WEB3
Decentralized Future

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3rd BCA

WHAT IS WEB?

The web, also known as the World Wide Web (WWW), is a collection of interconnected documents and other resources, linked by hyperlinks and URLs.

- It is a system accessed via the internet.
- The web allows users to easily access and share information by clicking on links to different web pages, which can contain text, images, videos, and other multimedia content.

FATHER OF WEB

Tim Berners-Lee

Tim Berners-Lee began to develop the first web browser and editor, as well as the first web server. And in 1991, the first successful communication between a Hypertext Transfer Protocol (HTTP) client and server via the internet was made, which is considered as the birth year of the World Wide Web.

Evalution of WEB

CURRENT SITUATION

Web 3 is still in an emerging stage and is not yet widely adopted.

01 Web 1.0

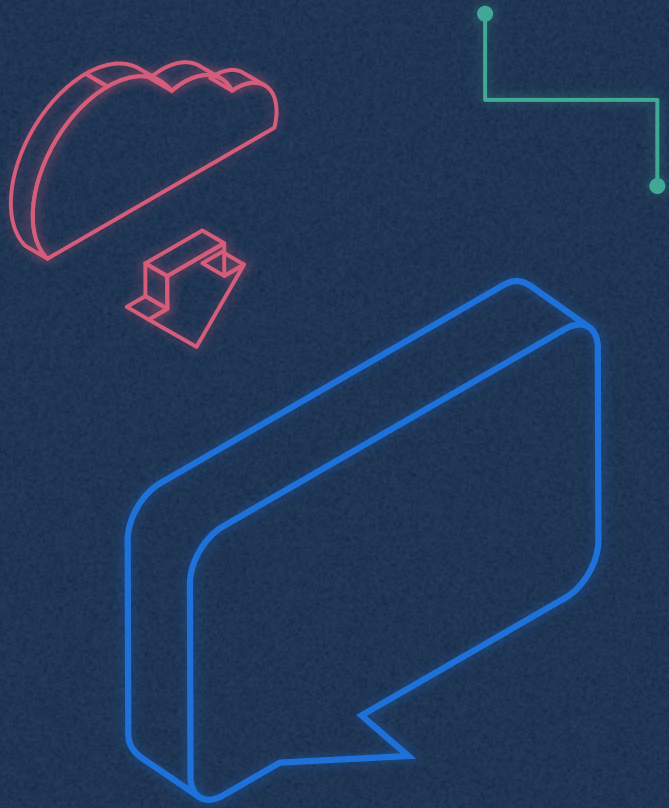
1994

02 Web 2.0

2004

03 Web 3.0

2022



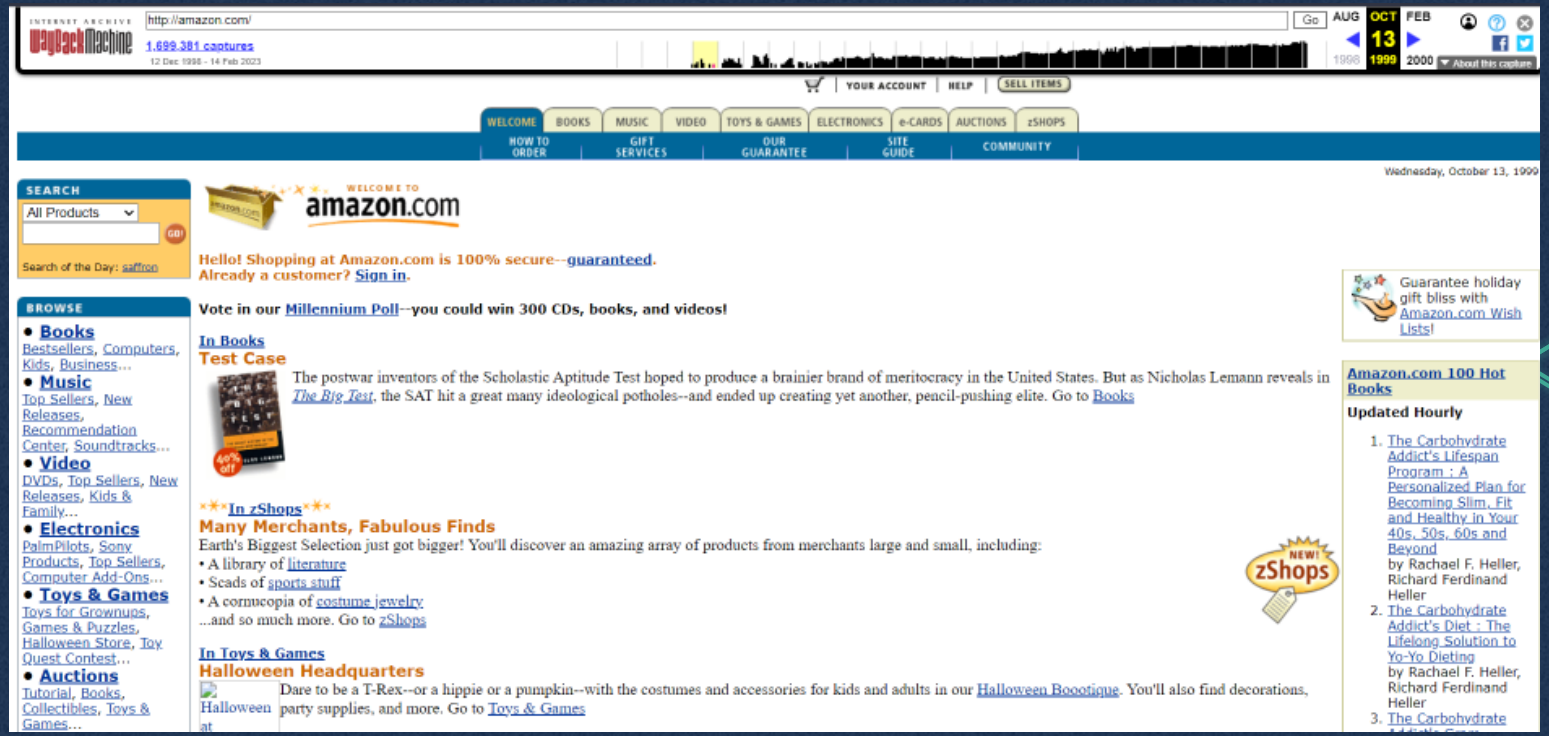
WEB 1.0

First Generation of Web

WEB 1.0

Web 1.0 refers to the first version of the World Wide Web, which was primarily a collection of static HTML pages that were linked together. It was primarily used for the sharing of information and was not as interactive or dynamic as the web is today. It emerged in the 1990s and was replaced by Web 2.0 in the early 2000s.

