# Ethical Principles and Guidelines for Digital Technology

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Digital technology is the basic supporting technology that promotes digital economy, social development and national construction. Digital technology represented by the Internet, digital communications, artificial intelligence, big data, cloud computing, virtual reality technology has become an important driving force for economy, trade, security, education, medical care, social governance, environmental protection, climate change response and other fields. In order to further promote the steady and beneficial development of digital technology, achieve precise and efficient digital governance, ensure that digital technology can better empower economic, social and ecological sustainable development, accelerate the construction of Digital China, and promote the construction of a digital community with a shared future, all parties involved in the development of digital technology should follow the following principles:

#### Values

#### Harmony and symbiosis

Life, the environment and the ecosystem are an organic whole. Life, the environment and the ecosystem are interdependent and influence each other. Human well-being depends on them and none of them can be missing. Digital technology should contribute to

protecting and promoting the healthy development of life, environment and ecosystems, and ultimately promote the harmonious symbiosis of life, environment and ecosystems.

#### Human-centeredness

The development of digital technology should serve human needs, interests and well-being, respect human dignity and rights, protect and promote healthy human development, improve human living environment, and enhance the productivity and creativity of human society. The application of digital technology should not harm human physical and mental health.

#### Digital for good

The development of digital technology should adhere to the principle of technology for good, with the goal of enhancing human well-being, promoting unity and harmony in human society, ensuring safety and stability, fostering prosperity and abundance, enabling people to live in peace and happiness, and advancing civilization. The development of digital technology and the establishment of a digital world should ultimately promote, rather than hinder, human development in the physical world. Digital technologies should be developed and promoted in a prudent and responsible manner to avoid the disruptive damage and impact that the introduction of emerging digital technologies may bring to the existing social ecology and order.

#### Freedom and equality

Digital technologies should contribute to respecting human freedoms, protecting and promoting equality, regardless of race, color, sex, language, religion, political or other opinions, national or social origin, property or other status.

#### Inclusive sharing

Digital technology should benefit the development of every person, industry, and region, coordinate the digital development of various regions and fields, narrow the development gap, and promote common prosperity. We should pay attention to groups that are easily overlooked and lack representation, improve the adaptability of disadvantaged groups, advocate digital services suitable for the elderly, children, and people with disabilities, support and help the development of ethnic minorities, and promote digital empowerment industry transformation. and Ensure the development disadvantaged groups, small and micro enterprises, and traditional industries, protect and promote the inheritance and development of culture, accelerate the digital construction of less developed areas, and bridge the digital divide between different groups, different industries, and different regions. Avoid data and platform monopoly, and promote human prosperity and global common development with an inclusive and open attitude.

## **Protection of rights and interests**

#### Respect human rights

Digital technology is developing rapidly, and the digital world has become an important part of human society. The development of digital technology should respect and safeguard the basic rights and interests of individuals in the physical world, as well as the legal extension of basic rights and interests of individuals in the digital world. The application of digital technology should respect human dignity and autonomy and should not interfere with or manipulate human will. Individuals' rights and interests such as legally accessing and using digital technologies and legally creating and publishing digital content should be protected by law.

#### Privacy protection

The application of digital technology can easily lead to leakage and violation of personal privacy. Throughout the entire life cycle of digital technology applications, attention should be paid to protecting and promoting personal privacy and security. The processing of personal information, including the processing of biometrics, religious beliefs, specific identities, medical health, financial accounts, whereabouts and other information, should follow the principles of legality, legitimacy, necessity and integrity. The collection, storage, use, processing, transmission, provision, disclosure, deletion and other processing of personal information must be notified to the individual and consent must be obtained before proceeding. Automatically

generating digital content based on personal privacy information such as biometric data requires ensuring informed consent and having a relatively complete authorization and revocation mechanism. When processing children's information, the guardian's knowledge and consent should be ensured.

