Social and Philosophical Aspects of Information Security

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ANNOTATION

Nowadays, information technologies cover all areas of human life. With the development of information technologies, the need for information naturally increases. Since the main element in the field of information technology is information, in this article we analyze information and its socio-philosophical problems.

Keywords: digitization, cyber security, cyberspace, network information, information flow.

1 Introduction

The dynamics of change in today's society is proportional to information and technologies of working with it, as well as their impact on society. This stage of self-organization is considered significant due to the intensive development of information from other periods of the development of society, as well as its global importance. Digitization and informatization covers all aspects of the spheres of activity, which creates problems related to information in these spheres. Also, this process, whose development and change does not depend on natural and geographical factors, the consequences of which cannot be predicted and the pace of change cannot be monitored, forms the cyberspace. All this makes it urgent to consider the social and philosophical aspects of issues related to information.

Uzbekistan is strengthening its position in the global cyber security index. In 2017, our country took 93rd place in this rating, and in 2019, it rose to 52nd place. Cyber security is a set of measures aimed at protecting information technologies, i.e. devices, programs, information systems and data in a broad sense. This means maintaining the confidentiality of data, protecting their integrity, ensuring the full operation of programs and information systems without disruptions. This serves to increase production efficiency.

1.1 The transformation of information into a leading resource of society.

In the period when human activity is covered by digital technologies and the main activity is focused on information, the main resource is human intelligence, and the activity is the search for information, collection and distribution of it, as well as the formation of new information. This information industry will form and create an information society. Information society unites people in a single cyberspace, regardless of nationality. A unique language and culture is formed in this cyberspace. In the information society, individual and social consciousness are combined to form a total - common consciousness. Because communication is one-way, socialization does not happen. Only one-way interaction takes place, that is, between the social network and network subjects. Information space combines information flow and total consciousness. Information security in the information society is considered to be the data of network users, which are its subjects, as well as the elimination of various effects on network users.

The objects of information technologies, whose security is important, are all types of data sets, information resources, the entire process of data transmission, the right of subjects to manage information, and the social consciousness management system (media).

The emerging post-industrial society, the contours of which are beginning to appear in the leading countries of the world, is characterized by the special position of information and knowledge in ensuring their own life, turning them into the most important strategic resource and the global value of humanity. Today, it is evident that the stable life of civilization directly depends on the quality and timely provision of information for decisions made at the international level. [1,43]

N. Viner, the founder of cybernetics, says that information is neither matter nor energy, information is information.

Information is fundamentally different from matter and energy in terms of intensity of development, changes in space and time, spread, speed, branching and differentiation.

Currently, global informatization actively controls the existence and life of countries in the world community, information technologies are used to solve national, military, economic security, etc. [2, 101]

The development of information technologies and methods of working with them creates a new space of social life, as well as forms a new format and flow of relations. New technologies based on digital information cover various areas of human activity and bring new problems along with conveniences and opportunities. Naturally, since the priority element is information, the problem is related to information. In the process of socialization, the need for information security is increasing. Because along with the development of the society, material needs and spiritual needs grow proportionally. This means that it is necessary to be prepared for both economic and moral risks. Paradoxically, along with the development of information technology and information becoming an integral part of social life, problems related to it are formed, i.e. information addiction, information corruption, and so on.

Currently, the global process of informatization of society is rapidly developing. At the same time, the entire information environment of society is radically changing, new automated information technologies are entering almost all spheres of social practice and are becoming an integral part of the new information culture of humanity.

Informatization of society is considered a global social process that affects all spheres of modern society. Wide spread of information technologies and their penetration into all spheres of society is a global trend of world development in recent decades. [3, 129-142] Its feature is that the dominant type of activity in social production is collection, collection, processing, storage, transmission of information, which is carried out on the basis of modern microprocessor and computer technologies, as well as various means of interaction and information exchange. [4, 53]

Today, experience that creates the necessary conditions for knowledge management, accumulation of intellectual capital, identification, collection, distribution, dissemination and transfer of knowledge are the main goals of forming a new economy. Knowledge management is becoming an important tool for improving the efficiency of all types of organizations and modern information and communication technologies. [5, 108-118]

There are different opinions about the scope of defining information. Some researchers claim that information is a property of all matter, and therefore information is a full-fledged philosophical category. Others understand information only as a characteristic of individuals and society. Still others understand information as a property of all living matter. [6, 18] Thus, according to V. I. Korogodin and V. L. Korogodina, the genetic information contained in DNA molecules, characteristic of plants and fungi, completely determined the evolution of all organisms that lead an attached lifestyle. These authors consider information to be the basis of life. [7, 44]

The very concept of "information" was introduced to science for the first time in 1928 by the American R. Hartley "to determine the quantitative measure of information distributed through technical communication channels."[8, 5 – 19]

Information is conscious information about the surrounding world that is the object of storage, change, transmission and use. In turn, information is knowledge expressed in signals, messages, news, notifications, etc. Every person in the world is surrounded by a sea of different information. [9,66-68]

From a philosophical point of view, information can be said to be a construction of the external world in the human mind. Also, decreasing information entropy means increasing order. Information, like a system, has a common feature of its need for accuracy.