WEBSITES OF WEB 1.0

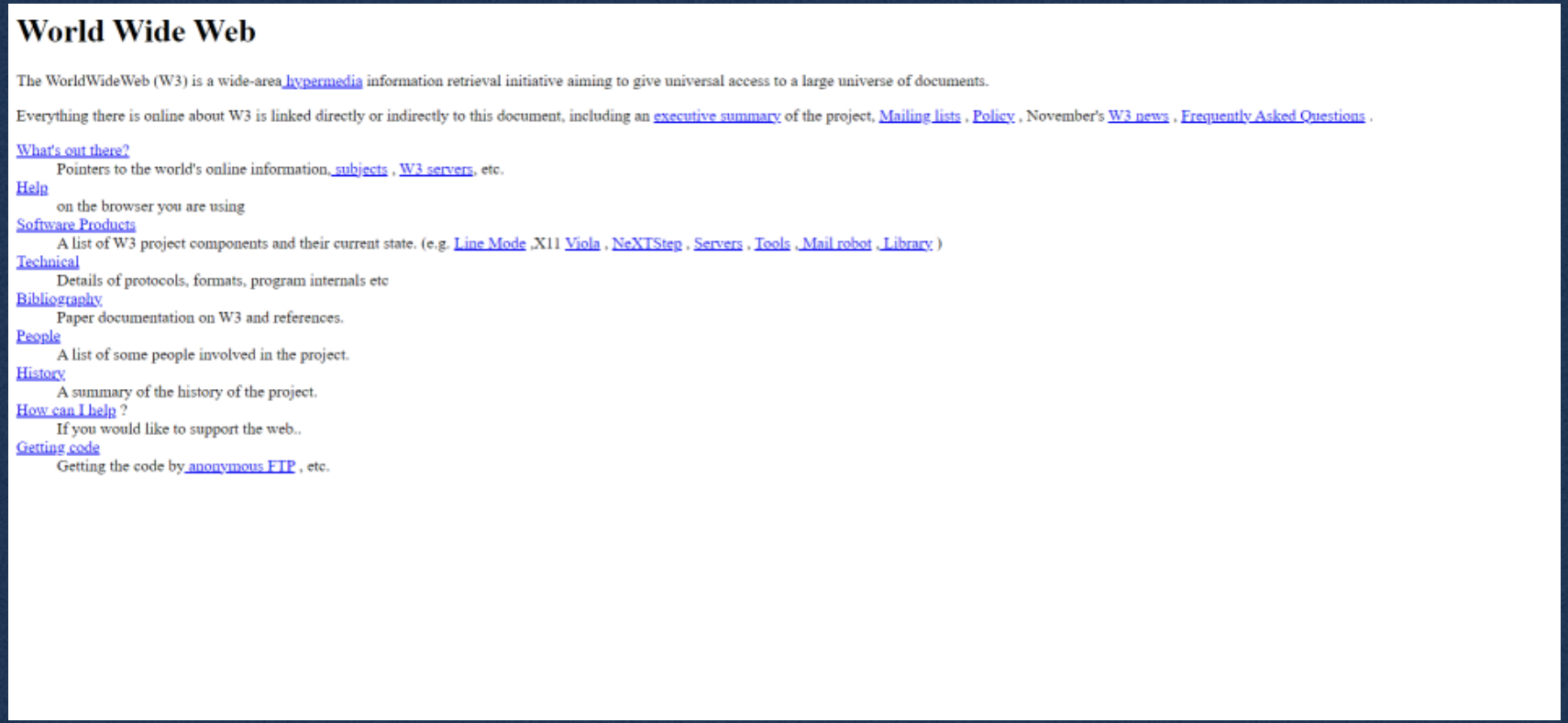


Amazon.com

WEBSITES OF WEB 1.0

Yahoo.com

FIRST WEBSITE IN THE WORLD



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.

Info.cern.ch : http://info.cern.ch/hypertext/WWW/TheProject.html

DISADVANTAGE OF WEB 1.0

- **Limited interactivity**

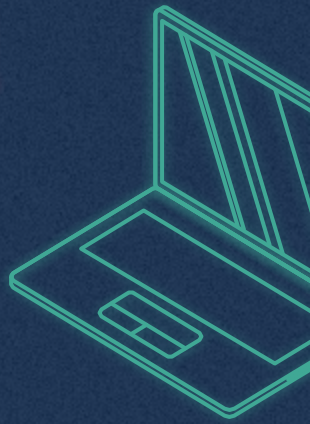
Most websites were primarily used for providing information and did not allow for much user interaction.

- **Limited design options**

The technology of Web 1.0 did not allow for complex designs or layouts.

- **Slow loading times**

Websites were often slow to load, especially on dial-up internet connections.



DISADVANTAGE OF WEB 1.0

- **Limited accessibility**

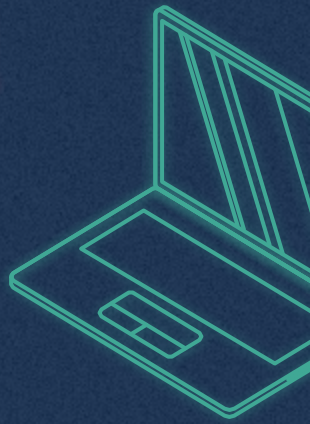
Many websites were not optimized for accessibility, making them difficult to use for people with disabilities.