#### Fairness and non-discrimination

The application of digital technology should avoid creating and amplifying discrimination and prejudice. Regardless of race, color, gender, language, religion, political or other opinions, national or social origin, property or other status, human rights and interests should be treated fairly and without discrimination. The possible negative physical and mental impacts of the use of digital services on vulnerable groups, including children, the elderly, disabled people, ethnic minorities, etc., should be fully assessed in advance.

#### Respect intellectual property rights

Digital technology should respect original content. Services and products created and generated based on digital technology should respect and safeguard intellectual property rights, including copyrights, trademark rights, patent rights, etc. Legally and compliantly publish, produce, and disseminate digital technologies and content. Avoid creating, replicating, or spreading false content, and avoid engaging in actions such as plagiarism, tampering, or impersonation that infringe upon the legitimate rights of individuals or organizations.

## Prudence and responsibility

#### Safe and trustworthy

In the entire life cycle of digital technology applications, the transparency, explainability, reliability, and controllability of digital technology applications should be valued and enhanced to make digital technology applications auditable, monitorable, traceable, and trustworthy. Pay close attention to the safety and security of digital technology applications, improve the robustness and anti-interference of digital technology applications, and improve the safety and security assessment and control capabilities of digital technology applications.

#### Informed consent

Content and services automatically generated using digital technology must be clearly identified. Digital technology services are prohibited from concealing the fact that they are non-human services. Current digital technology services should clearly remind that they are still data and information processing tools, and the use of relevant services must be confirmed by the user. Provide users with alternatives to refuse such services. When providing digital technology services to children, the elderly and other groups without the ability to identify non-human services, the knowledge and consent of the children's parents, legal guardians or other caregivers should be ensured.

#### Steady development

The large-scale application and promotion of digital technology

should ensure sufficient technological maturity, aim to provide high-quality services, and demonstrate sufficient technological progressiveness. Digital technology services should adhere to the principle of steady development and avoid as much as possible the deployment and promotion of immature technologies that can cause public sentiment, resource waste and social risks.

#### Responsibility and accountability

The consequences caused by digital technology should ultimately be the responsibility of humans. In particular, relevant organizations or individuals should bear accountability for all the negative impacts caused by the application of digital technologies such as automation technology and artificial intelligence technology. All relevant organizations or individuals involved in the design, development, deployment and use of digital technologies should be clearly informed of their responsibilities. The development of digital technology should also promote better technology implementation for responsibility auditing and traceability.

#### Supervision and decision-making

Throughout the entire life cycle of digital technology applications, humans should ensure full supervision of digital technology applications. Particular attention should be paid to the supervision, evaluation and auditing of emerging digital technologies. It should be ensured that humans always have reliable control over digital technology applications and that digital technology applications

should be placed under meaningful human control at all times and under any circumstances.

#### Scientific utilization

The development of digital technology should promote economic prosperity, social progress, and sustainable development, while avoiding harm to life, the environment, and ecosystems. It is crucial to emphasize and drive the argumentation and assessment of digital technology applications, fully understand and effectively harness the benefits it brings. At the same time, effective measures should be taken to prevent the misuse, abuse, and malicious use of digital technology. This includes avoiding and preventing the use of digital technology for the dissemination and amplification of negative values and speech, as well as for causing disruptions and upheavals in the existing social order, or for posing threats to social security and stability. Furthermore, measures must be in place to prevent digital technology from being used in new forms of illegal activities or terrorist actions.

## **Collaborative governance**

## Legal Compliance

The research, development and application of digital technology should comply with relevant laws, regulations, ethics, standards and other relevant regulations in various fields. When digital technology is applied to a specific field, it should comply with the specific regulations in that field, as well as the specific laws and regulations at

each level. Prevent digital technology from becoming a tool for promoting extremist ideas and committing illegal acts. In addition, we should speed up the formulation of norms and laws in the field of emerging digital technologies to avoid the barbaric development of emerging digital technologies, and promptly stop and correct illegal and unethical digital technology applications.