1) ***What is information security?***

The security of information is considered to be its attribute, literally the constancy of its structure. That is, it is understood that the simple and complex elements that make up information remain unchanged within the scope of external and internal influences, or do not deviate from the assigned task as a result of change, do not act in the opposite direction. Also, preserving its originality under any influence is considered to ensure its safety and protection. A potential risk for information is its disappearance or damage to its main content. In conclusion, it can be said that information security is the protection of important information about the individual, society and the state in the information field, ensuring their stability in the life cycle and interactions in internal and external influences.

Individuals, society and the state in the course of their activities satisfy their needs and establish mutual external and internal relations, and at this point each sector, whether it is society, whether it is an individual or the state, has its own interests and have interests. Information security is the protection of this interest, needs

and reserves in the information field. Information security is to protect them from accidental or targeted, natural or artificial influences.

The information that can be protected in social processes is considered to be the basic elements of the society, performing the regulatory function, its main elements that balance the inter-mechanistic task, that is, the information that its managers or authorized persons should have. This protection is aimed at preventing unauthorized access, unauthorized use, modification and distribution.

At a time when social networks have formed and become an integral part of society's life, the protection of each user's information, as well as the protection of the same users from information, is of urgent importance.

Consequently, sooner or later, in the conditions of the information society, everyone faces the acute problems of protecting personal data from "outside" attacks, and this factual nature mainly predetermines the general idea of self-development at the stage of defining methodological paradigms. [10, 34]

The interaction of consciousness and being exists in the general field of information flows, which are now slightly differentiated by "good" and "bad" moral norms, and negative processes can be masked in objectively neutral forms of their implementation. As a result of such "replacement", society is not only late in solving the problem of its identity in a constantly changing world, but it cannot respond in time to various challenges that threaten its existence, it does not adequately perceive and understand these threats and dangers. [11, 53-54]

The state and citizens have different goals and interests according to their potential. The legal aspects of information security are the prevention of crimes in the information field, the responsibility of the owner of information in the information practice, as well as the legal regulation of relations in the general information process, while its philosophical and social aspects are the influence of information on the human mind, the role of a person in the information process, the influence of this process. the secret is to determine the transformation of its values. From the philosophical and social point of view, security is considered to be the timely determination of the social importance, role and position of information, its impact on a person and his views.

If the informatic and legal aspects of information security have the characteristics of reliability of information, its safety, confidentiality, as well as information protection and information-related responsibility, its social and philosophical aspects are compatible with the security of the information field, the human interest of information. It is aimed at ensuring its well-being, the existence of a mechanism that does not have a negative impact on social systems when information is used, and the most important thing is to protect information users from information.

Information technologies and computer devices significantly change the content and nature of work and education, pose the problems of human intelligence and personality development in a new way, and have a serious impact on the human worldview. Understanding the social, intellectual and cultural consequences of the mass introduction of information technology is the most important task of modern philosophy. [12, 232 -234]

The Internet is one of the most important global computer networks today. Internet networks have become the main leading source of information today and have a higher influence than mass media. As a huge source of information, the Internet holds information about the whole world.

The global social network as a calculated Internet information space has favorable opportunities for any structure, class, category, (criminal) group and gangs: the main thing is that there is no single controller of this

global network and it does not belong to anyone, therefore the information no one assumes responsibility for; users have a huge audience, which is the population of the whole world; territories are not limited for the dissemination of information; there are special software combinations that continuously redistribute information, and they begin to spread autonomously and at high speed;

It is under the influence of the Internet that the attitude of users to information and the influence of thinking begins to change. At first, relations to information in the Internet network were based on neutral and symmetrical communication, but later they became disproportional with the increase of users' dependence on the network.

According to need and necessity, information is often found in a global space such as the Internet because of its speed and optimal functionality. Accordingly, having information and acquiring information are considered different concepts. That is, the difference between acquiring information and mastering it is significant. Acquiring information is a process related to human memory, and it is considered to remember information repeatedly or all at once. Having information means finding it through the search function on the network when certain information is needed. A person who has mastered the information, who usually uses the information only in a "search-result" way (i.e., just has the information), has a network that can separate and distinguish information from real and fake information. will be able to use it even when it is not available (offline state). It is not useful to absorb any information correctly, but today most of the Internet users use the basic information through this combination, that is, through "search and result". This means that the information necessary for human life and activity is being acquired by network users in this way or is disappearing from human memory.

