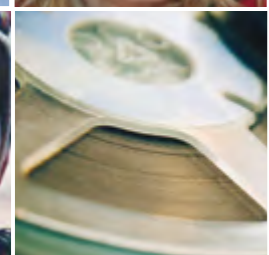
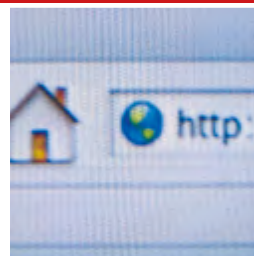


**TANGIBLE AND INTANGIBLE IMPACT  
OF INFORMATION AND COMMUNICATION  
IN THE DIGITAL AGE**  
Final Documents  
of International Conferences  
(2018–2022)



Commission of the Russian Federation for UNESCO  
Russian Committee of the UNESCO Information for All Programme  
Interregional Library Cooperation Centre

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**DOROTHY GORDON**

Chair, Intergovernmental  
Council of the UNESCO  
Information for All Programme

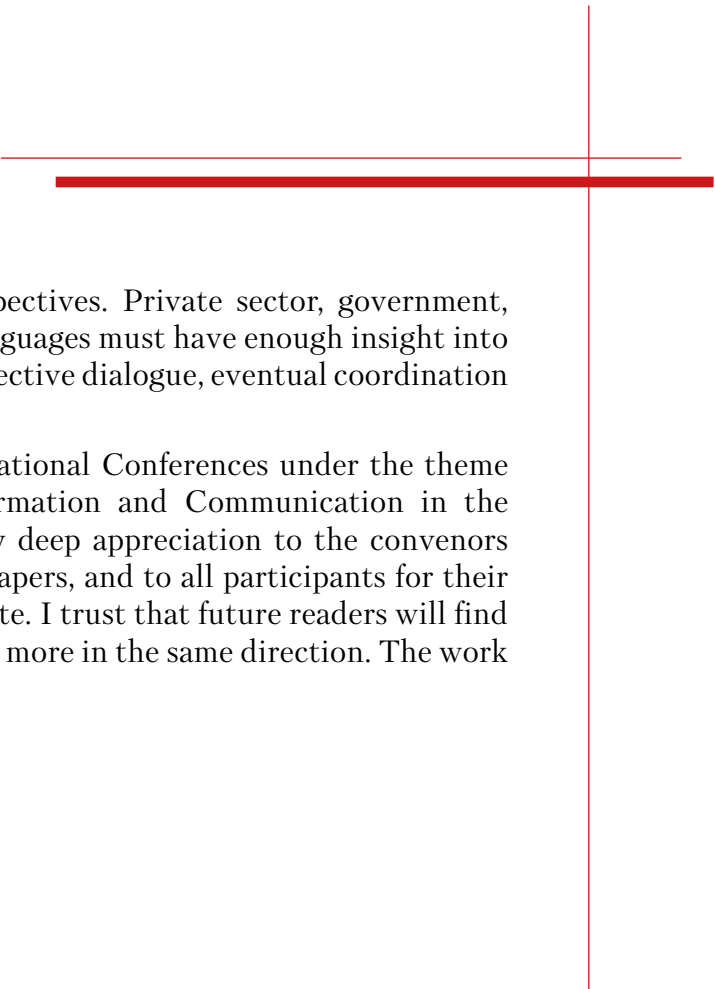
This collection of the final documents of the International Conferences (2018–2022) under the theme “Tangible and Intangible Impact of Information and Communication in the Digital Age” is a testimony to the intellect, vision and great convening power of an exceptional human-being, Evgeny Kuzmin. For over a decade, first in his capacity as IFAP Chair and subsequently as IFAP Vice-Chair and head of the Russian UNESCO IFAP committee, his thought-leadership created the strong network of academics, policy-makers, and concerned global citizens that made these conferences a success and who continue to stimulate debates around the exigencies of this theme.

Understanding the societal impact of digital technologies is central to IFAP’s mandate. The analysis of positive, negative and unintended consequences of the introduction and roll-out of digital technologies is a pre-requisite if States are to determine optimal and evidence-based policies in this area. Differential impacts between different sections and sectors of society must be researched systematically not only across university faculties but also by practitioners.

