

DIGITAL HUMANISM IN THE AGE OF THE INTERNET AND ARTIFICIAL INTELLIGENCE: CHALLENGES, OPPORTUNITIES, AND PROSPECTS FOR DEVELOPMENT

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Abstract. The relevance of this research topic lies in the evolving nature of digital humanism, a multifaceted and complex process aimed at achieving an optimal balance between the advancement of digital technologies and the preservation of human values and dignity. The study seeks to identify the conditions necessary for the conceptualisation of digital humanism in the era of artificial intelligence, and to analyse the challenges and opportunities associated with its development. The following *research objectives* are proposed: firstly, to clarify the essence, characteristics, and developmental trajectories of the concept of digital humanism; secondly, to examine the transformation of digital humanism in the context of the internet and artificial intelligence; thirdly, to establish the concept of digital humanism as a framework for harmonising technological advancement with the preservation of human potential; and finally, to explore cultural diversity as an embodiment of digital humanism and human values. *Methodology.* The study uses systemic, cross-cultural, axiological, anthropological and interdisciplinary approaches to provide a comprehensive analysis of digital humanism, facilitating an understanding of the interaction between digital technologies and humanity. A review of the literature shows that in the age of the Internet and artificial intelligence, digital humanism needs to be integrated into practical domains. This interdisciplinary research brings together philosophical, sociological, ethical and computer science perspectives to examine digital humanism in this transformative era. Artificial intelligence has opened up groundbreaking possibilities in fields such as medicine, education, transport and commerce. The study also highlights the European Digital Humanism Initiative and the methodology of informationalism, which illuminate the challenges and opportunities of digital humanism. Anthropological and socio-axiological approaches are used to analyse the value dimensions of the digital society, focusing on its impact on education, knowledge diffusion and innovation. *Findings and implications.* The results obtained provide a more profound comprehension of the genesis and pertinence of digital humanism in the context of societal transformation. This research underscores its capacity to address contemporary challenges while ensuring a harmonious coexistence of technological progress and human-centric values.

Keywords: digital humanism, artificial intelligence era, humanistic values, cultural diversity, humanism, digitalisation, technological ethics, artificial intelligence.

JEL Classifications: A13, D91, L87, O35, P46, Q55, Z18

1. Introduction

Digital humanism posits the notion of a "revival" of culture, relationships and ethics, with the human role being restored to a central position within machines and technologies. Digital humanism does not equate humans with machines, nor does it assign to machines the role of humans. Rather, it promotes a harmonious

balance between the development of digital technologies and the preservation of human values, ensuring that automation serves not only economic but also humanistic objectives. The evolution of digital humanism in the contemporary age, characterised by the integration of the Internet and artificial intelligence, is manifesting across multiple domains

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and encompassing both technological and cultural transformations. The Internet has created unparalleled opportunities for access to knowledge and information from any global location. This facilitates the enhancement of educational standards and the cultivation of humanistic values within the general population. The advent of social networks and other online platforms has facilitated communication and the exchange of perspectives among individuals from diverse geographical locations, thereby contributing to the cultivation of tolerance, cultural diversity and mutual comprehension. The advent of artificial intelligence has engendered a plethora of novel prospects across myriad domains, including medicine, education, transportation, and trade.

Digital technologies are replacing human functions in complex, repetitive operations and simple tasks, and humans are responsible for managing the most complex tasks, those that are difficult to automate. Given that all these changes put both human and technological capital at risk, the challenge for digital humanism is to configure digitalisation so that it can contribute to humanising the world by making it a better place. Traditional technologies "provide the material basis of modernity", while information technologies disrupt this material basis, and national governance and social governance are transformed into digital governance. The structure of relations, behavioural models and working mechanisms between digital government and digital citizens should be based on platforms, data and algorithms, which form new digital attributes.

