Second International Conference

Tangible and Intangible Impact of Information and Communication

in the Digital Age

Khanty-Mansiysk, Russian Federation

9 – 12 June 2019

UGRA RESOLUTION

INFORMATION AND COMMUNICATION IN THE DIGITAL AGE

1.1. The Second International conference "Tangible and Intangible Impact of Information and Communication in the Digital Age" took place in Khanty-Mansiysk, Russian Federation, on 9 – 12 June 2019, within the framework of UNESCO's Information for All Programme and the XI International IT Forum. It was organized by the Russian Committee of the UNESCO Information for All Programme, Interregional Library Cooperation Centre and UNESCO Institute for Information Technologies in Education with the support of the Government of the Khanty-Mansi Autonomous Okrug – Ugra, UNESCO / UNESCO Information for All Programme and the Commission of the Russian Federation for UNESCO.

1.2. The interdisciplinary conference brought together about 100 participants from 33 countries – academicians and practitioners from the field of ICT and media, as well as philosophers, policymakers, social scientists, representatives of higher educational institutions and research centres, libraries, public authorities, private sector and civil society.

1.3. A variety of observations were made by the participants concerning the tangible and intangible impact of information and communication within the Digital Age. The conference activities included two plenary sessions: "Digital Age: Quo Vadis?" and "Freedom of Information: Global Challenges for

Utopia"; a themed discussion "Malicious Use of Artificial Intelligence and International Psychological Security"; and two sections: "Media and Information Literacy and Ethics" and "Technologies and Linguistic Diversity". A special seminar "Preservation of Cultural and Scientific Heritage in the Digital Age" was organized as a satellite event.

1.4. The conference considered the shifts in how we perceive and experience the variety of benefits and threats brought to the fore by artificial intelligence (AI), big data, Internet of Things, blockchain, etc., and how society is being challenged in terms of their impact on our lives, decisions and actions. On a macro-level, geopolitical and international psychological security implications of AI, digital intermediaries, social media and e-government platforms were discussed.

The Conference emphasized the following:

2.1. Current and emerging technologies raise relevant and urgent issues that lead to the need for a transdisciplinary approach in monitoring the impact of technology on societies and critical considerations from different disciplines: science and technology, education, philosophy, culture and linguistic studies.

2.2. The transformative power of technologies is increasing rapidly, but society is failing to keep up. Therefore, a stocktaking of recent developments and a predictive modeling of the societal effects of Industry 4.0 and already emerging Industry 5.0 technologies is imperative.

2.3. The emergence of powerful digital platforms of both American and Chinese origin is significantly affecting the ICT landscape. These platforms have come to dominate the global market and have extraordinary data strength and incomparable reach in terms of analytics. This poses significant risks not only to ICT ecosystems but also to digital innovation.

2.4. The current situation has huge societal implications. The reshaping of information and communication environment creates threats such as the loss of

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privacy, loss of people's agency and autonomy. Moreover, the collection and use of data in uncontrolled ways could lead to profiling or exclusion, thus fostering another digital divide.

2.5.   Malicious use of artificial intelligence deserves special attention due to its possible global catastrophic effects, while keeping to a realistic vision what AI is, and is capable of, at its present level of evolution. Deep fakes, "fake people", artificial emotional intelligence, sentiment analysis, predictive analytics, etc. falling into the wrong hands, can have serious destabilizing effects on the social and political development of countries as well as the system of international relations, including international psychological security.

2.6. Automated systems should be operating in consideration of the principles of humanity, sustainable development as well as environmental protection. The use of technology can add value to society and contribute to the attainment of the Sustainable Development Goals (SDGs) provided it is implemented and maintained responsibly.

2.7.   While addressing the development of Industry 4.0 and Industry 5.0 technologies, it is important to deal with ethical issues related to trust, transparency, safety, accountability, assurance, liability, security, gender and other biases and potential malicious uses.

2.8.   The current vocational education system fails to provide training for specialists to develop both technical competencies and a high level of knowledge in the humanities. Such cross-disciplinary (universal) education is required so that the development of innovative technologies is accompanied by a comprehensive analysis of the social consequences of their implementation.

2.9.   The UN 2030 Agenda and priorities of the UNESCO Intergovernmental Information for All Programme, based on the ROAM principles and SDG indicators should be mechanisms to enable inter- and transdisciplinary

dialogue for policy development including on social responsibility, justice, universal access to information and education.

Proceeding from the above and referring to the provisions of the Ugra Declaration on Information and Communication in the Digital Age (the final document of the 2018 International conference "Tangible and Intangible Impact of Information and Communication in the Digital Age"), the Conference urges national governments, UN agencies (particularly UNESCO), and other relevant international, regional and national stakeholders to:

I. Complement public and private investments in AI and Industry 4.0 technologies by funding probing and comprehensive research on the societal impact of technologies in order to grasp their potential detrimental effects and ensure their beneficial use. This includes trans-disciplinary issues in robotics, computer science, economics, law, ethics, labor, psychology and social studies.

II. Undertake research into regulation models that monitor and evaluate digital intermediaries in order to secure the public interest in the following problem areas:

- ensuring that people can control their own data in responsible, secure and transparent ways;
- securing transparency and accountability in the operation of digital platforms;
- taking steps to reduce tax evasion by digital corporations;
- preventing the proliferation of psychological warfare pursuing "cognitive hacking" on people's cultural and social identities.

III. Determine, analyze, evaluate and clarify malicious use of artificial intelligence threats to international psychological security in order to make it possible to formulate concrete recommendations in this area. The establishing of an

international network of research centers for a better understanding and counteraction to these threats is also desirable.

IV. Promote consideration of information ethics across all disciplines, both theoretical and practical, and encourage bottom-up and top-down dialogue on ethical issues of information and communication amongst civil society, academia, media, private and public sectors.

V. Recognise the importance of media and information literacy skills in the digital era and promote them at all levels and forms of education including lifelong learning.

VI. Foster research on more accountable, democratic, and humane alternatives to the modern economic model of the Internet that has evolved around the commodification of personal information.

This document was drafted by the representatives of Argentina, Azerbaijan, Belarus, Belgium, Benin, Brazil, Cameroon, France, Georgia, Ghana, Hungary, India, Italy, Kazakhstan, Kyrgyzstan, Latvia, Moldova, Morocco, New Zealand, Pakistan, Peru, Philippines, Romania, Russian Federation, Slovenia, South Africa, Spain, Sri Lanka, Turkey, Ukraine, United Kingdom, Uzbekistan and Zambia.