In 2018, 2019, 2021 and 2022, the convenors of these conferences, the Russian UNESCO IFAP Committee, the Interregional Library Cooperation Centre and the Government of Ugra demonstrated their support to this important dimension of the UNESCO IFAP mandate and to the (World Summit on Information Society) WSIS goals towards building inclusive and equitable knowledge societies.

This year has seen a significant increase in the general awareness and debate around digital technologies. Much of the focus is on the use of large generative models such as GPT3 and GPT4 to the neglect of other ‘frontier technologies’. The nexus between digital technology and the use of the latest techniques in cognitive neuroscience has left many concerned as to whether we retain our power to decide our future. Governance, regulatory frameworks, changes in how we train the people who design technology and its roll-out; business models, so much is being questioned.

For those of us who knew Evgeny Kuzmin, it is truly painful that we lost him at the start of this year. No doubt with a wry touch of humour, he would have observed the current furore and reminded us of the story of the elephant and the blind men. An inclusive and equitable digital enabled future can only be shaped by breaking down the silos that prevent different groups of stakeholders from



understanding each other's different perspectives. Private sector, government, academia, and citizens of all nations and languages must have enough insight into each other's concerns such as to promote effective dialogue, eventual coordination and ultimately consensus.

This is the fundamental goal of the International Conferences under the theme "Tangible and Intangible Impact of Information and Communication in the Digital Age". As IFAP Chair, I express my deep appreciation to the convenors of the conference, those who contributed papers, and to all participants for their support and contributions to IFAP's mandate. I trust that future readers will find the debates of interest and be inspired to do more in the same direction. The work must continue.

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## **UGRA DECLARATION INFORMATION AND COMMUNICATION IN THE DIGITAL AGE**

### **Final Document of the International Conference “Tangible and Intangible Impact of Information and Communication in the Digital Age”**

(Khanty-Mansiysk, Russian Federation, 4–8 June 2018)

The International conference “Tangible and Intangible Impact of Information and Communication in the Digital Age” took place in Khanty-Mansiysk, Russian Federation, on 4–8 June 2018, within the framework of UNESCO’s Information for All Programme and the X International IT Forum. It was organized by the Government of the Khanty-Mansi Autonomous Okrug – Ugra, Commission of the Russian Federation for UNESCO, UNESCO / UNESCO Information for All Programme, UNESCO Institute for Information Technologies in Education, Russian Committee of the UNESCO Information for All Programme and Interregional Library Cooperation Centre.

The interdisciplinary conference brought together about 100 participants from 40 countries – academicians and practitioners from the field of ICT and media, as well as philosophers, policy-makers, social scientists, representatives of higher educational institutions and research centres, libraries, public authorities, private sector and civil society institutions.

Conference activities included the following plenary sessions: “Expanding Digital Universe”, “Transformations of Social Communications”, “Openness or Exclusiveness in Cyberspace: Quo Vadis?”, “Digital Present: Expectations and Reality”, as well as a themed discussion “Media and Information Literacy” and two sections: “Culture and Languages in the Digital Age” and “Access to Information: Right and Equity”. A special seminar “Digital Preservation Challenges” was organized as a satellite event.

Conference participants argued on the problems, phenomena and trends of the information and communication field – both those that have come into focus in the last decade and those that are less evident, but might significantly impact the socio-cultural landscape in the nearest future. The conference was aimed to contribute to harmonizing the pace of development in the field of information, communication and related technologies and the ability of science and the society to comprehend the changing reality and thus influence the vector and nature of progress.

The conference considered modern socio-cultural processes accompanied by the widespread introduction of digital technologies and the digitisation of various spheres of life from the humanistic perspective of the UNESCO intergovernmental Information for All Programme, sharing the commitment to the principles of social justice, inclusion and non-discrimination, and the balance of rights, opportunities and responsibilities.