Digital form interprets digital logics such as data use and rights protection, algorithmic governance and digital democracy, platform functions and regulatory logics. These public, social and private digital powers and digital rights will demonstrate the mobility of borders through diversified and scenario-based assertions of data rights. In 1989, Tim Berners-Lee, a British computer scientist, wrote a proposal that became the basis for the creation of the World Wide Web. His concept was set out in a document entitled "Information Management: A Proposal", in which he proposed the idea of a hypertext system for storing and sharing information within the European Organisation for Nuclear Research (CERN). Berners-Lee described a way of organising information through interlinked documents, allowing quick access to the right data. He emphasised the need to integrate disparate sources of information, stored in different formats and systems, into a single environment. The utilisation of URL, HTTP, and HTML resulted in the development of three pivotal components of the World Wide Web: 1) URL (Uniform Resource Locator) – for addressing resources; 2) HTTP (Hypertext Transfer Protocol) – for data transfer; 3) HTML (Hypertext Markup Language) – for creating

web pages. The World Wide Web was conceptualised as an open platform for information exchange, with universal accessibility to all network users. This proposal constituted the basis for the development of the first web browser, World Wide Web, in 1990 and the launch of the first website in 1991. It is widely acknowledged that Tim Berners-Lee is one of the most significant creators of the modern Internet (Tim Berners-Lee, 1989).

2. Analysis of Recent Research and Publications

A comprehensive review of the extant literature on this issue was conducted, which enabled the identification of the principal sources and areas of research related to digital humanism, the Internet, and artificial intelligence (AI), and their interaction. The following areas were identified:

1) The philosophical foundations of digital humanism include the works of thinkers who analyse the impact of digitalisation on society, such as Tapscott D. (Perspectives on the Digital Economy and Technology). The analysis shows that it is necessary to consider the challenges, which are based on the preservation of human values in the world of digitalisation, issues of autonomy, privacy and ethics in the digital world, and the opportunities, which include the use of technology to enhance human dignity, education and social interaction.

2) The impact of the Internet on humanistic concepts is evidenced by key themes based on the development of the information society and its impact on cultural and social values (Castells M., The Internet Galaxy, 2007), which includes the transformation of the Internet into a space for self-expression, collaboration and activism. In his works "The Information Age" and "The Internet Galaxy", Manuel Castells expounds on the manner in which the Internet gives rise to novel forms of social organisation, emphasises the significance of human solidarity in digital networks, and asserts that the Internet age concomitantly engenders challenges of information inequality and social exclusion. Concurrently, the Internet has engendered opportunities predicated on the democratisation of knowledge and participation in social life, encompassing the development of a digital culture characterised by openness and inclusivity.

3) The existing literature on AI in the context of digital humanism has included works by Bostrom and Muller on the ethical aspects of AI, such as "Ethics of Artificial Intelligence" and "Human Compatible" (Russell Stuart, 2020), which describe the interaction of AI with human values. In "Human Compatible: Artificial Intelligence and the Problem of Control", significant emphasis is placed on the necessity of developing AI that functions in accordance with human

values. The challenges encompass machine autonomy and the risk of relinquishing human control; ethical dilemmas in AI decision-making; and opportunities, including the utilisation of AI to address social, environmental, and economic issues. The enhancement of quality of life through personalised technologies is also a matter of concern.

In his book "Superintelligence", Nick Bostrom (2020) analyses the risks associated with the development of autonomous AI and calls for the creation of technologies that meet the interests of humanity. The literature review showed that in the context of the Internet and artificial intelligence, digital humanism should be integrated into practical areas: 1) education, promoting the use of digital technologies to develop critical thinking and creativity; 2) business, promoting the implementation of ethical principles in the development of digital business models; 3) culture, promoting the preservation of cultural heritage through digitisation and artificial intelligence. In Ukraine, the Concept for the Development of Artificial Intelligence in Ukraine of December 2, 2020, No. 1556-p was created. (<https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#n8>)

The primary challenge encountered during the analysis of the extant literature pertained to the mitigation of the erosion of humanity in a world increasingly dominated by digital technologies. In this context, technological development fosters opportunities that promote ethical, social and environmental well-being. In this study, emphasis is placed on foreign concepts, ideas and paradigms that influence the transformation of digital humanism in the age of the Internet and artificial intelligence.

1) The concept of artificial intelligence ethics explores what moral principles should guide the development, use, and regulation of AI (Brinjolffson and Makafi, 2016).

2) Humanistic interface design is aimed at creating technologies that promote harmonious human-computer interaction, ensuring the convenience, accessibility and efficiency of using digital technology algorithms, which requires the formation of an algorithmic culture (Bryan, Griffiths, 2020).

3) Digital activism emphasises the role of technology, in particular the Internet and social media, in stimulating public debate, mobilising citizens and supporting social change and political movements (O' Reilly, 2018).