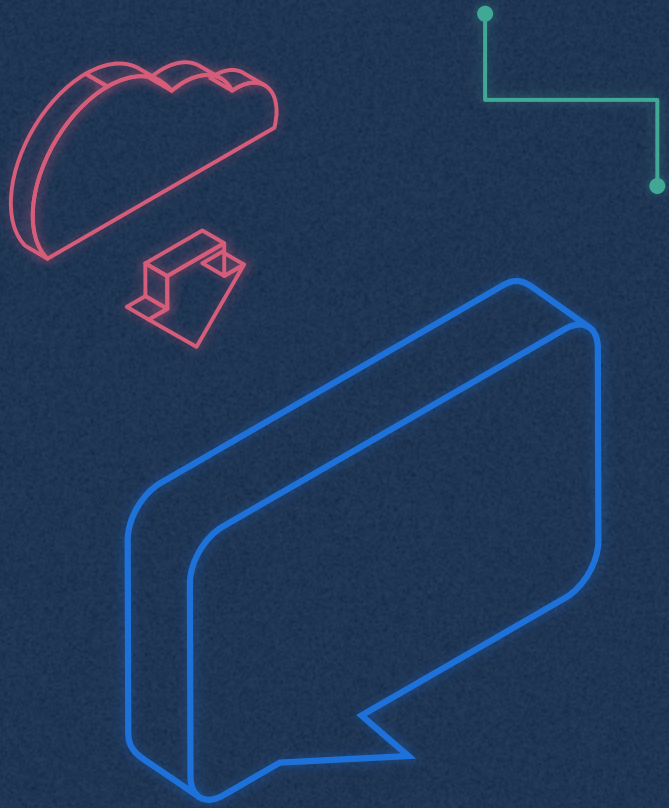
- **Lack of security**

There were only few security measures in place to protect user's personal information.

- **Limited mobile support**

Websites were not designed to be viewed on mobile devices, which were not as prevalent at the time.



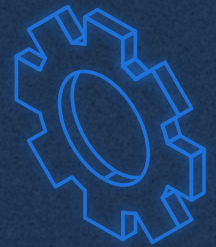


WEB 2.0

Second Generation of Web

WEB 2.0

Web 2.0 refers to the second generation of the World Wide Web, characterized by the increased use of social media, user-generated content, and greater interactivity.



Examples of Web 2.0

ADVANTAGE OF WEB 2.0

- **User-generated content**

Web 2.0 sites allow users to create and share their own content, enabling a greater variety of perspectives and knowledge.

- **Social networking**

Web 2.0 sites provide platforms for people to connect and interact with others, creating a sense of community and increasing social capital.

- **Collaboration**

Web 2.0 technologies enable people to work together in real time, regardless of their location, which can lead to increased productivity and creativity.

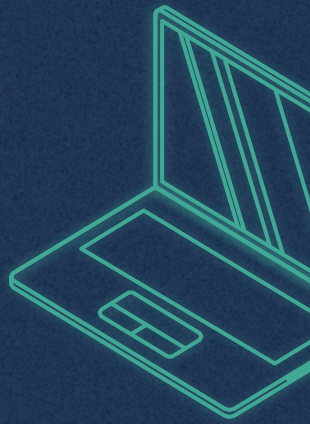
ADVANTAGE OF WEB 2.0

- **Interactivity**

Web 2.0 sites use interactive technologies such as AJAX, which allow users to interact with web pages without reloading them, resulting in a smoother and more seamless user experience.

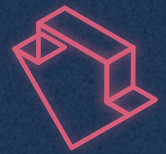
- **Customization**

Web 2.0 sites often allow users to customize their experience, for example, by creating personalized profiles, RSS feeds, or news alerts, providing a more tailored and relevant experience.



“If you are not paying for something,
Then you are the product.”