A doctor who has not mastered health information during training and practice can make a diagnosis if he searches for information on the network based on the patient's general symptoms during admission. This can lead to failure to take into account similar symptoms, one-sided diagnosis, incorrect use of inductive methods. The doctor, who does not just get the information from the network, but has acquired the information, can synthesize the information in general, as well as distinguish the similar symptoms of several diseases, and most importantly, at the same time, identify a new disease that is not in any literature, as well as not available in the technique. and can only investigate symptoms by first making an intuitive and deductive diagnosis that is only human.

a) **The influence of the flow of information on the human mind.**

Under the influence of new information technologies, it is possible to observe a change in the way of thinking in many areas related to human activity. Network-induced thinking is mainly autonomous, based on visual observation of data, and therefore influenced by communication with only a single template. The received and assimilated information forms a database depending on its type and form, and in the process of education and training, not only information, but also information processing, optimal methods of its assimilation, as well as memorization individual combinations are formed. And the combination of working with information in the form of "search-results", which is available on the networks and is becoming popular today, can lead to the disappearance of data collected over the years in a step-by-step decreasing order. It can also cause a violation of the "natural filter", which performs the function of critical thinking that determines the originality or authenticity of information. It is precisely the organization of perfect thinking that is connected with the complex

methods of working with information and the variety of effects. The more patterns and information in memory, the more complex it is organized and the size of active neurons increases. For comparison, we present the following information:

Note that different types of organisms have different amounts of DNA in their cells. The amount of DNA in cells is mainly related to the evolutionary complexity of organisms - the more highly organized an organism is, the more DNA is in its cells. [13, 176]

Accordingly, social networks, through its one-sided virtual templates, teach the complex and perfect thinking process to think with the same one-sided template as it is, with a high probability that the brain's self-organization and optimization functions can be made autonomous and controllable. Such an effect of information is considered to be of equal importance to information in any network, whether it is useful or harmful. Constant use of any information in the form of "search - result" and virtual generation without assimilating and analyzing it, causes the thinking of network subjects to constantly operate in a one-sided reflexive manner and to acquire the skills to do so.

Social network information and user communication can be compared to the synchronization process that occurs in nature. Because this process occurs not only in physical bodies, but also in biological and chemical objects. [14, 9 - 10] We take the social network as an artificial system created by man, and describe society as a natural social system. There are also types of oscillators in the synchronization process that oscillate by themselves and oscillate as a result of external influence. [15, 29]

Accordingly, it is natural that the high flow of information in today's networks has a significant impact on its users. Virtual space is considered an effective tool for any target group. The influence procedure can be both covert and overt. We explain the virtual effect in the section of the synchronization process. If the social network is one oscillator of synchronization, users are its second oscillators.

Oscillators (networks) of another artificial object begin to adjust their rhythm to one natural object, i.e. users. This is easy because the effect is one-sided. Since social networks work through constant feedback, autonomous, optimal algorithms, their impact on users is significant. That is, the effect is constant, there is an optimal technology of effect, and the user has to choose one of the networks that offer services. Because it is not possible to use its services without becoming a member of the main database or networks that integrate users. This is where the first addiction of users begins. That is, natural communication or receiving information naturally does not usually require mere agreement or anything. In order to use today's social networks, you must first subscribe to the network, comply with its terms, and be patient with the advertising of any content. Although this is not significant, the mandatory rhythms imposed by the network on users are counted (for example, the synchronization process).

As stated above, the lack of any responsibility for the information on the network causes it to spread throughout the network in various ways, and this information will definitely affect users whether we like it or not. This process is also considered the next oscillator rhythm that the network puts on the user. It has the following effect: for example, a group posts its ideas on illegal pages on the network, and then posts them on legal pages through the offshore payment system. As long as this information is analyzed and eliminated within the framework of the law, the information will fulfill its function. Or it may exist for a long time without being

noticed. Because until information develops and activates a certain social layer, it can remain hidden for a long time with its passive influence. The next rhythm is the multiplicity and repetition of one stream of information. That is, according to the financial agreement, the same information is considered to be distributed in all sectors. It's like a planned monopoly economy where only one piece of information is generated over and over again in the entire network in exchange for huge financial incentives. It is offered together with other information, is mandatory in advertisements, and is placed on the first page of mobile and computer applications that are downloaded from the network. The user has to see it whether he wants to or not. We can see this in today's examples of advertisements and information from cryptocurrency, trading stocks and bookmakers. The procedures in this example of synchronizer oscillators are general for both negative and positive networks, and are explained by the unidirectional and multidimensional effect on the user, regardless of the intended purpose of the network.

