

Research on Legal Protection of "Digital Inadvantaged Group"

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Abstract: The world is currently experiencing rapid Internet technology development, marking the onset of the "digital age". As this transition unfolds, human rights protection in the digital age is increasingly prominent, with the rights of "digital vulnerable groups" coming under threat. The primary threats to "digital vulnerable groups" are twofold: first, information resource asymmetry that leaves their rights invisible and vulnerable, and second, strong digital infringement concealment that often makes it difficult to identify members of "digital vulnerable groups". Protecting the rights of "digital vulnerable groups" should focus on two key aspects: first, redistributing information resources to benefit these groups, and second, reversing the burden of proof so that the tort subject bears the burden of proof.

1. Introduction

In the current era of rapid Internet technology development, people are becoming more closely connected and their means of communication are changing rapidly. With the assistance of information technology, people are shifting from being "traditional people" to "digital people", and human society is rapidly moving towards a digital age. The development of science and technology is a double-edged sword, providing us with significant benefits, but also posing a variety of new challenges. One such challenge is the protection of human rights in the digital age. In this era, those who possess data resources tend to have a competitive advantage, while those who do not possess such resources, referred to as "digital vulnerable groups", are often disadvantaged and may even have their basic rights violated. It is therefore essential to address the issue of protecting the rights of "digital vulnerable groups".

2. Concept analysis of "digital vulnerable groups"

With the advent of Internet technology, humanity has transitioned into the digital age. However, the group commonly known as "digital vulnerable" differs from traditional "vulnerable" groups. The term "digital vulnerable" refers to those who face economic hardship, lack the ability to learn and adapt to digital technology, experience social structure and relationship changes, and struggle to access and utilize information or benefit from the digital advantages of society^[1].

The term "digital vulnerable groups" carries a distinct meaning compared to traditional vulnerable groups. Traditional vulnerable groups typically refer to those who struggle to meet basic living standards due to economic constraints. In contrast, "digital vulnerable groups" are characterized by

limited access to information resources, which are crucial in the digital age. These groups often lack the ability to acquire and utilize information, and are thus at a disadvantage in terms of their rights and opportunities in the digital era. In summary, the key characteristics of the "digital disadvantaged group" include:

The term "digital vulnerable groups" carries a distinct meaning compared to traditional vulnerable groups^[2]. In the rapidly evolving digital age, advancements in technology such as big data, artificial intelligence, and blockchain have become integral to human life and development, changing the way we communicate and cooperate. While technology has brought convenience and efficiency, it has also created new challenges and vulnerabilities. In particular, the rights of the "digital vulnerable" are increasingly at risk. The right to survival and development is especially fragile, as many individuals lack awareness of their digital rights, which include privacy, access to information, personal data protection, and other rights that are essential in the digital era.

The vulnerability of digital rights is mainly attributed to two factors. Firstly, the concept of digital rights is relatively new and unfamiliar to many, making it challenging to identify and understand the boundaries and scope of these rights^[1]. As a result, when digital rights are violated, vulnerable groups may not even realize they are entitled to protection. Secondly, the legal protection of digital rights is still developing, and laws often lag behind technological advancements, only providing protection after a violation has already occurred. Furthermore, the high cost of pursuing legal action to protect digital rights may deter vulnerable groups from seeking justice^[3].

In conclusion, the phenomenon of "digital vulnerable groups" emphasizes the importance of digital rights and the need to strengthen legal protections. In the digital age, access to information and personal data are crucial for survival and development. Therefore, it is crucial to raise awareness of digital rights, to develop legal frameworks that protect these rights, and to ensure that these rights are enforced.

The issue of the digital divide and the lack of digital resources for certain groups is a pressing concern in the digital age. Those who lack access to digital resources are often at a disadvantage in transactions, and can be taken advantage of by merchants who have access to more information. This unequal access to information can result in higher prices and infringement on the legitimate rights of consumers^[4].