—Tristan Harris, Google's former design ethicist



DISADVANTAGE OF WEB 2.0

- **Centralization**

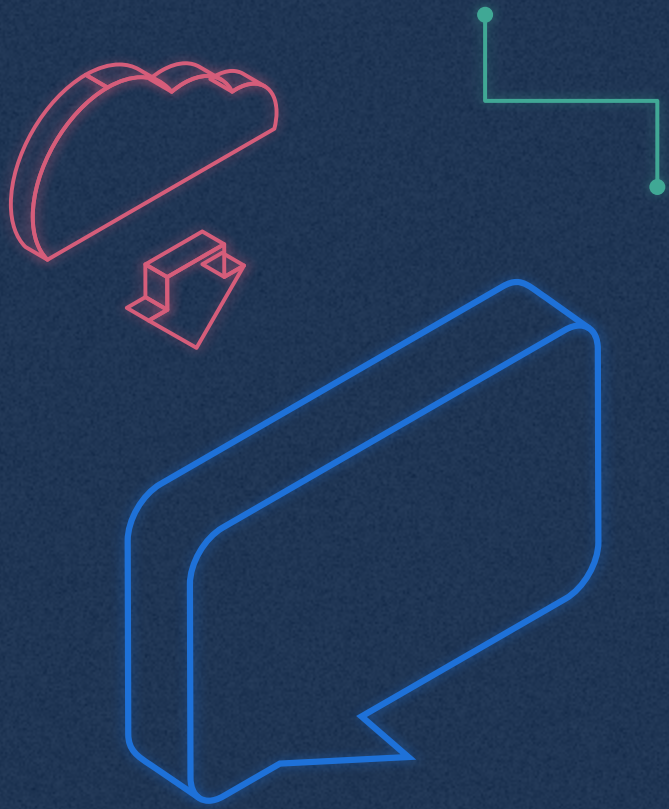
Web 2.0 is based on centralized platforms controlled by a few large companies, which can lead to issues such as censorship, data breaches, and lack of privacy.

- **Security and privacy**

With increased user-generated content and social networking, there is a higher risk of security breaches and privacy violations. Users need to be careful about what information they share and who they share it with.

- **Limited intelligence**

Web 2.0 sites rely on manual categorization and tagging of data, leading to limited intelligence and insights compared to the automated data processing and analysis of Web 3.0.



WEB 3.0

Third Generation of Web
Next step in the evolution of internet

WEB 3.0

Web 3, also known as the decentralized web or the blockchain web, is an emerging set of technologies and protocols that aim to create a more decentralized and user-controlled web. Unlike Web 1.0 and Web 2.0, which are largely controlled by a small number of tech giants, Web 3 is built on decentralized technologies like blockchain, which enable peer-to-peer interactions without the need for intermediaries. Web 3 is designed to give users more control over their data, eliminate the need for third-party intermediaries, and create a more transparent and secure digital environment. It is still in its early stages of development, but it has the potential to transform the way we interact with the internet and with each other.

Features of WEB 3.0

01 Decentralization

Web 3 is built on decentralized block chain technology, which means that there is no central authority controlling the network.

02 Data ownership and privacy

Web 3 is designed to give users more control over their data and privacy.