#### Multi-party governance

Promote the development of a cross-disciplinary, cross-field, cross-sector, cross-agency, cross-regional, global, and comprehensive digital governance ecosystem, and form a shared digital governance ecosystem that includes multiple stakeholders such as government agencies, regulatory agencies, intergovernmental organizations, industry, investors and financial institutions, academia, research institutions, professional associations and standardization organizations, social organizations and stakeholders, media, users and consumers. Promote the participation of multiple stakeholders in the full life cycle governance of digital technology and form a multi-party digital technology governance mechanism.

#### Open and inclusive

Digital technology governance cooperation should uphold an open and inclusive attitude, promote the construction of a global, open, and inclusive cooperation platform, and jointly respond to the risks and challenges brought about by digital technology. Promote the shared development of global digital technology governance, avoid

monopoly and malicious competition, and share the results and governance experience of digital technology development.

#### Improving literacy

The public should be simultaneously promoted to form a correct understanding of the development of digital technologies and possess necessary digital literacy. Help the public cope with and adapt to the cognitive changes brought about by emerging digital technologies. By enhancing the public's understanding of digital technology and its risks, we can safeguard the interests of the public while avoiding potential misunderstandings and hype surrounding emerging digital technologies, thereby promoting the long-term healthy development of digital technology. We should strengthen digital technology education and training, raise the overall level of digital literacy and skills among the general population, help the public fully leverage the advantages of digital technology, and minimize the potential risks associated with digital technology.

#### Looking to the future

Adhering to the principle of compatibility between development and governance, it is essential to respect the developmental laws of digital technology. Scientific governance policies should be formulated according to the level of digital technology development, ensuring that governance ultimately safeguards digital technology rather than hindering its innovative progress. It is necessary to continuously optimize and improve the governance system of digital

technology, enhance awareness of risks, and prevent problems before While encouraging thev arise. and promoting innovative developments in digital technology, it is crucial to strengthen sustained research on the potential social impacts of emerging digital technologies. Early identification and assessment of the negative impacts and risks that may arise from the widespread application of emerging digital technologies should be conducted. Proactive measures should be taken to address the governance challenges brought about by emerging digital technologies, ensuring that future digital technologies evolve in a direction that is beneficial to society and the environment.

## Sustainable development

#### Promoting employment

It is crucial to closely monitor the impact of digital technology on cautiously implement technology employment and digital applications that could have a significant impact on existing jobs. Multiple stakeholders, including the government, educational institutions, and enterprises, should collaborate to enhance education training for the unemployed, thereby improving their and employability. It is essential to actively explore new ways and methods for human participation in the workforce in the new employment environment empowered by digital technology, and to create new types of work that leverage human strengths and characteristics. Encouraging industries to create more job opportunities while

undergoing digital upgrades is also important.

#### Quality education

The development of digital technology should contribute to providing the public with more inclusive, equitable, and high-quality education. It should follow the principles of open-mindedness, personal development, and capacity enhancement in education and make full use of the empowering role of digital technology in education. While promoting digital education, due consideration should be given to the laws of teaching and the essence of education. The application of digital technology that replaces human-led teaching activities should be approached with caution to avoid the negative impact on the physical and mental health of individuals resulting from the unreasonable introduction of digital technology.

#### Protecting ecology

The development of digital technology should promote the protection of biodiversity and the ecological environment, provide support for improving the environment and help cope with ecological issues such as climate change, and at the same time avoid the damage and negative impact on the natural environment and ecosystems caused by the development of digital technology as much as possible.

## Empowering development

Development should be empowered by digital technology to enhance human well-being, empower national and social governance, economic development, environmental protection, and many other areas. By improving development efficiency and transforming development approaches, it should help promote comprehensive and balanced development that benefits everyone, every region, and every industry.

#### Promoting peace

The development of digital technology should help achieve global and regional peace and prevent the negative impact on global and regional stability. Digital technology should promote exchanges between different cultures, help form and expand consensus, manage and reduce differences, and enhance common understanding of the world and the whole society.