

## The impact of the Fourth Industrial Revolution on the right to privacy

### أثر الثورة الصناعية الرابعة على الحق في الخصوصية

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#### **Abstract:**

*The right to digital privacy has emerged with technological advancements and its rapid pace has led to the creation of a new set of rights known as information rights, which represent the new generation of rights and freedoms in modern societies. Digital privacy is a concept that continues to raise many concerns in defining an appropriate definition for it. It is a flexible idea that evolves gradually with changing societal data. This research paper attempts to define the concept of digital privacy and the international and national efforts aimed at protecting this right.*

**key words:** Human rights, privacy, the fourth industrial revolution.

#### **الملخص :**

إن الحق في الخصوصية الرقمية ظهر مع التطور التكنولوجي وتسارع وتيرته فأدى إلى استحداث نمط جديد من الحقوق تعرف بحقوق المعلومات والتي تمثل الجيل الجديد من الحقوق والحريات في المجتمعات الحديثة. إن الخصوصية الرقمية من المفاهيم التي مازالت تثير العديد من الانشغالات لتحديد تعريفاً مناسباً لها، فهي فكرة مرنة تتطور تبعاً لتغير المعطيات السائدة في المجتمع، تحاول هذه الورقة البحثية تحديد مفهوم الخصوصية الرقمية و الجهود الدولية والوطنية الرامية لحماية هذا الحق.

**الكلمات المفتاحية:** حقوق الإنسان، الخصوصية، الثورة الصناعية الرابعة.



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## **Introduction:**

Privacy is considered one of the inherent rights of an individual's life, as it has a significant impact on preserving human dignity. However, the Fourth Industrial Revolution has brought about a fundamental change in the way people live, work, and interacts with each other, as well as their perceptions and patterns of existence. The technological advancements achieved by science have become a violation of privacy through various new media.

The Fourth Industrial Revolution has been described as a "giant tsunami"<sup>1</sup> that will sweep through human societies, causing a radical upheaval in various aspects and details of human life as a whole.

The transition from the right to private life to digital privacy carries several implications for individual freedom, accompanied by various risks and challenges. Therefore, international agreements, constitutions, and laws have mandated the protection of this right and the commitment to safeguard it as a guarantee of dignity and the protection of private life from various types of violations, especially with the rapid development in the field of media and communication technologies, which have affected all areas of life and negatively impacted individuals' privacy.

However, since digital privacy evolves over time and its philosophy differs from one society to another, determining its boundaries poses many difficulties and challenges. It constitutes a new pattern of rights that includes the online space and is linked to the freedom to use communication and information technology tools. This leads us to the necessity of addressing this new pattern of rights by posing the following problem: What are the manifestations of violation of the right to digital privacy? And how have international and national efforts contributed to protecting this right?

In order to answer this problem, we touch on general concepts of the right to digital privacy in our first section and the second on international and national efforts to protect the right to privacy.

### **1- General Concepts on the Right to Digital Privacy.**

The right to digital privacy is a concept that refers to the scope of private life, which is the ability of a person to prevent information from becoming known to others. Attempts to define it raise many difficulties. It is linked to the development of technological means and philosophical changes prevailing in each society. Therefore, the definition of this concept requires first defining the right to digital privacy, and then determining its elements.

#### **1-1- The Definition of the right to digital privacy:**

The right to digital privacy is one of the concepts that have raised many concerns to determine an appropriate definition. This right emerged with the emergence of digital rights, which led to the creation of a new pattern of rights known as information rights, representing the new generation of rights and freedoms in modern societies.<sup>2</sup> And as long as the right to privacy is linked to the existence of a body of personal information, it is coupled with subjective data classified into two categories. The first category is nominal

data as the name, surname, mailing address, e-mail, health information, newspaper, case law, photographs, civil status, personal car, date of birth, residence, and workplace.<sup>3</sup>

The second type includes indirect nominal information such as telephone number, social security number, national identification card number, biometric data, bank account number, fingerprint and genetic fingerprint.<sup>4</sup>

All this nominal information and personal data indicates the meaning of the personal right. Everyone has the right to control his or her information because of the meaning it carries, the most important of which is the non-interference of others in the individual's private affairs expressed in the privacy of the information.

