes
- Look up your friends' friends
- See a visualization of your social network

To get started, click below to register. If you have already registered, you can log in.

Register Login

about contact faq terms privacy  
a Mark Zuckerberg production  
Thefacebook © 2004

# 2005 - YouTube



[About Us](#) | [Terms of Use](#) | [Privacy Policy](#) | Copyright © 2005 YouTube, LLC™

# 2006 - Twitter

The screenshot shows a web browser window titled "twtr" with the URL "http://twtr.com/t/account/identify". The page features a large green "Twitter" logo at the top. Below it is a promotional message: "Use twtr to stay in touch with your friends all the time. If you have a cell and can txt, you'll never be bored again...E V E R !". On the left, there are two rounded boxes: one labeled "What your friends are" showing updates from Kevin Systrom, Jeremy, and Katie; and another labeled "txt (or) What are you doing?" with a text input field and a "Send" button. At the bottom, there are two sections: "timeline" and "what up?". The "timeline" section says "follow along with what your friends are doing throughout the day". The "what up?" section says "send updates from your cell or from the web about what's in yr head". To the right, there is a "Sign in" form with fields for "Mobile number (or email)" and "Password (or PIN)", a "Remember me" checkbox, and a "Sign in" button. Below the sign-in form is a "New? Sign up!" link and a note about verifying the user's mobile number.

twtr

Gmail – Inbox Google Calendar Valleywag Welcome to Flickr! del.icio.us/popular Google AdSense

Gmail – Inbox twtr

twtr

Use twtr to stay in touch with your friends all the time. If you have a cell and can txt, you'll never be bored again...E V E R !

What your friends are

Kevin Systrom babysitting  
Jeremy home - boys to be  
Katie It's my birthday! (about)

txt (or)  
What are you doing?

Send

timeline

follow along with what your friends are doing throughout the day

what up?

send updates from your cell or from the web about what's in yr head

Sign in.

Mobile number (or email)

Password (or PIN)

Remember me

Sign in

New? Sign up!

twtr works best when updated from your mobile phone. To verify you are you, we'll need your number.

Mobile number

# 2008 - Dropbox



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• På ”bara” 30år har det  
hänt en del...

# Varför läser vi denna kurs?

För att få ett perspektiv på  
mobil webbutveckling

- Vilka alternativ finns?
- Vilka fördelar & nackdelar innehåller webben för handhållna enheter?
- Vilka möjligheter och begränsningar erbjuder dagens webblösningar?

Ge en inblick i mobil  
webbutveckling

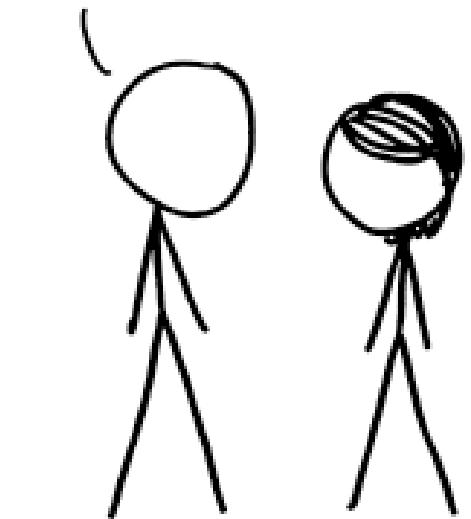
- Vad kan HTML5, CSS3 & JavaScript erbjuda?
- Vilka externa bibliotek/ramverk finns för
  - Utökad funktionalitet
  - Effektivisering/optimering av kod

Hur vi kan använda  
webbtekniker för utveckling  
med fokus på flera plattformar  
(iOS, Android, Windows, etc.)

- Möjligheter
- Begränsningar
- Hybridlösningar?



INSTALLING THINGS HAS  
GOTTEN SO FAST AND PAINLESS.  
WHY NOT SKIP IT ENTIRELY,  
AND MAKE A PHONE THAT HAS  
EVERY APP "INSTALLED" ALREADY  
AND JUST DOWNLOADS AND RUNS  
THEM ON THE FLY?



I FELT PRETTY CLEVER UNTIL I  
REALIZED I'D INVENTED WEBPAGES.

<https://mau-webb.github.io/resurser/da395a-vt23/>

