

People First: Humanism is Back

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Abstract: Starting from the description of the actual scenario this paper considers both benefits and drawbacks related to the digital transition outlining both present and near future potential impacts on society. This introduces the growing interest in reshaping the digital landscape, as we know it now, into a more human centred and ethics domain. A potential benefit is evident in the case of upcoming or recently started digital transformation process, ensuring the opportunity to deploy a human centred environment instead of a cyber centric web of procedures and duties. The concept and the objectives of a research project that puts humans and their shared values as key reference point are described. To shape this approach a strong interdisciplinary approach is required: SSH, STEM, Biz, Cyber, Phycological skills and more. Applied methodology and the main steps are described with the potential outcomes and future steps.

Keywords: Digital Humanism, Digital Transformation, Humanities, Ethics, Western World

1. Preamble

It is not under question the added value and the achievements due to digital technology (access, societal, intellectual, etc.); we look to cyber technology from the humanities side, considering the mid- and long-term impact on society. The main objective of this paper is to analyse the current and foreseeable mid- and long-term impacts and potential drawbacks or unwanted side effects of digital transformation process with reference to social, economic, and environmental aspects possibly suggesting mitigation strategies keeping humans in the centre. Why can this specific topic be interesting in the Global South that is in general more “human centred” than the western world? Because if they will join the digital transformation process this process can be shaped not forgetting the human side, including cultural models and local behaviour.

The paper will set the scene, illustrated benefits and potential drawbacks, the required DT “human” tuning, vision, approach and future developments.

2. Setting the scene

The interest for a human centred approach to digital technology dates back a long time, in the digital scale of time, some steps include the study on interaction design (SIGCHI) or the report to the G7 in 2001 “On Culture in a world-wide information society” [3] together with the active contribution to UNESCO IFAP, IGF and WSIS [4] working groups dealing with cyber ethics and digital technology impacts on society.

The omnipresent digital technology was considered one of the building blocks of a “new global order”. Hence, one of the main vectors of this change was associated to the so-called Digital transformation (DT). The incredibly rapid success of the “Internet”, mainly due to e-commerce, information services, and social media, gave a boost to the globalization trend, a shift toward uniformity, jeopardizing diversities, broadcasting the vision of cyber majors [2 – UNESCO-IFAP- 2023]. Social media, global content providers

are “training” young generations offering a *pensée unique* approach¹, this will impact future generations and their cultural identity.

Among the key actors promoting a humanistic reshaping of the digital world we find the Technical University of Vienna, and its team Digital Humanism stating that “Technology profoundly shapes the world we live in, and the stakes are high. Digital Humanism deals with digital technology development and policies based on human rights, democracy, inclusion, and diversity.” As Klaus Schwab wrote in 2016 in the preface of his book [1] *“The world is at a crossroads ... “a paradigm shift driven by a convergence of cyber, nano, and bio technologies. Since the ubiquitous rise of cyber technology driven by the Internet and later boosted by the pandemic, innovation and development become progressively less humans centred. The “cyber” aspect currently exerts the most profound influence on society, affecting privacy, freedom, labour, security, behaviour, and beyond. That presents both unprecedented opportunities and challenges. Shoshana Zuboff’s “The Age of Surveillance Capitalism” [2] highlights several concerning aspects of digital technologies. While the digital world promises freedom and innovation, we now face visible drawbacks such as the monopolization of information spaces, proliferation of misinformation, concentration of power among online platforms, escalating cybersecurity threats, privacy infringements, market disparities, and the commodification of human experience for commercial exploitation. Ranjit Makkuni, former chief researcher at Xerox PARC actually Director, Sacred World Design Laboratory wrote “The Betrayed IT Revolution” stating that in the 1980s “computational tools were envisioned as a tool for creativity and leisure Nearly 50 years later, that vision had become a nightmare, with deep impacts on the society”.*

Recently, on the World Economic Forum 2024, Jeremy Jurgens ², foresaw the possibility a global cyber-attack that will take us back to the stone age. Of course, even this message might be fake news.