4) In response to concerns about privacy, censorship and control by large corporations and governments, concepts of decentralised technologies such as blockchain are emerging to give users greater autonomy and control over their data and assets.

5) Human-centred technology design underscores the significance of incorporating social, cultural and ethical dimensions into the design process to ensure

that technological solutions align with people's needs and values (Tapscott, 2014). A UNESCO study illuminates the role of digital technologies in cultural preservation.

3. Materials and Methods

The analysis of digital humanism is based on an interdisciplinary approach that integrates philosophy, sociology, ethics and computer science to provide its conceptual foundations. The study uses comparative analysis to assess approaches to digital humanism in different countries and cultures, including the European Digital Humanism Initiative. The methodology of informationism, developed to analyse the phenomena of the digital age, is complemented by a synergistic approach. The synergistic methodology encompasses the search for attractors, the overcoming of entropy and information stochasticity, and the consideration of the digital society as a non-linear system operating in a non-linear space. The utilisation of agile methodology as a theoretical framework for comprehending digital society, education, and the role of the individual represents a novel approach. This methodology necessitates a radical re-evaluation of the mission, functions, legitimacy, and tools of activity, proposing a transition from the classical management paradigm to a more innovative and digital one. Agile methodology is based on a general systemic methodology that includes the principles of autopoiesis (self-construction of systems), identity, homeostasis and permeability. Contemporary methodologies of systemic and structural analysis facilitate the interpretation of the concept of digital humanism as a complex, non-linear social system comprising numerous subsystems that are in constant interaction with the environment. The combination of synergistic and systemic approaches elucidates the idiosyncrasies of the evolution of digital humanism, both in stable conditions and during periods of crisis (modes of aggravation). The anthropological and socio-axiological approaches disclose the social, anthropological and axiological dimensions of digital humanism. The analysis is centred on corporate anthropology, which concentrates on people, education, knowledge and the aspiration for an innovative society. The application of these methods contributes to a more profound understanding of the essence of digital humanism, its challenges and opportunities, which allows for the formulation of scientifically sound conclusions about its impact on modern society. The initiative fosters interdisciplinary collaboration, integrating fields such as philosophy, sociology, computer science, law and economics, to facilitate a comprehensive analysis and identification of solutions to the challenges posed by digital transformation in the context of the Fourth Industrial Revolution (Schwab Klaus, 2016).

The European Digital Humanism Initiative aims to integrate humanistic values into the development of digital technologies and society. It includes the following key aspects:

- 1) Human-centredness, which prioritises the development of technologies that support human dignity, rights and freedoms. This implies the creation of inclusive and transparent systems that take into account the needs of different population groups.
- 2) The ethical principles that should guide the development and implementation of technologies should be in line with ethical standards, including confidentiality, non-discrimination, honesty and responsibility of developers and users.
- 3) Supporting democratic values means focusing on preserving democratic principles in the digital environment, including free access to information, transparency of algorithms, and combating disinformation. Digital humanism is concerned with the development of digital technologies and policies based on human rights, democracy, inclusion and diversity. The Digital Humanism Initiative is an international collaboration aimed at building a community of scholars, policy makers and industry representatives who are committed to ensuring that technology development is in line with human interests.

The Digital Humanism Initiative aspires to address the challenges posed by the digital age, while concomitantly seeking to optimise opportunities for the establishment of a harmonious, sustainable, and humane digital society (<https://caiml.org/dighum/>).

The objective of the present study is twofold: firstly, to identify the conditions for the formation of the concept of digital humanism in the era of artificial intelligence; and secondly, to explore the challenges and opportunities for the development of this phenomenon. The objectives of the present study are as follows: 1) to clarify the content, characteristics and directions of development of the concept of digital humanism; 2) to reveal the transformation of digital humanism in the age of the Internet and artificial intelligence; 3) to formulate the concept of digital humanism as a factor in ensuring harmony between the introduction of technology and the preservation of human potential; 4) to reveal the concept of cultural diversity as an expression of digital humanism and human values.

4. Results and Discussions

4.1. Content, Features and Directions of Development of the Concept of Digital Humanism

Digital humanism is a concept that puts people at the centre of digital transformation and emphasises the importance of preserving human values, ethics

and rights in the face of the development of modern technologies. It seeks to harmonise the relationship between technology, society and culture, ensuring inclusivity, transparency and fairness in the digital environment. The main aim of digital humanism is to ensure that technology is used to improve the quality of life, promote culture, education and social justice (Table 1).