In addition, the excessive collection of personal data by major internet companies and countries has raised concerns about privacy and transparency. People are becoming more transparent, while the data controllers become more hidden, which further widens the digital divide and reinforces the power imbalance between those who have access to data and those who do not. In the digital age, everything is based on data, and individuals are often unaware of the extent to which their data is being collected and used^[5].

To address these issues, it is important to ensure that everyone has equal access to digital resources and information. This requires investment in digital infrastructure and education, particularly in underserved communities. Additionally, there needs to be greater transparency and accountability regarding the collection and use of personal data, with individuals having greater control over their own data.

3. The scope of the rights of the "digital vulnerable groups"

The right of "digital disadvantaged" is not an independent right, but includes many specific powers.^[1]

3.1 Privacy

The issue of privacy infringement in the digital age is a complex and multifaceted problem. There

are two main aspects to consider: the infringement of privacy by public power and the improper acquisition and application of personal information by strong business organizations^[6].

In the case of public power, the use of information technology has made it easier for authorities to monitor the public, leading to a potential violation of citizens' privacy rights. The use of cameras and electronic capture systems has made it easier for the public to be monitored, and this has led some scholars to advocate for a new deal that promotes citizens' ownership, use, control, and disposal of personal data^[7].

On the other hand, strong business organizations are collecting users' personal information through trading platforms and using big data to analyze their behavior, which leads to a violation of privacy rights. The use of personal information to accurately push goods to users can lead to the infringement of the fair trading rights of the "vulnerable groups."

Overall, the issue of privacy infringement in the digital age is complex and requires a multi-faceted approach. It is important to balance the benefits of information technology with the protection of individual privacy rights. Governments and businesses should work together to establish clear regulations and guidelines to protect citizens' privacy rights and prevent the misuse of personal information^[8].

3.2 Right to know

In the digital age, the right to know is a crucial human right. Protecting this right for "digital vulnerable groups" is essential to safeguard their digital rights, such as their right to information processing and data use. Governments and powerful Internet companies have access to large amounts of data, including citizens' personal information. While it is necessary to collect this information for administrative efficiency, crime prevention, and citizens' convenience, it is important to balance this with protecting citizens' privacy and personal information.

To achieve this balance, the government should inform citizens about the collection and processing of their personal information through reasonable channels. This will increase citizens' sense of security and dispel any concerns they may have, particularly among vulnerable groups. Meanwhile, Internet companies must obtain consent from individuals before collecting their personal information and respect their right to know by disclosing how the information will be used and processed.

In summary, protecting the right to know is critical in the digital age, particularly for those who are most vulnerable. Governments and Internet companies must strike a balance between collecting information and protecting personal privacy to ensure that everyone's rights are respected.

3.3 The right to use personal information and data ownership

In the digital age, it is crucial that "digital vulnerable groups" have the right to use their personal information and own their data. While the law may not clearly stipulate these rights, individuals inherently own the data they generate and their personal information. In fact, data has become a valuable resource, and those who control data essentially control resources. Companies like Taobao and Jingdong, for example, collect vast amounts of data on consumer preferences, personal information, and browsing behavior to create precise consumer profiles. They analyze consumption behavior and determine the factors that influence it, using this information to develop push plans that make consumers more reliant on their platforms.

At first, companies offer various benefits to reduce consumer costs and facilitate deals, making consumers dependent on their platforms. Once consumers become dependent, companies increase commodity pricing to grab excess profits. This practice infringes upon consumers' legitimate rights and interests, taking advantage of their dependence and lack of information.

The concept of data ownership emphasizes that "digital vulnerable groups" have the right to use

and delete their own data, the right to forget browsing information, and the right to make rational use of the data they generate. As data owners, individuals have the power to prohibit the use of their data without their consent. It is crucial that these rights be recognized and upheld to protect the interests and privacy of "digital vulnerable groups" and ensure fair practices in the digital realm.