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### **Concluding its work, the conference adopted the following Declaration:**

Rapid and constant changes in the information and communication field have become one of the most vivid and comprehensive features of the modern era. These changes are fuelled by the penetration of information and communication technologies into all spheres of our life and by nurturing the so-called converging technology generations. The development of e-services (e-Government, e-Education, e-Health, etc.), embedded systems and devices, artificial intelligence and machine learning, the Internet of things, augmented and virtual reality, big data analytics and cloud computing, cryptocurrencies, block-chain, etc., foster the shift towards a new technological paradigm. The future brings both positive expectations of scientific and technological progress and distinctly perceived concerns and challenges, which are described and analysed by various communities – from media specialists to academics and politicians.

The speed of changes in an ever more complex world is so high that societies do not have sufficient time to interpret and thoroughly understand the current processes and trends as well as their impacts. Most studies focus on the receding reality; those trying to describe and analyse the current state-of-the-art and to forecast possible development lines and their consequences follow out-of-date models and approaches. At the same time, experts and the public have reached a relative consensus on the socio-cultural challenges coming into particular prominence:

- information overload, resulting in its devaluation, de-professionalization of journalism and loss of trust to professional media outlets;
- pervasive communications accompanied by ever more sophisticated and addictive communicative technologies;
- power and mid- and long-term effects of digital platforms, born within regulation grey areas and run by big monopolizing companies;
- dangers of dehumanization, with people gradually framed by technology, getting excluded from generating meanings and values and turning into functional supplements to communication flows;
- traditional cultural regulators of social relations and processes being displaced by automated social algorithms;
- blurring the borders between the real and the digital world, wide spread of simplified virtual mock-ups and simulacra;
- privacy being eroded by the spread of both commercial and government surveillance; personal data and digital footprint turned into goods which can be sold and resold to form the economic basis of cyberspace;
- post-truth in its heyday, with public perception shaped more by means of addressing feelings and personal opinion rather than operating real facts, with fakes, clickbaits, hypes and other tools introduced to form post-reality in the political and media culture, and furthermore to influence people to create and live in fake universes;

- artificial intelligence technologies tending to shape humanity's access to information and knowledge transaction processes.

While the convergence of digital, physical and biological environment is gaining momentum, traditional pre-digital interaction and management models are still used, which leads to a widening range of problems, in particular considering ethical and legal issues.

In this context, the reframing and promotion of competencies (skills, knowledge and attitudes) incorporated in the term “media and information literacy” and providing a safe and responsible critical use of networks and digital services, is gaining great importance. The development of such competencies is becoming indispensable.

### **The Conference elaborated the following recommendations:**

1. UNESCO Member States, relevant intergovernmental and public organizations, UN agencies and other stakeholders should reach a consensus on the preparation of a global report on sociocultural transformations accompanied and influenced by the prevalence of digital technologies. The report should be based on a holistic and interdisciplinary approach to ensure a better insight of the present and future challenges. Cooperation among ethics, social sciences, humanities and cyber scientists and developers must be activated to avoid unintentional drawbacks. In addition they must establish and support the activity of an interdisciplinary working group on cyber trends and emerging cyber technologies envisaging their potential impacts on society. This cooperation will not set limits to innovation but will promote “informed” innovation.
2. All relevant stakeholders should take steps to enable individuals to better manage the collection, storage, analysis and sharing of their personal data and digital footprint and to protect the privacy of users against intrusion, misuse and abuse by both governmental agencies and private sectors. Regulation should be elaborated on the limits of the use of personal data. Designers, developers and other stakeholders who are working with algorithms that process personal data should abide by Code of Ethics proposed by computer science and engineering societies such as The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems and ACM Principles for Algorithmic Transparency and Accountability.
3. Concerned stakeholders, specifically governments, academics, and civil society organizations as well as experts from the scientific community, librarians and teachers should contribute to the elaboration of educational and learning programmes concerning the ethical, legal, systemic, cultural and social aspects of living in a world saturated by digital communication and media. Such programmes should broadly and massively promote the empowerment and raise the competency of citizens (with a special priority towards young citizens), in particular through increasing the level of media and information literacy.



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4. Access to knowledge is a condition for informed/knowledge-based societies. Open science must thus be a priority for governments and research institutions. Their policies and action plans must ensure sustainable and linguistically more diverse open access to scholarly communication, research data and open educational resources, facilitated by digital technologies.