03 Smart contracts

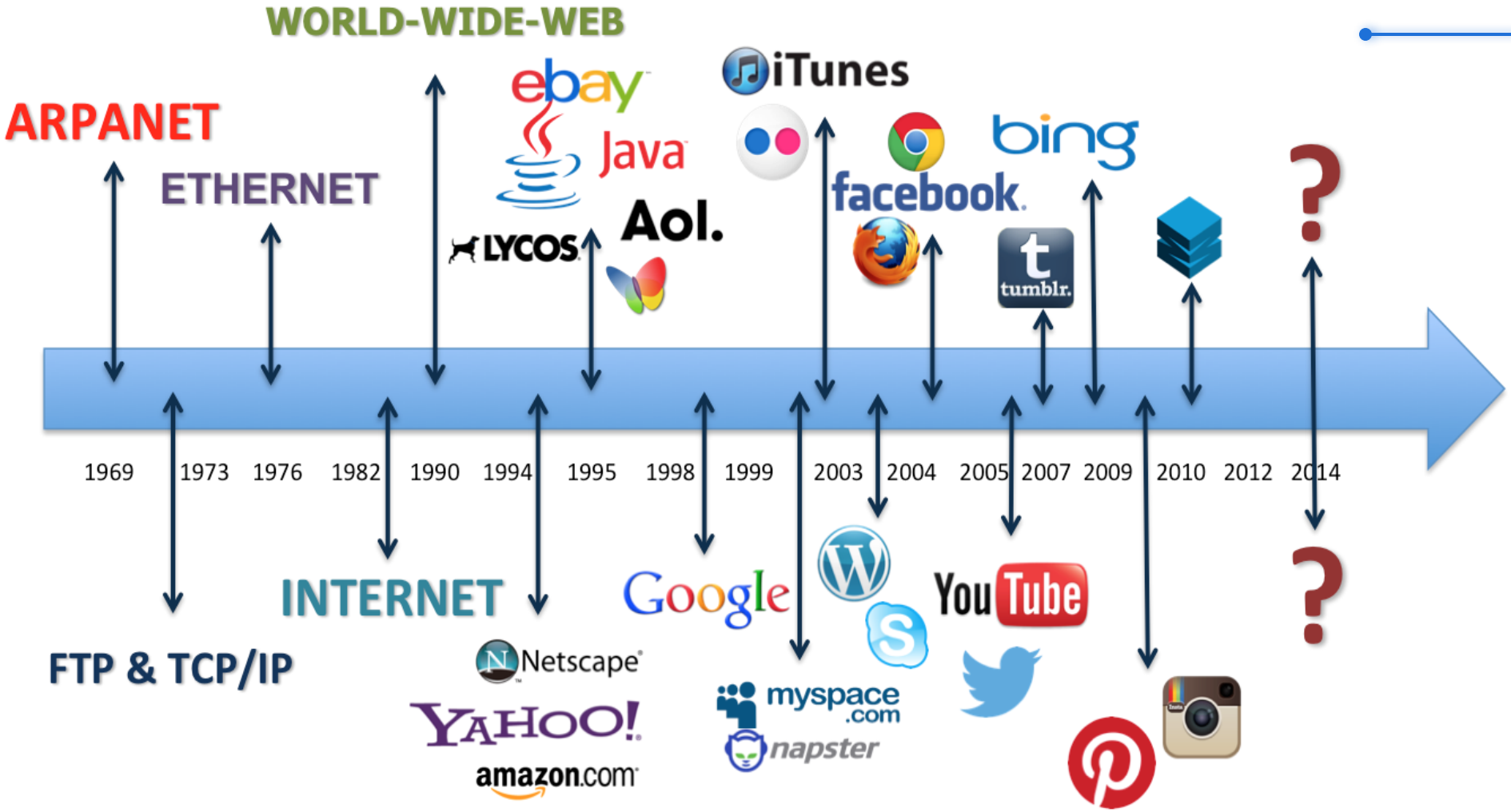
Web 3 allows for the creation of smart contracts, which are self-executing contracts with the terms of the agreement directly written into lines of code. This eliminates the need for intermediaries in business transactions and enables trustless, transparent transactions.

04 Artificial Intelligence

AI can be used to improve search algorithms, enabling more accurate and relevant results for users. AI can be used to analyze data and make predictions about user behavior, market trends, and other relevant factors.

APPLICATIONS OF WEB 3.0

- **Decentralized Finance** (DeFi)
  - Decentralized financial applications that run on a block chain and are not controlled by any central entity. These applications can provide better security, transparency, and accessibility to financial services, such as lending, borrowing, and trading.
- **Digital Identity**
  - Web 3.0 can enable the creation of secure and decentralized digital identity systems that allow individuals to control and manage their own data. This can improve privacy and reduce the risk of identity theft.
- **Gaming**
  - Enable the development of decentralized gaming platforms that allow players to own and trade in-game assets, such as characters and items, and participate in gaming communities without the need for centralized authorities.
- **Social Media**
  - Web 3.0 can enable the development of decentralized social media platforms that prioritize user privacy, control, and ownership of data. These platforms can provide better security and prevent censorship and data breaches.