In addition to the general procedures, there are certain technologies that are usually designed to be misleading, deceptive or manipulative. Usually, such information structures are organized mainly through special technologies and are focused on a certain layer of society, a class, or at the end of the activity process, they organize and shape a certain class. If we consider this process in the example of synchronizer oscillators, it looks like this: Oscillators, as in a physical process, the weak first adapt to the rhythm, and in society, weak layers, i.e. weak oscillatory rhythms, are usually: young people (even 5-6 years old) [16,86], a part of the population with deviant behavior, conformists who do not have a personal worldview, a part of the society that is dissatisfied with the existing system, and others are considered. Weak, seemingly insignificant oscillator rhythms are adapted to the weak oscillators of this part of society. These programs are considered special psychological programs, that takes the necessary information from the user through questionnaires, adapts accordingly and continues to engage.

The social network program, which has organized an information server about all its users, later uses this information against users according to the intended purpose. In such programs for children, the desired result is usually achieved by first entertaining them and then scaring them.[17] In the programs intended for adults, the protest potential of the population is increased during the imperceptible effect of the oscillator rhythms. Sometimes, propaganda owners use this potential as a living wall. That is, he organizes illegal forms of political uprising and protest. The organizers of the dangerous information server determine the essence of the uprising based on the audience and the conflicts in society, rationally describe the causes and possible consequences, develop development algorithms and the psychology of the uprising in advance.

Despite the apparent diversity of the modern media space, some events manage to overcome cultural barriers and attract the attention of a larger audience from around the world than professional journalists and amateur storytellers. [18, 24]

Armed with special technologies and information content such as the above, dangerous disseminating groups with their high information flow and special psychological influence can occupy an audience that no mass media has. This means that exposure to information on networks today is the most dangerous propaganda and protection from this information is urgent.

Network users united under the influence of a special group, through their interests, as well as under strong psychological influence, form a common virtual crowd. Although this crowd does not have a clear common goal, they consist of users with common problems, ambitious plans and goals, and emotional states. Managing this virtual crowd is easier than managing a real crowd, because in a real crowd it is impossible to learn the problems and questions of each participant, and on a virtual platform, this task is performed by an autonomous program with special common answers, that is, an optimization bot that is supposedly a real program. The crowd, which is under strict software control, performs its task at the next stage.

It is known that in a crowd, a person behaves differently than when he is alone. According to scientists, even the fiercest individualist is subject to the hypnosis of the crowd. In this regard, the question arises: what determines public behavior of people? According to the scientists, firstly, the mass easily adapts to emotions, secondly, the ability to work intellectually weakens, and thirdly, the masses do not have the basis for sensitive logical work. He wants to hear clear judgments and strong arguments. A public person is gullible, he seems to be depersonalized, the ability to critically perceive what is happening is reduced. [19, 41]

Another important aspect of the information flow is that, by publicly discussing or repeatedly allegedly "condemning" concepts or "taboos" that are contrary to the views, mentality, or norms of society, it brings the concepts that are actually harmful and forbidden to society into the norm. Concepts in the "forbidden" category, whose consequences have been tested for centuries and whose consequences are harmful, and then forgotten, are re-discussed and temporarily revived. So it turns it into a normal, non-"dangerous" concept.

Conclusion

In conclusion, it can be said that while the influence of the flow of information is focused on individual users, these individual procedures promote the individuality of a person in virtual and real life and form a general worldview. Against the background of views of individuality, uniqueness, free style, network information destroys the contents of identity, which is the original distinguishing feature of a person.

Also, external information has a systemic importance from the point of view of influence, and their complexity forms the complexity of the mind focused on it. Information is generated in the mind in the form of an ensemble of neurons. Neuron ensembles are temporarily or permanently excited depending on the type of information and effect. The same type of activation can be caused by the same external information. A constantly changing external influence is necessary for the development and continuous activity of human thinking. The same neuronal activity as above can cause automatic response-based movements in the system and neurons. Automatic constative reactions can lead to the loss of a living being.

According to E.S. Bauer's principle of stable disequilibrium, living beings must actively and purposefully seek and achieve desirable connections, as well as avoid harmful connections. [20, 58]

At a time when social networks have formed and become an integral part of society's life, the protection of each user's information, as well as the protection of the same users from information, is of urgent importance. The information obtained in the field of development and science is considered the greatest wealth of the society. Therefore, the main problem today is to clean social networks, which are the main educators of users' worldview, from incomplete, incorrect and harmful information. Also, the most important thing is to prevent the destruction and disappearance of scientific arsenals, which are a great wealth of mankind.

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