Digital humanism ensures that technologies are developed in accordance with the basic principles of ethics, humanism and equality. The concept of digital humanism promotes a fair, safe and enjoyable digital environment where technology works for the benefit of humanity, not the other way around. Examples of the implementation of the concept of digital humanism include 1) digital platforms for education based on the development of accessible online education tools for people of all ages; 2) ethical standards for artificial intelligence, including regulation of the use of algorithms to prevent discrimination; 3) digitisation of cultural heritage through the creation of digital archives that preserve historical artefacts, traditions and art; 4) smart cities that include technological solutions that take into account the needs of the community and the environment. Digital humanism is predicated on the recognition of the specificity of human beings and their abilities, with digital technologies being used to enhance these rather than limit them. Digital humanism is positioned at the intersection of utopia and dystopia, contemplating the utilisation of technology to cater to the needs of the populace. This concept is not confined to the domains of production and economics; its scope extends to medicine, scientific research, and all endeavours that contribute to the well-being of society. Digital humanism proclaims the restoration of the centrality of humans to machines and technologies, initiating a 'renaissance' of culture, relationships and ethics. It does not turn people into machines, nor does it assign the role of people to machines. Digital humanism recognises the uniqueness of human beings and their capacities, and uses digital technologies to enhance rather than limit them (Bostrom, 2020).

The concept of digital humanism considers the use of technology to serve people and their needs. This applies not only to production and the economy, but also to medicine, scientific research and all activities that contribute to the well-being of society. Following the cultural trend that bears its name, digital humanism places people at the centre of the universe, while embracing digital technologies with a full understanding of their limitations and potential. This new paradigm is underpinned by a society in constant flux, fostering the development of new companies and startups, which in turn use technology to grow their businesses and expand their organisations. Digital humanism proffers an exhaustive

Table 1

Content, features and significance of the concept of digital humanism

Characteristics of digital humanism	Directions for the development of digital humanism
Human-centred focus	- People are the main value, and technology is seen as a tool for their development. - The use of artificial intelligence, automation and digital platforms should improve the comfort and quality of life, not replace human potential.
Ethics and responsibility	- Attention to ethical aspects of technology use. - Ensure transparency in the creation and use of digital systems, including artificial intelligence algorithms. - Avoiding discrimination and manipulation in the digital environment.
Inclusiveness and equality	- Ensure equal access to technology and digital tools for all segments of the population, regardless of place of residence, social status or age. - Overcoming the digital divide between developed and less developed regions.
Preservation of cultural diversity	- Utilisation of digital platforms to support and promote local cultures, languages and traditions. - Digitisation of cultural heritage and making it accessible to future generations.
Transparency and openness	Ensure the availability of information related to the development and operation of digital technologies. Protection of personal data and the right to privacy.
Humanisation of technology	Creation of technologies that take into account the emotional, cognitive and social needs of people. Application of artificial intelligence to develop educational, medical and social systems.
Support for sustainable development	Technology should contribute to the achievement of sustainable development goals, including environmental responsibility, fighting inequality and poverty.
Human rights compliance	Digital humanism is focused on the protection of human rights and freedoms in the digital environment. Development of legislative mechanisms to protect against violations in the digital space.

Source: compiled by the authors

examination of the human-machine relationship in its totality, thereby engendering a transformation of interpersonal relationships, modes of existence, and, consequently, extant business models and management methodologies. According to a study by McKinsey & Company, about half of today's jobs will be automated over the next decade due to the rapid development of digital technologies, and many of these jobs will be taken over by new professions (Concept of the State Targeted Scientific and Technical Programme for the Use of Artificial Intelligence Technologies in Priority Sectors of the Economy for the Period up to 2026, 2024).