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This document was elaborated by the representatives of Argentina, Armenia, Brazil, Bulgaria, Burkina Faso, China, Colombia, Dominican Republic, Ecuador, Egypt, France, Georgia, Ghana, Hungary, India, Italy, Jamaica, Japan, Kazakhstan, Kyrgyzstan, Latvia, Moldova, Norway, Palestine, the Philippines, Russia, Serbia, Slovenia, South African Republic, Spain, Sri Lanka, Switzerland, Syria, USA, Uzbekistan, and Zambia.

## **UGRA RESOLUTION INFORMATION AND COMMUNICATION IN THE DIGITAL AGE**

### **Final document of the II International Conference “Tangible and Intangible Impact of Information and Communication in the Digital Age”**

(Khanty-Mansiysk, Russian Federation, 9–12 June 2019)

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.

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.

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.

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:**

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.

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

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.

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This document was elaborated 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.

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## **UGRA MEMORANDUM INFORMATION AND COMMUNICATION IN THE DIGITAL AGE**

### **Final document of the III International Conference “Tangible and Intangible Impact of Information and Communication in the Digital Age”**

(Khanty-Mansiysk, Russian Federation, 17–18 June 2021)

The Third International Conference entitled “Tangible and Intangible Impact of Information and Communication in the Digital Age” was held on June 17–18, 2021 using a hybrid of face-to-face and online format. The conference was hosted within the framework of the XII International IT Forum and the UNESCO Intergovernmental Information for All Programme (IFAP). The event followed discussions from two previous international conferences on Information and Communication in the Digital Age held in Khanty-Mansiysk. The outcome of those meetings is reflected in their final documents – the Ugra Declaration (2018) and the Ugra Resolution (2019). The 2021 conference was organized by the Russian Committee of the UNESCO Information for All Programme, the Interregional Library Cooperation Centre, the UNESCO Institute for Information Technologies in Education in cooperation with the Government of Ugra, UNESCO, the Permanent Delegation of the Russian Federation to UNESCO, the Commission of the Russian Federation for UNESCO and the International Institute for Central Asian Studies. This international interdisciplinary forum brought together more than 150 participants from 58 countries including experts in philosophy, sociology, cultural anthropology, political studies, psychology, linguistics, management, international affairs, communication and information technology, information security, education science, librarianship, archiving, museology and creative industries.

The conference was focused on socio-cultural, ethical and philosophical aspects of the impact of digital and AI technologies on both humans and societies. These technologies are shaping a new sociocultural reality. This new reality is characterized by a constantly increasing complexity of infocommunication technologies, devices and platforms and an ever greater proliferation of digital applications and products leading to widespread availability of information and services and enhanced possibilities for universal connectivity of societies, communities and individuals as well as incorporation of humans in cyber-physical systems, and further blurring of boundaries between the real (physical) and virtual worlds.

The development of technologies based on collection and processing of big data, including use of artificial intelligence-based technologies (AI), gives, on the one hand, an enormous impetus to scientific progress and has contributed significantly to innovations that have raised the efficiency of human activities through the emergence of personalized services and other software modalities. On the other

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hand, these technologies usher in new radical changes in traditional structures and agreed practices and systems of functioning of human societies in general and the lives of individuals in particular. With the widespread and commonly used term “digital revolution” now accepted largely uncritically, the development of these technologies foreshadows the transition to a new world order within which principles and norms of economic development and social relationships will dominate that are completely different from traditional ones. Transformations are taking place at the level of institutions, such as government and business, and in specific areas of life, for instance in medicine, education, and scientific endeavour. These transformations also bring such research and experimentation that can have unintended consequences, in particular those affecting and modifying the very essence of human existence.

Rapid technological development and the thrilling new opportunities that are provided by the exploitation of its unlimited capacities, while offering solutions to complex challenges in various domains, are also accompanied by the exacerbation of existing problems such as inequality of income distribution, rights and opportunities, prejudice, as well as the emergence of new problems in the political, economic and social spheres. Being at the very heart of the process of changes, modern citizens face certain difficulties not only in comprehending these changes but even in capturing them.