Some studies suggest that this concept (digital privacy) first emerged at the end of the 1960s and 1970s, through the writings of the jurists Alein Westin and Miler in 1971. The first noted in his book *Privacy and Freedom* is defined as "the right of individuals to determine when, how, and to what extent information about them reaches others".<sup>5</sup> The second jurist, through his book *The Assault on Privacy*, defined it as "the power of individuals to control the cycle of information that relates to them".<sup>6</sup>

It is a form of privacy that has direct relevance to information because an important aspect of sensitive and private information is now available via information systems and the Internet, where it is difficult to track, retrieve, or make it forgettable.<sup>7</sup> It is therefore the transition from the protection of private life to the protection of personal data, the moral part of private life, according to the classifications mentioned above.

Based on this, it can be said that digital privacy includes the protection of an individual's personal data, which is disseminated and traded through digital means. But from the standpoint that what is private at one time is not at another time, and what can be private somewhere can't be like that elsewhere. Therefore, images of a violation of the right to digital privacy must be distinguished.

### **1-2- Manifestations of violations of privacy :**

As digital privacy is a flexible concept that evolves according to changing circumstances and the data of each society, it is necessary to focus on its most important manifestations and forms, which mainly include:

#### **A) Unauthorized disclosure of data:**

This takes two forms. The first relates to professions that require data protection, such as the legal profession, accounting profession, doctors, and bank employees. The law requires these categories to preserve professional secrets. The second form is when the data is disclosed unlawfully or misused by those responsible for its protection, even if it is done under the pretext of national security requirements.<sup>8</sup>

#### **B) Unauthorized collection and storage of personal data:**

This includes illegal monitoring and tracking of individuals, such as tracking someone's communications and recording them without their consent or knowledge. An example of this is when security agencies monitor and track individuals without judicial authorization in the context of searching for presumed suspects.<sup>9</sup>

### **C) Electronic surveillance of private life**

This involves monitoring and tracking individuals' activities and behavior by using approximation and correlation between information, as well as using statistical programs and data integration. Electronic surveillance can also occur in personal conversations, either through eavesdropping or capturing data transmitted between remote devices via the internet or by translating electromagnetic emissions from a computer into data, using any technological means. Additionally, it may involve capturing or transmitting images of a person present in a specific location without consent.<sup>10</sup>

### **D) Cyber intrusion**

Cyber intrusion is the act of infiltrating the data of public or private companies and institutions with the purpose of obtaining personal information that affects the lives of employees and workers, and accessing it without permission. It also refers to the hacking of information systems.<sup>11</sup>

## **2- International and national efforts aimed at protecting the right to digital privacy :**

Many infractions that violate the right to privacy have emerged as a result of the internet's open, global character and the quick development of information and communication technologies. As a result, a legislative framework guaranteeing privacy protection in the digital age has to be established. This is what we will talk about in this chapter, where we will talk about national attempts to protect digital privacy after which we will address global efforts to protect this right.

### **2-1- The International efforts to protect the right to digital privacy :**

Given the risks facing privacy in the digital age, the protection of this right has become a priority for many international organizations. Such as:

#### **A) The United Nations General Assembly.**

This body has developed a series of reports under the title "The Right to Privacy in the Digital Age." It issued Resolution A/RES/68/167 on December 18, 2013, affirming that the right to privacy is a human right. For the first time, it emphasized that the same rights enjoyed by people must also be protected online<sup>12</sup>. It called on states to "respect and protect the right to privacy, including in the context of digital communications." Through this resolution, the General Assembly recognized the global and open nature of the internet and the rapid progress in information and communication technology as driving forces for accelerating progress in development in its various forms.<sup>13</sup>

In this regard, the Office of the High Commissioner for Human Rights organized expert consultations and published several reports to assess the challenges facing the right to privacy and other human rights in the digital age. In its 2021 report entitled "The Right to Privacy in the Digital Age," the report focuses on the multifaceted impacts of the increasing and continuous use of artificial intelligence (AI) on the enjoyment of the right to privacy and related rights. It emphasizes the urgent need to halt the sale and use of AI systems that pose a serious threat to human rights until appropriate safeguards are put in

place. It also calls for a ban on AI applications that cannot be used in accordance with international human rights law.<sup>14</sup>

Another report, published in 2018, reviewed the most important current trends in the field of digital rights, addressing the obligations of states and businesses, guarantees, and the issue of surveillance. The report identified the key elements of data privacy frameworks that should be adopted by states and businesses.