4.2. Transforming Digital Humanism in the Age of the Internet and Artificial Intelligence

The transformation of digital humanism in the age of the Internet and artificial intelligence is taking place on many levels and involves both technological and cultural changes. The Internet opens up unprecedented opportunities to access knowledge and information from anywhere in the world. This enables the enhancement of educational standards and the cultivation of humanitarian values within the general population. Social media and other online platforms allow people from different parts of the world to communicate and exchange views, which promotes tolerance, cultural diversity and mutual understanding. Artificial intelligence opens up new opportunities in many areas, including medicine, education, transport and trade. Nicholas Negroponte,

a Greek-born American computer scientist, is renowned for his contributions to the development of digital technologies and concepts. In 1985, he established the Media Lab at the Massachusetts Institute of Technology, which has since evolved into a renowned centre for innovation in media and technology. In 1995, Negroponte published the seminal work "Being Digital", in which he advanced the concept of transitioning from the processing of atoms to the processing of bits, underscoring the pivotal role of digital information in the contemporary era. This work was among the first to popularise the term "digitalisation" and influenced the further development of the digital economy. Moreover, Negroponte initiated the One Laptop per Child educational project, which sought to provide every child with an affordable laptop for learning purposes, thereby helping to bridge the digital divide in education (Negroponte, 1995).

Negroponte laid the groundwork for the use of AI to make people's lives easier, reduce risks and increase convenience. With the introduction of new technologies, new ethical issues arise, such as privacy, security and the impact of artificial intelligence on the workplace and society as a whole. The growth of digital humanisation can increase inequalities as access to technology is unequal.

Developing policies to reduce this gap is becoming an important task for modern society. In general, the transformation of digital humanism in the age of the Internet and artificial intelligence opens up new opportunities for the development of society, but requires attention to the ethical, social and cultural

implications of the introduction of new technologies (Table 2).

Advancements in the domain of artificial intelligence, alongside other technological pursuits, are directed towards the conception of innovative solutions within the realm of digital humanism. These solutions are designed to bolster humanistic principles and enhance the quality of life for individuals. The identification of these areas of transformation is dependent on a multitude of factors, including but not limited to technological advances, socio-cultural changes, and the response of society to these changes. Artificial intelligence technologies are diverse in nature and can be categorised into several distinct groups based on their objectives and applications. The following discussion will highlight the main areas of work in the field of artificial intelligence that contribute to the development of digital humanism:

- 1) Machine learning represents a major approach within the field of artificial intelligence development. This field of study involves the development of algorithms that facilitate the acquisition of knowledge by computers from data and the subsequent enhancement of their performance over time.
- 2) Deep learning is a subcategory of machine learning that uses neural networks with multiple layers to

automatically learn high-level functions from large amounts of data.

3) Natural language processing (NLP) is the field of study concerned with the development of computer systems capable of comprehending and generating human speech. This encompasses a range of tasks, including speech recognition, parsing, and machine translation.

4) Computer vision is a branch of artificial intelligence that focuses on the development of systems that can interpret the content of images and videos.

5) Robotics and autonomous systems use artificial intelligence to create robots and other mechanisms that can act and interact with their environment without direct human control. These areas of AI work are just a few of the many examples of how the technology can be used to solve a variety of tasks and problems in different industries, creating amazing digital technologies that are transforming our world (Rose David, 2018).

The use of AI can make people's lives easier, reduce risks and increase convenience. The introduction of new technologies raises new ethical issues, such as privacy, security and the impact of AI on workplaces and society as a whole. The growth of digital humanisation can increase inequalities as access to

Table 2

Artificial Intelligence (AI) as a factor in the development of society and global digitalisation: advantages and disadvantages

Content of the artificial intelligence (AI) function	Advantages of artificial intelligence	Disadvantages of artificial intelligence
Artificial intelligence as high work efficiency	High efficiency, reliability, replacement of people for more dangerous work	High efficiency, reliability, replacement of people for more dangerous work
Artificial intelligence copes well with tedious mechanical work	AI is very reliable, less prone to errors than humans, and more efficient	In the area of innovation, artificial intelligence does not cope well with innovation due to the lack of fixed measurement standards and output models
Value of artificial intelligence	The cost is relatively low in the long run, it can significantly save labour costs as less physical and more intellectual labour is required	The cost is too high for normal business and the threshold for use is too high
Application of artificial intelligence	The key issue is data mining to help businesses make smart decisions	Artificial intelligence as a threat to humanity's existence
Improving workplace efficiency with AI	People will be surrounded by IoT devices that can speed up complex tasks and everyday activities	AI systems can fail
Artificial intelligence as a means of providing many automated services for people	These services can be smart, which will improve the environment	The ability of artificial intelligence machines to process large amounts of data quickly and accurately is crucial for many intelligent technologies and environments
Artificial intelligence for decision-making in the workplace	The speed and effectiveness of some AI applications make them attractive to executives looking to gain more business advantage	The use of artificial intelligence to manage employees will lead to the fact that the work of managers will become increasingly isolated, destroying human functioning
The future of workplaces	Artificial intelligence will actually lead to long-term job growth	Decision-making software causes some concerns
Artificial intelligence can truly eliminate human error in the process	AI saves time and labour costs, and thus reduces human error	The biggest disadvantage of artificial consciousness is that it will completely destroy human functioning