4. The rights of "digital vulnerable groups" are difficult

Protecting the rights of "digital vulnerable groups" is fraught with difficulties, particularly in the current digital age. These groups have limited access to information resources, and compared to others, they have fewer choices and are often at a disadvantage in terms of data. As a result, they tend to passively accept the consequences of any infringement of their rights. Moreover, "digital infringement" is often hidden and difficult to identify, which allows unscrupulous actors to carry out infringement without fear of consequences.

Given these challenges, it is crucial to strengthen the protection of the rights of "digital vulnerable groups." This can be achieved by raising awareness about the importance of digital rights, providing education and training on how to protect personal information and data, and improving access to information resources. Additionally, governments and internet companies must take responsibility for protecting the digital rights of all citizens, particularly those who are vulnerable. By working together, we can create a fair and equitable digital environment that respects the rights of all individuals.

4.1 Information resources are asymmetric, and the rights are vulnerable to infringement

"Digital vulnerable groups" are formed due to inherent defects in cyberspace. The compressed development of the Internet has resulted in the unbalanced transmission of information, causing "digital vulnerable groups" to become "information islands" due to the systematic defects of network knowledge. There are two reasons why "digital vulnerable groups" become "information islands": first, the intergenerational gap. Young people have better learning consciousness, learning ability, and memory compared to the elderly, and have a different attitude towards new things. Young people are keen to discover and explore new things, treat new things with curiosity, and are willing to challenge new things^[9]. For the development of Internet technology, young people show unprecedented passion and are keen on researching, developing, and applying Internet technology. They are interested in all aspects of Internet technology in daily life, including the development of software, creating various games, and using the Internet for communication. On the other hand, some elderly people are slow to accept new things or are unwilling to accept them, often resisting the development of new things. They are unwilling to learn and understand Internet technology and still live with traditional ideas. The elderly are more conservative and find it difficult to accept new things, which often becomes an obstacle for them to understand and use the Internet.

Second, excessive indoctrination of ideas is another reason. The digital age is a brand new era, supported by Internet technology, changing our lives fundamentally. Our way of life has changed profoundly; we can now access information in new ways, and every aspect of our lives has changed dramatically. The world under the Internet is more closely connected, and the world has grown rapidly. Coupled with the over-publicity of online media, many older people feel that they are out of society. The "digital vulnerable" are already on the edge of the digital age, and everything in the digital age seems very strange. Under the action of instinctive protective psychology, it is even more difficult to accept in the digital age. As in the psychological concept of "learned helplessness," excessive publicity leads to a further widening of the "digital divide"^[10]. "Digital vulnerable groups" in the face of strong data and choice do not know that their rights are being violated. They have limited information resources and are weak in the face of those who master strong information resources. For example, in online shopping, because network platforms collect a large amount of user personal

information, including their economic situation, consumption habits, consumer psychology, and consumption preferences, the platform can accurately push products to users and influence their consumption choices, potentially infringing on the user's choice.

4.2 "Digital infringement" is highly concealed, and the infringement behavior is not easy to detect

In terms of commodity trading, the rights of "digital vulnerable groups" are often infringed upon. For example, in online shopping, personal information collected about online buyers is used to label different consumer groups on digital platforms according to different classification standards. Based on these classifications, digital platforms offer different prices or seemingly the same price with different coupons, creating different "consumer identities" for online buyers^[11]. Digital platforms use data collection and algorithm technology to formulate competitive strategies, strengthen their market influence or dominant position, and extend their power to the mixed market by integrating data and other production factors of data and algorithms. The different prices for different people determined by the platform's portraits violate the fair trading rights of traders and seriously damage the fair trading rights of consumers. When "digital vulnerable groups" face big data portraits, their rights are virtually infringed upon, and they can only choose to accept the strong and accurate commodity pricing.

5. "Digital vulnerable groups" rights protection path

In the digital age, protecting the rights of "digital vulnerable groups" is extremely urgent in the face of infringement. To address the issue of "digital vulnerable groups" rights infringement, we must provide tilted protection for them, strengthen their right to know, and implement burden of proof inversion for "digital infringement" based on proving the legitimacy of internet companies.