3. Benefits and Potential Drawbacks

Digital transformation is having and will have potential desirable impacts on society, such as benefits for health, work, learning, culture or leisure activities, etc., but, at the same time, it is relevant to warn about several risks, potential drawbacks and challenges, such as monopolization of the information space, increasing levels of fake news and disinformation, strong power of few online platforms and key players, cyber threats and crimes, privacy breaches and potential top down control, strong market disparities, sustainability and green transition issues. Major part of such concerns is already “on stage” in countries that are leading digital transformation eliciting relevant concerns in citizens. These concerns are particularly useful to adjust the path of digital transformation (DT) while this just started or is ongoing minimising potential harms depicted in the present document. This improvement is particularly useful if the country just started or is going to start DT as in part of the African continent and the so-called Global South.

The rapid adoption of digital procedures and tools over the past few decades has fundamentally reshaped citizens' activities, ushering in the era of *digital transformation*” [11]. This process profoundly impacted society, accelerating globalization trends and potentially threatening cultural diversity and identities. As a first impression the whole cyber environment will ease everyday life and improve security but on the other side the

¹ *pensée unique* based on a single cultural model

² “Geopolitical instability makes a catastrophic cyber event likely in the next two years”: WEF Managing Director Jeremy Jurgens on the Global Cybersecurity Outlook Report 2023.

alleged total dependence from the cyber domain, intrinsically fragile³, represents a significant weakness blending with the still widespread lack of digital literacy and cybersecurity awareness among citizens. At the same time globalisation and the economic model carried out in the recent past shows its limits [5]. Nowadays more often we consider de-globalisation [6] as a scenario and the re-discover of local “values” and “identities” [7].

We are reshaping our “world” based on cyber technology, government, procedures, documents, production, supply chains, general services and more they all are based and rely on cyber technology and platforms. Platforms are mainly directly or indirectly private, and the key ones are concentrated in few countries creating a kind of oligarchy. The “control buttons” of our daily life are often outside the control of our nation state. The double nature of “cyber”, many times it contributes to improve resilience but, because of its pervasive attitude, it can be the target for attacks and generate the “perfect storm”. In the “analogue” world we had different pipelines and “channels” to perform, thanks to different tools and means, our activities, in the cyber world the whole “system” depends on a single “bottleneck”: cyber technology. This single pillar represents a significant risk both in case of malfunction or hackers’ attack and in case of top-down decision to switch off [4]. The latter aspect is often a key risk in the Global South, sometimes subject to restrictions. A plan B in such a situation, if not present, will require long time to be implemented.

The recent pandemic boosted the digital transition, an increasing number of “digitally divided” citizens forced to “go digital” generated a significant impact on cybersecurity. We are surrounded by “critical infrastructures” managed by cyber components that, in case of attacks, may create mayor or minor impact on our daily life. This aspect it is not globally relevant nowadays in some countries but already impacts some critical services and infrastructures such as health and basic assets provision.

On the social side western citizens are wrapped in their own personal cyber-sphere in a kind of symbiotic relation. They experience the world thanks to a cyber device mediated approach; the “new reality” is the one delivered by devices. The cyber-loneliness, one of the foreseeable risks is a kind of addiction to this “parallel life” training users to shift from Real- to Meta-life blurring the border between them.

Furthermore, the rapid implementation of Artificial Intelligence (AI) poses potential ethical concerns, apart from potential bias, deep fakes and more, will citizens, for instance, solve serious ethical dilemmas simply referring to an AI proxy asking how to behave and feel released from a personal ethical analysis and related responsibilities. Generative AI is usually fed by western content and as a result provides “western” outcomes, in midterm, this will minoritise the outcome generated by other “culture” as it already happened in the field of minoritised languages. Once again, this aspect will impact the richness of cultural diversities especially in the Global South composed by most of the different culture. Do we need to create “local” generative AI platforms to ensure cultural diversity? If this will be the perspective how many local platforms must be created considering the incredible number of cultural sources in the Global South?

In recent years, philosophers and humanists have increasingly engaged with computer scientists and innovators to grapple with the ethical implications of technological advancements in areas such as autonomous vehicles, robotics, machine learning, and artificial intelligence. These emerging technological trends may pose significant ethical [8] problems to innovation even if we consider the different cultural and ethical models around the world.

Moreover, the environmental impact of digital technologies—including energy consumption from data centres and blockchain operations, as well as electronic waste from

³ In the “analogue” world we had different pipelines and “channels” to perform, thanks to different tools and means, our activities, in the cyber world the whole activity depends on a single “bottleneck”: cyber technology. This pillar is quite fragile and subject to attacks or suitable for top-down discrimination.

rapid device turnover—raises questions about the sustainability and resilience of our current technological trajectory. Consequently, can cyber technology be considered green and resilient [9]? Who will “pay” for this surplus of energy and waste?