**Conference participants highlighted the following issues:**

1. Digital platforms that were initially created to accomplish a certain task or to solve a problem, e.g., developing a search engine or a social network, facilitating efficient exchange of information for raising the efficiency of commercial activities, have evolved into giant digital monopolies, annexing not only cyberspace, but also entire industries. Moving from digital platforms to whole digital ecosystems, these behemoths are swallowing up physical world communities, meddling in government services, reshaping public and private economic activities and disrupting traditional business models and social responsibility systems.
2. The business model promoted by digital companies is based on the permanent collection of personal data, often without informed consent. Such collection of data has become a source of extraordinary profits as well as a tool for controlling and managing the attitudes and behaviour of individuals and communities. Covert collection, retention, management and manipulation of personal data is a universal practice that is essential for all businesses operating through digital devices and platforms within a competitive environment. This business model, generated and promoted since the 2000s by such transnational corporations as Amazon, Google and Facebook, has resulted in an economic imperative known as “surveillance capitalism” that is defining the parameters and driving the direction of economic and social development. The guiding principle is to commercialise and commodify personal data that is necessary for a majority of citizens to participate in the digital space. This practice is now mandatory to access goods and social services including education, health and

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welfare. Personal data is collected and accumulated in a surreptitious manner with a superficial consent allowing the infinite use of an individual's private data by these companies without any compensation: 1) to serve as the basis of direct advertising to users; 2) to collect, collate and/or sell the private data to third party commercial users; and 3) to expand the user base with incentives. This surveillance capitalism remained unperceived for a long time and the fact that it contradicts citizens' rights and freedoms, enshrined in the Universal Declaration of Human Rights and in the constitutions of most countries of the world, was outside the focus of attention.

3. Accompanying the current process of historical development, there has been a manifest shift in the vision of the importance of information, communication and knowledge at the individual and societal level, particularly with reference to building a just future. Whereas knowledge and information have always been considered essential development resources allowing both individual and collective decision-making, nowadays humans themselves are becoming the resource for creating digital data arrays. Earlier limitations of access to information as well as exclusion from the means of communication have given way to a state of information and communication overload putting new constraints on the psychological and intellectual status and well-being of individuals.
4. National states and government agencies are also adopting models of governance that are based on mass collection and covert and perpetual automatic processing of big data. The efficiency of surveillance capitalism, and especially its legitimation by sovereign states within the framework of the development of digital economy, lead to the introduction of rigid algorithm-driven digital governments, to mainstreaming security as a basic value, and to the 'normalization' of universal surveillance and covert control, both on the Internet and in the physical world.
5. As a consequence of mutually beneficial reinforcement of collaborations between state systems and digital corporations, data is easily priced, exchanged, combined and compared, and thus commodified by them for a gain or profit.
6. The Internet and, in a more extensive and pervasive manner, digital platforms are transforming more and more into instruments for an illicit, massive and unlimited invasion into the minds of citizens, and thus their behaviour in a civil society, leading – in certain circumstances – to various types of discrimination, attempts to introduce changes to power structures and public policy to the benefit of certain stakeholders.
7. Governments around the world – independently of their ideology and putative values – are trying to implement systems of social credit and similar model of social influence, promoted in particular by the key digital platforms. In the context of the COVID-19 pandemic, new forms of control over citizens are tested and introduced, based mainly on the use of digital technologies, that



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might enhance political and social inequalities and discrimination of citizens, limit civic freedoms and lead to other unpredictable ominous effects.

