WEB 3.0

Comrades: Derunov M.V., Bakshevnikov A. V., Fedor I.A., Danilov I. A..



WEB 1.0

Web 1.0 is a network for accessing content that was posted on websites by their owners. Static html pages, read-only access to information, the main joy is hyperlinks leading to the pages of this and other sites. A typical website format is an information resource. The era of offline content transfer to the network: digitization of books, scanning of images.



WEB 2.0

Web 2.0 is a social network that unites people. Users immersed in the Internet space create content directly on web pages. Interactive dynamic websites, content tagging, web syndication, mash-up technology, AJAX, web services. Information resources are giving way to social networks, bloghosting, wiki. The era of online content generation.



VERSION NUMBER ONE.

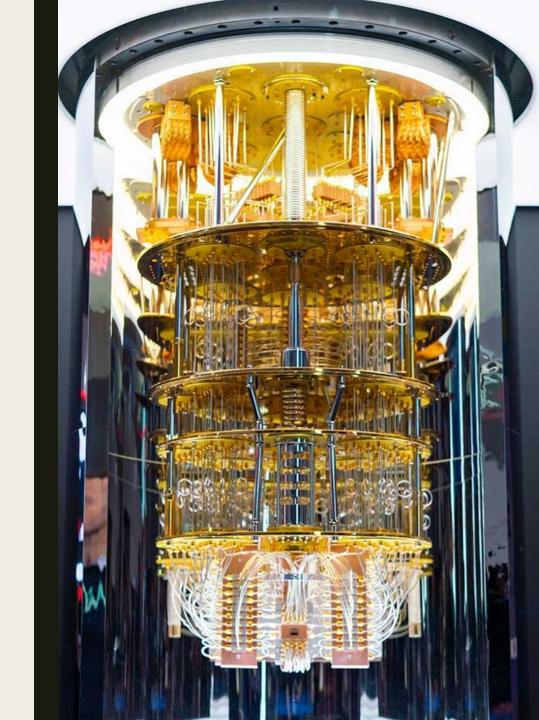


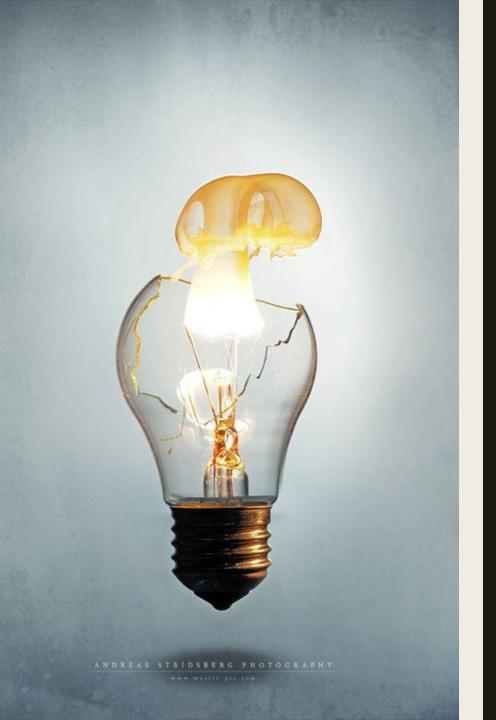
Tim Berners-Lee

The first concept of the third version was expressed by Tim Berners-Lee, the founder of WWW. If WEB 2.0 provided information freedom to a person, then the next generation should already give information security to machines, that is, to various computer systems. His project was called "Semantic Web".

Service machines

What does it mean? You may have noticed for yourself, the Internet is simply overflowing with insignificant content, similar services and other useless information. How to control this and, most importantly, how to find what you really need among petabytes of data? The answer to this in WEB 3.0 should be service machines capable of "reading" the content of websites and determining the usefulness of information.





Failure

Powerful new waves of digital innovations helped hide the failure of the semantic web. The interest of the press and ordinary people switched to big data, the Internet of things, deep learning, drones, additional reality and, of course, blockchain. If the first on the list are mostly offline technologies, then blockchain is essentially a network project. At the peak of its popularity in 2017-2018, it even claimed to be the new Internet.



VERSION NUMBER TWO.

Decentralization

There is another vision of what the future WEB 3.0 should become — this is the concept of decentralization.
 "Decentralization is the absence of a single control center and a single point of failure." The modern Internet is mostly centralized. This means that the content is owned not by the author, but by a specific service.





Example

Take YouTube. Anyone can watch videos and upload their own, But owns them and decides what to show — YouTube. And if the video hosting service "falls", then millions of users will simply lose access to the created content. The data of most of these Internet resources, despite the reservation, are stored in the hands of one "Big Brother".

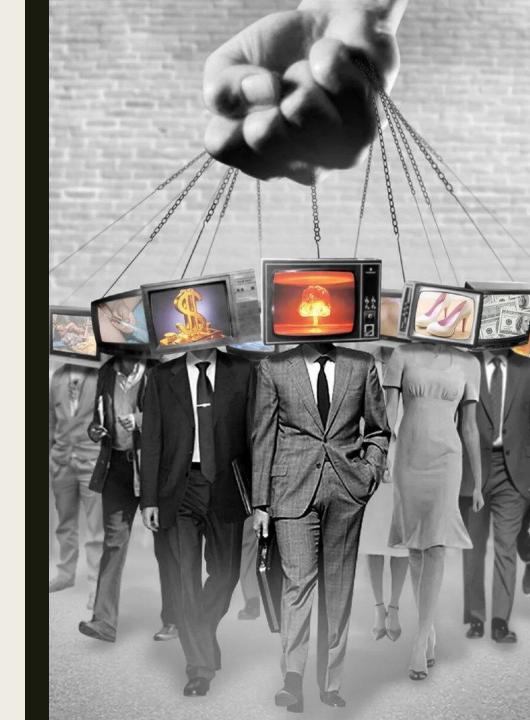


Decision

How to solve these problems? WEB 3.0 offers decentralization. That is, the information must be stored separately on thousands or even millions of different machines, so that in case of equipment failure or an attempt to substitute information, the original data will not be lost.

Blockchain

■ WEB 3.0 assumes that virtually all information, be it financial data or entertainment content, should be stored in a decentralized manner. This will ensure not only her safety, but also protection from censorship.





Problems

Decentralization looks nice and independent, but in practice it faces problems. Many felt the most important of them on the example of miners. Firstly, for decentralized data storage via the blockchain, each network participant must allocate space on his computer. For example, the bitcoin blockchain already weighs almost 390 GB. That is, each miner has such a chain of several hundred gigabytes on the disk, and over time it will only increase.



THE END. THANKS FOR YOUR ATTENTION!