Source: compiled by the authors

technology is unequal. The development of policies with the aim of reducing this gap is becoming an important task for modern society. In general, the transformation of digital humanism in the age of the Internet and artificial intelligence opens up new opportunities for the development of society, but requires attention to the ethical, social and cultural implications of the introduction of new technologies that have contributed to the formation of the digital human in the era of the Fourth Industrial Revolution (Skinner, 2020).

Questions are being raised about the ethical use of artificial intelligence and digitalisation in different areas of life, including human rights, privacy and discrimination. The development of new technologies requires a review of the curricula and skills needed to function successfully in a digital society. The regulation of artificial intelligence is a key factor in ensuring efficiency, safety and the protection of human rights. Research into the impact of artificial intelligence requires collaboration across a range of disciplines, including computer science, psychology, economics, philosophy, sociology and law. Understanding the impact of AI on a digitalised society is crucial for developing strategies, policies and innovations that promote sustainable development and well-being in the digital age. The impact of artificial intelligence (AI) on people and society is broad and diverse (Kai-Fu Lee, 2020).

The growing impact of artificial intelligence and other technologies on different areas of human life, as the main object and subject of digital humanism, requires the development and implementation of ethical standards and regulations to protect human rights and security. It is important to ensure that digital literacy skills are available to all segments of society in order to avoid digital exclusion and ensure equal access to the opportunities offered by the Internet and AI. Given the large amount of personal data collected and processed by technology, it is important to ensure a high level of privacy and security protection for this data. Technology companies should pay attention to the social impact of their products and services, actively engage in solving societal problems, and adhere to the principles of social responsibility in the age of artificial intelligence (Tegmark, 2019).

4.3. The Concept of Digital Humanism as a Factor in Ensuring Harmony between the Implementation of Technology and the Preservation of Human Potential

The notion of digital humanism is predicated on the premise that humanistic principles must be upheld in the context of rapid technological development, encompassing artificial intelligence, automation and digitalisation. Consequently, it is imperative that, in the

course of technological progress, there is a concerted effort to maintain and fortify attention to human values, ethics, law and social relations. Digital humanism aims to ensure that technology does not become an end in itself, but is used for the benefit of people and their development. In this context, automation is the main driver of digital transformation, which spans multiple areas of life: from industry and business to education and healthcare. It can increase efficiency, reduce costs and create new opportunities. However, automation also poses new challenges to society, including job security, the ethics of decisions made by automated systems, and managing the social impact of this transformation.

The concept of digital humanism aims to ensure harmony between the introduction of technology and the preservation of human potential and promotes employment support to prevent massive job losses due to automation; investment in retraining based on the creation of programmes to adapt workers to the new requirements of the digital economy; and the stimulation of entrepreneurship, including support for innovative initiatives that combine technology with human creativity. Inclusiveness and the concept of bridging the digital divide are predicated on the notion of ensuring equal access to digital technologies, a prerequisite for the attainment of sustainable economic development. The provision of education to all segments of the population, with an emphasis on technological skills, is instrumental in the formation of digital literacy. Digital humanism is predicated on the utilisation of technologies in accordance with ethical principles, founded on transparency of algorithms that ensure the clarity of the processes that govern digital systems. It is further defined by the protection of human rights, including the guarantee of personal data security and the prevention of economic manipulation (Shoshana Zuboff, 2019).

In this context, the concept of humanity underscores the imperative to safeguard fundamental human qualities such as empathy, mutual understanding, ethics, and dignity, even within a high-tech environment. The notion of balance asserts that automation should not supplant the human element, but rather complement it, thereby contributing to the enhancement of a more equitable and prosperous society. The path to harmony in this context is the desire to ensure that technological progress takes place in a way that maintains a balance between technological advances and the need for ethical and humanistic management of these advances. This requires the development of new approaches to regulating the use of technology, its integration into society, and teaching people to use it for the benefit of personal development, information culture and society as a whole (Table 1).