4. Digital Humanism: the tuning of the reset

“While digital technologies bring strong advantages coming along with a promise of freedom and innovation, negative aspects have also become visible in the last years. These include the monopolization of the information space, increasing levels of fake news and disinformation, strong power of online platforms, cyber threats and crimes, privacy breaches, strong market disparities as well as an economic order that claims human experience as free raw material for commercial practices of extraction, prediction and sales“ [2].

Digital transformation is a complex process shaped by the interplay of different capabilities. To understand the implications of decisions and guide them, different approaches can be considered:

Human-centred design. This approach involves designing digital solutions that are based on the expectations, needs, wants, and limitations of the end-users at each stage of the design process. It emphasizes involving users in the design process, understanding their perspectives, and iterating based on their feedback. This approach could be used to ensure that digital solutions are designed to reinforce digital humanism and not undermine it.

Multi-stakeholder approach. This approach, positively experienced on WSIS, involves engaging a diverse range of stakeholders, including ICT experts, ethnologists, sociologists, and experts in fundamental rights, in the development and implementation of digital solutions. This approach could be used to ensure that digital solutions are developed in a cross-disciplinary and collaborative manner and considering a broad range of perspectives.

Ethical frameworks. This approach involves using ethical frameworks⁴ to guide the development and implementation of digital solutions. This approach could be used to ensure that digital solutions are developed in a way that respects and promotes fundamental rights and values.

Impact assessment. This approach, a long time neglected or limited to the marketing dimension, involves assessing the potential impact of digital solutions on society, including their potential benefits and risks. This approach could be used to identify potential gaps or issues that need to be addressed to ensure that digital solutions reinforce digital humanism and do not undermine it.

Capacity building. This approach, essential in a DT scenario, involves building the capacity of digital actors, such as data scientists, start-ups, and investors, to develop digital solutions that promote digital humanism. This approach could be used to develop training and education programs, as well as resources and tools, to support the uptake of best practices.

No single approach can bring about the expected benefits and mitigate or prevent risks. A combination of approaches is necessary.

5. Vision and Approach

The current vision aims to embed ethical, inclusive innovation into the technological landscape. By bringing together stakeholders from information communication technologies (ICT), science technology mathematics (STEM), industry/business, humanities, and social sciences, it aims to tackle the diverse societal impacts of digital transformations. This interdisciplinary collaboration ensures that proposed technological advancements are accessible, made transparent and beneficial, reducing inequalities and

⁴ such as the European Union's Charter of Fundamental Rights.

promoting inclusivity for all societal groups. At the heart of this approach is the empowerment of end-users and workers as “human beings”, actively involving them in the development lifecycle of technologies, fostering a participatory design process. This approach not only enhances the relevance and adoption of these technologies but also ensures that they align with real-world needs and ethical standards. Through this engagement, it cultivates a sense of transparency and ownership among providers and users, which is crucial for the widespread acceptance and success of technological solutions. The commitment also extends to fostering social innovation, particularly in critical sectors such as healthcare, mobility, and public administration, which are vital in the upcoming digital domain. It aims to create frameworks and tools that encourage innovation, ensuring that it results in practical improvements in everyday life while adhering to ethical practices.

The approach promotes innovation that is both technologically advanced and socially acceptable and ensures that this innovation aligns with the values of inclusivity data access and fairness. It focuses on preparing society for upcoming transitions by enhancing skills and competencies that encourage adaptability and resilience among citizens. In addition, it addresses the risks that come with digital transformations, such as for instance, digital gaps, skills mismatches, top-down control, and security vulnerabilities. Targeted interventions are designed to effectively mitigate these risks, ensuring a safe and fair digital future. It achieves this by developing transparent guidelines, information on ownership and authors rights and best practices for the ethical deployment of technology, prioritizing the respect of individual privacy and user rights and societal values.