5.1 Implement the redistribution of information resources

Information resources are the most critical resources in the digital era, and "digital vulnerable groups" are often short of mastering them. In the face of "digital infringement," the state, as the defender of civil rights, has an obligation to protect their rights. State obligations originate from civil rights and serve the purpose of civil rights, which is the fundamental guarantee of civil rights. The obligations of countries to protect the rights of "digital vulnerable groups" can be summarized as three progressive levels of respect, protection, and payment.

Firstly, in terms of respect obligations, in the digital age, the state should not collect citizens' personal information. For administrative needs, the state should strengthen management and take strict protection measures to prevent citizens' personal information leakage and avoid causing damage to their personal information. Administrative managers should also enhance their awareness of the importance of information protection^[12]. When querying and collecting citizens' personal information, the state should follow more stringent procedures, and national rights should not invade citizens' personal information. This is what the state should mean when protecting privacy. Compared with individual rights, there are few constraints on state rights, which need to be constrained. Without constraints, state rights will expand wantonly and eventually evolve into a disaster in the field of human rights. Therefore, appropriate constraints on state rights are legitimate and necessary^[13].

In terms of payment obligations, in the digital age, citizens are entitled to enjoy the benefits of the digital era, such as online shopping, convenient travel, and communication. It is a basic right of citizens to enjoy the welfare of the era's development^[14]. As the defender of civil rights, the state has an obligation to ensure that "digital vulnerable groups" have access to these benefits. The state has a

positive obligation to provide convenience in the digital age, which includes standardizing technology, promoting the development of digital technology, and guiding the technology to benefit society.

The payment obligation also includes compensation for damages suffered by "digital vulnerable groups" due to digital infringement. When "digital vulnerable groups" suffer losses due to digital infringement, the state should provide compensation for their losses. This is an important aspect of protecting the rights of "digital vulnerable groups" and ensuring that they are not left behind in the digital age. The payment obligation is the highest level of protection obligation, and it is an important measure for the state to ensure the realization of the rights of "digital vulnerable groups" in the digital age^[15].

5.2 Reasonable distribution of the liability for proving infringement

To address the disadvantages faced by "digital vulnerable groups" in terms of evidence collection and preservation, there needs to be a new allocation of tort proof liability. One possible approach is to shift the burden of proof to the data controller or digital resource owner who is in a better position to collect and preserve evidence^[16]. This approach is consistent with the principle of fault liability, as the data controller or digital resource owner is responsible for protecting the personal information and data of the "digital vulnerable groups" and preventing infringement.

Moreover, the law can provide for specific measures to ensure the protection of the rights of "digital vulnerable groups", such as requiring digital resource owners to keep records of data processing activities, implementing data protection measures, and providing clear and accessible information about data processing activities. The law can also establish a presumption of fault on the part of the data controller or digital resource owner when an infringement occurs, unless they can prove that they have taken reasonable measures to prevent the infringement^[17].

In addition to allocating the burden of proof, it is also important to provide legal assistance and support to "digital vulnerable groups" to help them protect their rights. This can include providing legal aid, simplifying legal procedures, and promoting legal education and awareness. By doing so, "digital vulnerable groups" can better understand their rights and be empowered to seek redress in case of infringement.

In summary, given the unique challenges faced by "digital vulnerable groups" in terms of evidence collection and preservation, it is necessary to allocate new tort proof liability to better protect their rights. This can be done by shifting the burden of proof to the data controller or digital resource owner and providing legal assistance and support to "digital vulnerable groups".

6. Conclusions

There are still many issues to be addressed regarding the protection of the rights of the "digitally marginalized" population. The arrival of the digital age has made our lives more convenient, but it has also brought many problems. It is necessary to strengthen research on "digital human rights", including the rights of the "digitally marginalized" groups that we need to pay attention to. This will enable the digital age to promote our lives without infringing upon our rights, and allow us to fully enjoy the benefits brought by the digital age.

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