4.4. The Concept of Cultural Diversity as an Expression of Digital Humanism and Universal Values

The concept of cultural diversity as an expression of digital humanism focuses on the use of digital technologies to support human values, dignity, rights and cultural diversity. The concept of cultural diversity recognises that digital transformation should not negate cultural identity, but rather contribute to its preservation and development (Table 3).

A digital humanism that supports cultural diversity opens up new possibilities for preserving the metaverse, a new large-scale computing and networking platform that is a breakthrough that has transformed almost every industry and changed human reality (Matthew Ball, 2023). The objective of this proposal is to establish the digital world as a space in which each culture is able to thrive and flourish. Digital humanism is a pivotal approach that guarantees the harmonious coexistence of technology and human values. The implementation of this approach is conducive to the formation of sustainable economic development that is focused

on long-term stability, equality and environmental responsibility.

5. Conclusions

The practical significance of research on the transformation of digital humanism in the age of the Internet and artificial intelligence is in many ways.

- 1) Research in this domain contributes to the development of technologies that facilitate the lives of individuals, enhance work efficiency and augment the accessibility of services.
- 2) The examination of the ethical implications inherent in the utilisation of artificial intelligence and other digital technologies assists in establishing principles and standards that guarantee security, privacy and fairness in their application.
- 3) The study enhances the level of education in the domain of artificial intelligence and other digital technologies among professionals and the general public, thereby facilitating a more profound comprehension of the possibilities and limitations of these technologies.

Table 3

Key areas of the concept of cultural diversity in the context of digital humanism

Development direction and impact	New opportunities to preserve the uniqueness of humanity
Fundamentals of cultural diversity in the context of digital humanism	Cultural diversity (recognition of and respect for the diversity of languages, traditions, beliefs and creative expressions of humanity). Digital space (a new platform for preserving and promoting cultural characteristics). Digital humanism integrates these two concepts, creating a platform for the interaction of cultures in a global world.
The role of digital technologies in supporting cultural diversity	<ul style="list-style-type: none"> – Preservation of cultural heritage. – Digitisation of artefacts, literature and folklore. – Virtual museums and archives available anywhere in the world. – Dissemination of knowledge about cultures. – Online courses, libraries and databases that promote cultural heritage. – Social media as a tool for intercultural dialogue. – Support for linguistic diversity. – Development of programmes and applications for learning and preserving lesser-used languages. – Automatic translators to overcome language barriers.
Challenges of cultural diversity in the digital age	<ul style="list-style-type: none"> – Unification of culture (the spread of globalisation trends that can suppress local cultures). – Digital divide (unequal access to technology in different regions of the world). – Manipulation of cultural values (use of digital platforms to promote stereotypes or discrimination).
Principles of digital humanism to support cultural diversity	Inclusivity (ensuring equal access to digital resources for all cultures). <ol style="list-style-type: none"> 1. Transparency. Openness of data and platforms for promoting cultures. 2. Respect. Avoidance of commercialisation or manipulation of cultural heritage. 3. Dialogue. Encouraging intercultural exchange through digital channels.
Examples of concept implementation	<ul style="list-style-type: none"> – UNESCO. Programmes for digitising intangible cultural heritage. – Virtual museums. For example, the Louvre, the British Museum, which offer online access to collections. – Language platforms. Duolingo and other tools for learning less commonly used languages.
Prospects for digital humanism in cultural diversity	<ul style="list-style-type: none"> – Development of artificial intelligence to create content adapted to different cultures. – Global projects of cooperation between states that promote the preservation and development of cultural wealth. – Use of meta-space for virtual travel and cultural research.

Source: compiled by the authors

4) The research proffers innovative approaches and solutions for various spheres of life, including medicine, education, economics, and others.

5) Research in this area assists governments and international organisations in the development of effective policies and regulations that govern the use and development of digital technologies for the benefit of society.

Research findings have the capacity to influence cultural and social changes in society, with

consideration for the impact of digital technologies on human interaction, work patterns and lifestyles. The study of digital humanism is of great practical importance, as it contributes to the development of technologies, the improvement of the ethics of using these technologies, political and social changes, and the creation of innovative solutions for modern society. The introduction of technology must be balanced with the preservation of human potential.

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