6. Hard to achieve but still feasible

At the heart of the methodology is the establishment of an Interdisciplinary Working Group (IWG) that brings together experts from various fields, including ICT, STEM, HSS, Biz/Econ and the whole wealth of Humanities. The next step will be to activate the interdisciplinary working group mapping and analysing of the state of art of digital humanism as it is conceived in Europe and in other countries to capture the common basis. Each expert will start from his/her own knowledge and understanding of the relation between the digital world and humanism, we will not start the debate from a “pre-casted” approach to the topics generating the bandwagon effect, we would like to “keep the door open” to different “culture” and standpoints and out of the box thinking.

This group is responsible for guiding the activities towards innovative solutions that are both technologically advanced, ethical, transparent and socially responsible. Keeping in mind the potentially different approaches and stand points due to different cultural identities. By incorporating diverse perspectives, the IWG ensures that provided solutions are comprehensive and address the multifaceted challenges of digital transformation.

The methodology can be summarised as follows:

Mapping and analysis of the state of digital humanism approaches world-wide. This shall provide a comprehensive overview of digital humanism, including its conceptual foundations, current practices, challenges, and opportunities. This activity aims to establish a solid understanding of the field, analyse case studies, and develop methodologies for promoting human-centred digital transformation across various sectors and contexts.

The next step is a cross-disciplinary collaboration in the field of digital humanism, which aims to establish an international network of digital humanism researchers, practitioners, and experts, who will collaboratively analyse, deploy, and disseminate key principles of human-centred digital transformation. It will map and network digital humanism research, forming an extended network and a core expert group. These experts will analyse case studies, define the principles for human-centred digital transformation, and implement them in living labs. A comprehensive map and database will be created to identify ongoing research initiatives and key players in the field of digital humanism.

Concurrently, a set of guidelines and best practices will be developed for integrating digital humanism principles into various sectors and contexts. This will be achieved through collaborative analysis of case studies and investigation frameworks. A systematic data collection process using online surveys and interviews will be conducted to gather information about ongoing research activities and key players. The results of this data collection will be merged with those achieved by previous activities to create a comprehensive and up-to-date resource for the field of digital humanism.

Once defined, the Digital Humanism guidelines the development and implementation of digital solutions can start. First actions will address data protection, privacy, informed consent, and related issues, along with the complexities of balancing open-source practices and intellectual property rights (copyright and copyleft) in contemporary research and practice, by delving into critical data governance and ethics issues and examining existing research and practice, to enhance guidelines for data protection, privacy, informed consent, and related matters. This set of activities will focus on ethical principles, considering both procedural ethics and ethics in practice. These principles will be connected to the practical challenges of digital humanism guidelines. To ensure a tight connection between digital humanism and evolving digital technologies, an annual symposium will be foreseen fostering collaboration and knowledge exchange, while policy guidelines will provide actionable recommendations for to ensure the integration of digital humanism principles in digital transformation initiatives.

The awareness and capacity building of digital actors seeks to develop a robust monitoring and evaluation framework for digital humanism initiatives. This framework will help measure the progress and impact of digital products and services aligned with digital humanism principles. By empowering stakeholders with knowledge and skills, creating innovative tools, providing targeted training, and contributing to the creation of a digital humanism platform collecting, among the others, tested templates and success stories. To complement this platform and activate the shift toward digital humanism a digital humanism mentorship and impact evaluation programme will be setup. It involves setting up structured mentorship programme that connects seasoned digital humanism experts with emerging talents. The programme will offer tailored guidance, regular progress reviews, and collaborative projects, with a comprehensive impact evaluation to measure its success in advancing digital humanism expertise and advocacy. The Mentors will be selected from the pool of participating stakeholders: Ethical technology experts in the fields of ethics, technology, and social responsibility, Human rights advocates who are passionate about protecting human rights and promoting social justice, Policymakers who are involved in shaping technology policies; Business leaders who are committed to ethical and sustainable business practices; Academics: Researchers and professors who specialise in the ethical implications of technology.

The Mentees will be selected from the pool members of the value chain: Students: Undergraduate and graduate students who are interested in pursuing careers in technology or related fields; Early-career professionals who are starting their careers in technology or related fields; Entrepreneurs who are starting their own technology businesses, Non-profit organizations who are working to promote ethical and responsible technology; Government officials who are who are involved in developing technology policies.