8. The creators of the global Tech and social media corporations were given financial benefits and privileges when they were founded in the United States, and today they receive superprofits under the guise of managing information sharing and communication platforms for the benefit of society. As these corporations have expanded and become dominant global actors, they have moved away from their original ideas of being neutral in creating open and free spaces of communication, and have ultimately become powerful and influential socio-political players ('Masters of the Universe'). At the same time, they play duplicitous games maintaining that their values and principles are intact and need to be protected by gate-keeping information and communication looking to the common good.
9. Digital platforms and social media are also progressively compromising on the positive effects of free exchange of information by powerful means of re-directing the flow and access of data and information, which then encloses more and more individuals in filter bubbles and media echo chambers. Freedom of expression and information is giving way to a progressive narrowing of the allowable discourse in digital space, as these platforms become the means not so much of communication, informing or educating, but of priming and mobilising audiences. This situation exacerbates the atomization of society and boosts new processes of isolation, social exclusion and radicalization, thus provoking discord between people, social groups and even between states. A massive decrease in the level of critical thinking is accompanied by the emergence of waves of information epidemics (infodemics) of national and global scale. Social media and the Internet have thus become the new frontline in, and often a source of various social, political, economic conflicts at the local, regional and global levels.
10. Processes of universal digitization proceed unchecked and inevitably affect the relationship between citizens and institutions. The automation of decision-making processes increases their opacity, often distorting the initial goals, with a consequence that citizens lose control over social, economic, scientific and political agendas. This implies an erosion of the legal foundations of society and its democratic structures, and the reinforcement of unrepresentative and extra-legal forms of government. When verification of decisions and appeals are rendered difficult or even impossible, the lack of public control of the authorities is exacerbated, fostering a decline of trust in institutions and increasing protest potential in society.
11. These changes are seen to be accompanied by development of a new morality. It is characterized by a simultaneous presence of seemingly opposite vectors: an increase in the value of human life (as evidenced, for example, by the extraordinary security measures in connection with the spread of

COVID-19), and at the same time the subjection of citizens to public-private social engineering with technologies of total supervision and control, that can be characterized as dehumanizing. The COVID-19 pandemic has exposed and accelerated these processes.

**Based on the foregoing and taking into account the provisions of the Ugra Declaration (2018) and the Ugra Resolution (2019) on Information and Communication in the Digital Age, the Conference calls on all stakeholders to make efforts in the following areas and to act according to the following Recommendations:**

1. Develop interdisciplinary and transdisciplinary research activities, according to the principles and guidelines of science-policy interaction (UN Global Sustainable Development Report, 2015). The aim is to promote a correction of the negative effects of the digital revolution on the lives of people and communities and their cultural and creative systems.
2. Push for a Universal Digital Code of Ethics faced with the risk of fundamental modification of human beings, that is to a) define the limits of the digital revolution, with respect to the values and principles of reference, b) promote digitization processes in a direction of real and fair political, economic, social and cultural progress of humanity, and c) operate as a fundamental tool for the development of coherent regulatory systems.
3. Disseminate study programmes in schools and universities to promote among young people critical awareness and a capacity for adequate evaluation of the multiple, complex and ambivalent aspects of the digital revolution in progress, as well as the nature and purpose of the main public and private, national and international stakeholders. In parallel, involving the most representative civil society organizations in civic education initiatives aimed at spreading awareness and practice among citizens of the value of active participation in plans and programmes for the implementation of digital technologies in production activities and public and private services.
4. Support states in cooperation initiated and implemented at the international level for identifying inclusive, multi-level governance systems suitable for directing the ongoing processes of digital transformation towards a fair balance between the promotion of civic, public and private goals, tasks and interests.
5. Promote actions aimed at reining in and regulating “surveillance capitalism” and sweeping digitalisation:
  - Limiting profitability of its business model through a) economic and tax mechanisms so that its marginality does not exceed the average for the economy; b) counteracting monopolization, including in high-tech industries; c) fostering research and/or initiatives for alternative Internet business models, that are not based on advertisements and/ or the use of

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- private data; d) increasing awareness of platform users concerning the fact that the current business model is based on (ab)using their private data; and e) supporting EU Initiatives of General Data Protection Regulation (GDPR), with contributions from civil society and experts to foster the evolution towards a more self-determined control of personal data by platform users.
- Auditing online platforms' recommendation services and moderation systems in order to ensure that they do not infringe upon freedom of expression and information.
  - Developing and applying rules and principles of social sustainability for digital technology solutions that affect people's life, health and economic conditions, based on constitutional rights and freedoms and ensuring the quality and efficiency of formal and informal regulation of digitally driven transformation processes.
  - Providing for the preservation or creation of analogue alternatives to digital public services and products, for the benefit of the supporters of "digital resistance" movements.
6. Ensure transparency and accountability in the collection and use of personal and behavioural data, in particular through:
- Conducting wide public discussions of government digital initiatives, attended by all stakeholders including the representatives of civil society organizations, especially in the fields of health services and medicine, social welfare systems, cultural ecosystems, education, public order and security, including dissemination of discussion materials in the public domain.
  - Conducting independent, regular, fully-fledged and responsible socio-humanitarian assessment of digitalization in public administration, to balance considerations of efficiency with the aforementioned ideas of sustainable digital transformations including wide dissemination of the results of such assessment.
  - Creating and using personal data management systems, thus providing the ability for each person to independently determine, open and limit the level of access to their different kinds of private data. In order to strengthen these autonomous capacities for individuals, a system of laws and regulations should be promoted and independent supervisory authorities should be organized to limit the inequitable system of protections and privileges, enjoyed currently by digital platforms and social media and, more generally, by transnational digital corporations, via a) spreading awareness and adoption of socio-humanitarian assessment practices of the digitization process, b) incentivising appropriate media and digital literacy initiatives, and c) promoting a real, efficient human-centred approach in public policies.

