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DARKNET

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The aim of the thesis is to identify the phenomenon of DarkNet and analyze the role of it in all the information environment. *The tasks* are to study the current state of DarkNet and to analyze its features and identify the positive and negative sides.

The study object is DarkNet closed phenomenon that is not accessible to ordinary users and search engines of the global network.

The methods of observation, classification, generalization, description are used in this paper.

The scientific novelty of the presented work is that for the first time the author tried to systematize information about DarkNet focusing on its role in the global network.

Results and discussion. DarkNet is a private network whose connections are established only between trusted peers, sometimes referred to as "friends" [1], using non-standard protocols and ports. Darknet differs from other distributed peer-to-peer networks, since file sharing is anonymous (since IP addresses are not publicly available), and therefore users can communicate without much concern and government interference. [2] That is why darknet is often perceived as a tool for communication in various kinds of underground and illegal activities. More generally, the term "darknet" can be used to describe non-commercial "nodes" of the Internet [3] or to refer to all "underground" Internet communications and technologies, which for the most part are associated with illegal activities or dissent. [2] Darknet should not be confused with a deep web - a lot of web pages of the World Wide Web, not indexed by search engines. The term "darknet" appeared in the 1970s and was used for security purposes to refer to networks isolated from ARPANET, which later evolved into the Internet. [4] Darknetes could receive data from ARPANET, but they had addresses that did not appear on the network lists and did not respond to requests from outside. The term was widely distributed thanks to the publication "The Darknet and the Future of Content Distribution" [5], the work of 2002, the authorship of Peter Biddle, Paul England, Marcus Peinado and Brian Willman, Microsoft employees. In their opinion, the idea of darknet is based on three assumptions: Any object intended for wide distribution will be accessible to a certain part of users with permission to copy. Users will copy objects, if possible and if they so desire. Users are connected by channels with high bandwidth. DarkNet is a file-sharing network that occurs when public data appears, according to assumption 1, and in the dissemination of these data, according to assumptions 2 and 3. Microsoft researchers argue that the existence of darknet was a major hindrance to the development of workable DRM technologies. Since then, this term has often been borrowed and even used in such major media as Rolling Stone and Wired. Darknet can be used in certain cases, such as: Privacy and fear of political repression Crimes in the field of information technology Distribution of copyrighted files. When this term is used to describe a file-sharing network, DarkNet is often used as a synonym for the phrase "friend-to-friend" - these two concepts describe networks in which direct connections are established only between two peers that are different trust a friend. Such networks are called p2p (Private peer-to-peer) in another way. The most common file sharing services, for example, BitTorrent, are not actually darknets, as users can communicate with anyone on the network. Almost all known darknetes are decentralized and, therefore, are considered peer-to-peer. Many darknets require the installation of special software to gain access to the network.

Keywords: DarkNet, network, users, conyetrn, privacy, copy, objects, information.

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