Another report, issued a year earlier in 2020, highlighted the impact of new technologies on enhancing the protection of human rights in the context of gatherings, including peaceful protests. This report discussed the effects of various surveillance practices on human rights and called for a halt to the use of facial recognition technology in the context of peaceful gatherings.<sup>15</sup>

### **B) The International Agreements**

Several international agreements have addressed the issue of protecting digital privacy, the most important of which are:

#### **C) The European Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data:**

The convention was signed between the founding members in January 1981 and states that each country that joins must take necessary measures in its legislative system to respect the fundamental rights of individuals and protect their data. The convention also requires member states to include security measures in their laws to protect identity, individual and collective rights and freedoms, and private life from any harm through the use of information. It emphasizes strengthening international cooperation to combat cybercrime and protect individuals. The convention prohibits the processing of sensitive data, such as racial origin, political opinion, health status, religious beliefs, sexual life, and criminal convictions.<sup>16</sup>

#### **D) The Budapest Convention on Cybercrime:**

The Budapest Convention is one of the most important international treaties that combat cybercrime related to the use of the internet, information and communication technologies, and all forms of computer-related crimes. It was signed on November 23, 2001, by 26 member states of the European Union and entered into force in 2006.<sup>17</sup>

The convention aims to unify the criminal policy of member states in the field of cybercrime, facilitate coordination between different national authorities in combating and reducing cybercrime, and establish procedural rules for international cooperation characterized by speed, effectiveness, and accuracy. It is worth noting that it comes after a long period of consultations between governments, police agencies, and the computer sector, and its text was drafted by a number of legal experts in the Council of Europe with the assistance of other countries.<sup>18</sup>

#### **E) The Arab Convention against Information Technology Crimes 2010:**

This Convention aims to promote and strengthen cooperation among Arab States in combating information technology to prevent the dangers of such crimes in order to

safeguard Arab States' security, interests and the integrity of their societies and individuals. One of the most important is the parties' obligation to criminalize the various methods of infringement of the rights of individuals in the electronic sphere set out in chapter II, entitled "Criminalization", which focused on criminalizing illegal entry as well as unlawful interception and abuse of the integrity of personal data.<sup>19</sup>

## **2-2- The National efforts to protect the right to digital privacy.**

Many Arab and Western legislations have taken up the issue of protecting the right to digital privacy, including the Algerian legislation, which enshrines the recognition of the right to privacy as a constitutional principle under Article 47 of the constitutional amendment of 2020, which states that "the protection of natural persons in the processing of personal data is a fundamental right." This is in response to the requirements of the digital age and its inclusion of the protection of personal data as a protection of digital privacy.

The principle of criminal protection is also enshrined under the Penal Code, where Article 303 states that "anyone who intentionally violates the privacy of private life through any means shall be punished with imprisonment for a period of 6 months to 3 years." This includes capturing, recording, or transmitting private or confidential conversations or conversations without the consent or permission of the owner.

The law No. 04-15, which amends the Penal Code, includes a section titled "Interference with data processing systems," and Article 394 repeats that anyone who enters or remains by cheating in any part of the automated data processing system or attempts to do so shall be punished with imprisonment for a period of 3 months to 1 year or a fine of 50,000 to 100,000. Article 394 also criminalizes the acts of designing, researching, collecting, providing, publishing, or trading in stored, processed, or transmitted data through an information system.<sup>20</sup>

In order to establish legal protection for digital privacy, Law No. 09-04 was issued, which includes specific rules for preventing and combating crimes related to information and communication technologies. It specifies the cases in which electronic surveillance is allowed, primarily for the prevention of acts classified as terrorist or sabotage crimes, or crimes that threaten national security. The most important aspect of this legal text is the provision of guarantees that the information obtained under this law will only be used within the necessary limits of investigations or judicial inquiries.

It should be noted that the protection of personal data is essential to protect an individual's right to privacy. Law No. 18-07 was issued on June 10, 2018, regarding the protection of natural persons in the processing of personal data. This law established the "National Authority for the Protection of Personal Data," which serves as an important mechanism for protecting the processing of personal data within the framework of respecting individuals' private lives.<sup>21</sup>

Although these legal texts were issued late compared to many countries, it does not negate the fact that the Algerian legislator, like many other countries, attaches importance to protecting the right to digital privacy.

### Conclusion:

From the above, we conclude that the revolution of fast information has brought some damages such as interference in the privacy of individuals or even companies. Therefore, despite international and national efforts to establish legal rules aimed at respecting the right to digital privacy, the tremendous development in the field of artificial intelligence makes the establishment of appropriate rules to respect this right not easy. Therefore, we propose the following:

1- Paying attention to the field of artificial intelligence from the primary stage of education by programming special materials that focus on how to protect information privacy.

2- The necessity of providing employees and state officials with training courses related to the field of digital privacy protection in order to face the challenges imposed by the digital age.

3- Paying attention to the culture of securing all accounts and devices through full encryption and strong and unique passwords, and also avoiding websites and tools that do not support our right to hide personal information.

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