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**UGRA COMMUNIQUE**  
**TANGIBLE AND INTANGIBLE IMPACT OF INFORMATION**  
**AND COMMUNICATION IN THE DIGITAL AGE**

**Final Document of the IV International Conference**  
**“Tangible and Intangible Impact of Information and**  
**Communication in the Digital Age”**

(Khanty-Mansiysk, Russian Federation, 8–10 June 2022)

The IV International Conference on Tangible and Intangible Impact of Information and Communication in the Digital Age took place in Khanty-Mansiysk, Russian Federation, within the XIII International IT Forum with BRICS and SCO participation and UNESCO Information for All Programme. The event was organised by the Russian UNESCO IFAP Committee and its working body, Interregional Library Cooperation Centre, with the support of the Government of the Khanty-Mansi Autonomous Area – Ugra, Russian Ministry of Digital Development, Communications and Mass Media, and the Commission of the Russian Federation for UNESCO. The conference gathered about 150 representatives of government authorities and institutions of science, education, culture, information and communication, experts in philosophy, cultural anthropology, sociology, political science, psychology, sociolinguistics, management, international relations, information technology, information security, teacher education, as well as politicians, diplomats, journalists from 35 countries.

The conference provided a platform to follow up on the discussions initiated within three previous international conferences on the same topic and reflected in their final documents – the Ugra Declaration (2018), the Ugra Resolution (2019) and the Ugra Memorandum (2021). The IV Conference focused on socio-cultural, ethical and philosophical dimensions of the impact of information and communication technologies, including artificial intelligence, on individuals and society. Conference contributions were based on the premise that these technologies are shaping a new sociocultural environment, characterised by ever-increasing complexity of technologies, devices and platforms and their large-scale distribution, leading, in particular, to an increase in the volume of transmitted information, disinformation and information noise, expanding availability of services and opportunities for establishing links between individuals, groups and communities, inclusion of humans in cyber-physical systems and blurring of boundaries between physical and virtual worlds.

Dramatic events in Ukraine, aggravation of the crisis of the existing world order and exacerbation and multiplication of global challenges influenced conference discussions and the mindset of their participants. However, it was agreed that the conference should continue to serve as a platform for open, honest and mutually respectful dialogue and cooperation, even in the period of acute contradictions.

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**Conference participants agreed on the relevance of key socio-cultural aspects of the digital transformation processes described in the Ugra Memorandum «Information and Communication in the Digital Age» (2021):**