WORLD-WIDE-WEB
ARPANET
ETHERNET
ebay
Java
iTunes
bing
facebook
LYCOS
Aol.
tumblr.
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1969
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INTERNET
Google
YouTube
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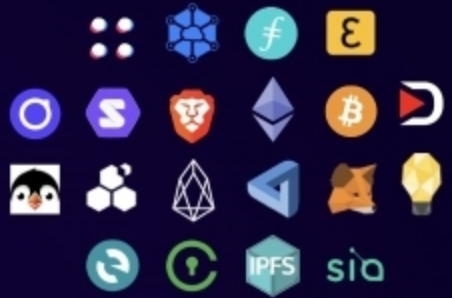
FTP & TCP/IP
Netscape
YAHOO!
amazon.com
myspace
.com
napster

Web 1.0

"Read Only",
Decentralized

Web 2.0

Participatory,
Centralized



Web 3

No Intermediaries,
Decentralized

Pros & Cons

Pros

- Data Privacy And Control
- Seamless Services
- Transparency
- Open Accessibility To Data
- More efficient web browsing
- Single Profile Creation
- Enhanced Data Processing

Cons

- Requires Advanced Devices
- Not Ready For Widespread Adoption
- Demand for Reputation Management will Increase
- Complicated Functionality

KEY COMPONENTS

Block Chain

Blockchain is a decentralized, digital ledger that records transactions in a secure and immutable way

DApps

DApps are applications that run on a decentralized network, instead of a centralized server.

Smart Contracts

Smart contracts are self-executing contracts with the terms of the agreement between buyer and seller being directly written into lines of code

CURRENT STAGE OF WEB 3.0

Web 3.0 is still in the early stages of development, and many of the technologies and platforms that will comprise it are still being developed and refined. However, there has been significant progress made in recent years, and several key Web 3.0 technologies are already in use or under active development.

One of the main technologies that is driving the development of Web 3.0 is block chain, which is a decentralized ledger that allows for secure and transparent recording of transactions. Block chain is the foundation for many Web 3.0 applications, such as decentralized finance (DeFi), non-fungible tokens (NFTs), and decentralized autonomous organizations (DAOs).
Another important technology that is contributing to the development of Web 3.0 is decentralized storage, which allows for the secure and private storage of data across a network of nodes

Overall, the current stage of Web 3.0 can be described as one of active development and experimentation, with many new technologies, platforms, and protocols being developed and tested by a growing community of developers, entrepreneurs, and enthusiasts. While it is still early days for Web 3.0, the potential for this new generation of the web is vast, and it is likely that we will see many exciting new applications and use cases emerge in the coming years.

TOP WEB 3.0 WEBSITES

Steem it (Social Media Platform)

TOP WEB 3.0 WEBSITES

Atlas.work (Decentralized Freelancing Website)

TOP WEB 3.0 WEBSITES

D.Tube (Video Steaming Platform)

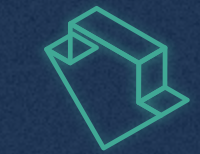
TOP WEB 3.0 WEBSITES

Audius (Music Steaming Platform)

CHALLENGES OF WEB 3.0

Let's look at some of the biggest challenges of Web 3.0 implementation:

- Vastness
- Vagueness
- Uncertainty
- Inconsistency
- Deceit



CONCLUSION

Based on the seminar on Web 3, it can be concluded that Web 3 represents the next phase of the internet's evolution, where decentralized technologies and block chain-based solutions will replace centralized systems. Web 3 aims to create a more open, transparent, and secure internet, where users have control over their data and digital identity.
The key features of Web 3 include block chain technology, decentralized applications (DApps), smart contracts, and decentralized finance (DeFi) protocols. These technologies are designed to provide a trustless environment where transactions can be conducted without intermediaries, reducing costs and improving efficiency.

In conclusion, Web 3 has the potential to revolutionize the internet as we know it, creating a more decentralized, secure, and user-centric internet. However, it will require collaboration between developers, businesses, and governments to address the challenges and realize the full potential of this new technology.

THANKS!

Do you have any questions?