1. Rampant development of technologies is accompanied by the transition to a new political, social and economic situation in the world within which principles and norms of economic development and socio-cultural relationships will dominate that are completely different from pre-digital ones. Transformations are taking place both at the level of key institutions, such as government and business, and in specific areas of human activity, for instance in medicine, education, culture and science. Without proper critical understanding, such changes may lead to unforeseen consequences, affecting and modifying the very essence of human existence, starting with ethical principles and basic cultural references. Being at the very heart of the process of changes, it is difficult not only to fully comprehend, analyse and evaluate these changes but even to capture them and evaluate future outcomes.
2. Digital private monopolies, often grown up in an unregulated domain, are taking over cyberspace, as well as entire sectors of the material world propelling changes in the functionality of governments and social responsibility systems, in public and private economic activities.
3. Covert collection, retention, management and manipulation of personal data have become a source of extraordinary profits for digital companies and government agencies, as well as a tool for controlling and managing the attitudes, behavior and psychology of individuals and communities. The fact that this situation contradicts citizens' rights and freedoms, enshrined in the Universal Declaration of Human Rights and in the constitutions of most countries of the world, has been outside the focus of attention in discussions up to this time.
4. The introduction of rigid algorithm-driven control systems, including digital governments, the expansion and strengthening of universal surveillance and covert control, their acceptance by society and gradual tacit validation as a moral and even a legal norm upon the plausible pretext of ensuring security, as well as attempts to introduce social manipulation models intensify the opacity of social decision-making processes, the spread of non-representative and extra-legal forms of governance and the erosion of the legal framework of society and its structures. These implications enhance a dangerous decline of trust in governments and increasing protest potential in societies.
5. Algorithms of digital platforms and social media trigger individuals' containment in filter bubbles and media echo chambers, exacerbating the atomisation of society and boosting the processes of isolation, social exclusion and radicalisation among individuals, social groups and even states. A massive decrease in the level of critical thinking is accompanied by waves of national and global-scale information epidemics (infodemics) and the increasing manifestations of public-private social engineering with technologies of total supervision and control.

### **Conference participants express concern over the following trends:**

6. The Internet of Things and the Internet of Data have been supplemented with the Internet of Behaviours which is facilitated by the mass adoption of face recognition, location analysis and big data technologies, as well as more noticeable efforts to develop implantable wearable devices and brain-machine interfaces. Such advances in technology expand the area in which decisions related to the activities of individuals are made without their participation, and people might significantly lose control over their own lives.
7. On the one hand, advanced digital technologies have given an enormous impetus to scientific progress and contributed significantly to innovations and the emergence of new opportunities in various fields. On the other hand, the use of artificial intelligence technologies in surveillance systems reinforces autocratic tendencies in government activities. Authorities, in turn, shape an increased demand for technology and stimulate the ever more rapid development of technological innovation, while public control over these processes and their support by relevant social and humanitarian scientific research is weakened or completely lost.
8. The implementation of the idea of a global digital world as a Metaverse, allowing not only to reproduce objects, actors, phenomena and interactions of the real world, but also to expand both their form and content, gives rise to a new social phenomenon that requires a comprehensive understanding of the risk of exacerbation and multiplication of sociocultural problems and negative practices, the need to ensure cybersecurity, confidentiality and privacy, psychological and physical health, ethics and cross-border legal regulation.
9. Since the actual trend is to transfer as many “traditional” processes and documents as possible to the digital domain, in the foreseeable future government procedures, citizens’ documents and data will flow in the format of bit streams. To this date, under the pressure of critical events, this process does not always ensure security requirements. This is a burning issue, since after this transfer is completed the major part of our life will depend on algorithms and the Internet of Things.

**In view of the foregoing, the Conference calls on all interested parties to contribute to the implementation of the Ugra Declaration (2018), Ugra Resolution (2019) and Ugra Memorandum (2021), adopted under the general title «Information and Communication in the Digital Age». Particular attention should be paid to the following action lines:**

- Development of interdisciplinary and transdisciplinary research activities and debates, aimed at identifying, studying, comprehending and minimising negative impacts of digital revolution on the lives of individuals and communities, with a focus on socio-cultural implications of the introduction of automated decision-making systems, the limits of their control and balance of interests of governments, businesses, society and individuals.

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- Support and development of programmes aimed at improving the quality of secondary and higher education, strengthening complex perception of reality and rational critical thinking among representatives of all social strata and groups.
  - Promotion and facilitation of international cooperation in order to shape inclusive multilevel governance systems that recognise pluralism of cultural and human values and move towards the governance of digital technologies as a universal project to ensure a fair balance of goals, objectives and interests of citizens, the state and the private sector, including the voices of “digital resistance”, as well as to propagate an effective, ethical and truly human-centred approach in public policy.
  - Support for the initiatives of certain states aimed at defining the Digital Codes of Ethics and, therefore, at their approval and translation into legislature and regulations capable of providing shared, valid and effective elements to guide digital innovation processes, as an opportunity and tools for the real progress of humanity.