To support this methodology, the involved parties will adopt a flexible and adaptable project management structure to address the complexities of digital technology projects. This will prioritise stakeholder engagement, including end-users, policymakers, industry leaders, and civil society organisations, to ensure that outputs are socially viable, transparent, and widely accepted. A collaborative approach, combined with targeted training and outreach, will build capacity and promote the adoption of project's outcomes. In addition to these participatory activities, it incorporates a range of supportive measures

and analytics, including targeted training sessions, dissemination events, and KPI measured public awareness campaigns. The described activities are designed to build capacity among stakeholders, promote the widespread adoption of the project outcomes accompanied by a high reach, relevance and impact on the public discussion. The target is to achieve measurable and sustainable transformative transparent and trustworthy outcomes, creating a profound impact on technological and societal landscapes.

7. Further developments

Policy guidelines for digital humanism [10] will translate findings and recommendations into actionable policy guidelines for stakeholders and institutions. Drawing upon the results, the task will yield evidence-based policy guidelines on the critical aspects of digital transformation and will explore the benefits and challenges of digital technologies, the essential role of humans in shaping these technologies, and strategies for promoting human-centred values in digital initiatives. Through collaboration with experts from the team extended and core networks, as well as relevant stakeholders and other policy organizations will contribute to the creation of a supportive regulatory framework for successfully integrating digital humanist principles into digital transformation initiatives throughout countries.

Lastly, as a significant follow up, the development and maintenance of digital humanism online resource centre and community hub is recommended. The hub will serve as a dynamic platform for training materials, case studies, and research findings, incorporating forums and interactive features to support continuous learning and community engagement. The hub will be sustained through established partnerships and operational strategies, ensuring it remains a vital resource for ongoing collaboration and knowledge sharing in digital humanism. This continued availability will support long-term engagement and contribute to the ongoing advancement of digital humanism principles.

8. Conclusions

This rapidly evolving scenario potentially expressing a power that no other transformations had in the past, there is a concrete risk to increase the gap between the two major blocks world's population, there is a strong need for frameworks involving all actors of the digital ecosystem (governments, institutions, policy makers, business, startup developers, investors, NGOs) to integrate their work and activities in a global sustainable scenario respecting human rights.

A comprehensive and human-centred approach is essential for making digital transformation the concrete opportunity to deliver high-quality public services such as healthcare, education, and empower citizens to participate fully in the twin green and digital transition. More in general there is a need to reshape our technological landscape putting humans again in the focus. This is relevant in industrialised countries that already entered a technology centred innovation but even more relevant in countries that are now facing the digital transition process.

To mitigate risks such as monopolization of the information space, increasing levels of fake news and disinformation, strong power of online platforms, cyber threats and crimes, privacy breaches, strong market disparities, a robust framework grounded in ethical principles is imperative. The described methodology adopts a horizontal and holistic approach that combines ethical considerations with extensive stakeholder engagement to develop a collaborative framework centred on transparency and human well-being. By disseminating findings widely together with media partners, the aim is to foster a larger shared understanding of digital humanism and encourage the integration of ethical principles into digital policies and regulations than today, that will empower individuals

and organisations to shape a more equitable, trustworthy and human-centred digital future. By combining user-centric analytics and design, broad stakeholder involvement, and ethical considerations, this methodology aims to identify digital solutions that not only meet user needs but also contribute to a more equitable and sustainable future.

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References

- [1.] Klaus Schwab. "Shaping the Fourth Industrial Revolution", World Economic Forum 2016
- [2.] Zuboff Shoshana (2019), The Age of Surveillance Capitalism. The Fight for the Future at the New Frontier of Power, ISBN 978-1610395694, Public Affairs
- [3.] Ronchi Alfredo et Al. (2001), On Culture in a world-wide information society, <https://re.public.polimi.it/bitstream/11311/690095/1/Future%20OnLine%20Culture%20G-8%20report.pdf>
- [4.] Ronchi Alfredo et Al. (2023), Can cyber tech be resilient and green?, WSIS 2023 Outcome Document, <https://www.itu.int/net4/wsis/forum/2023/Agenda/Session/161>
- [5.] Imad A. Moosa, 2023, The Western Economic System, In book: The West Versus the Rest and The Myth of Western Exceptionalism, Palgrave Macmillan
- [6.] Deglobalisation: what you need to know, World Economic Forum 2023 <https://www.weforum.org/agenda/2023/01/deglobalisation-what-you-need-to-know-wef23/> and Deglobalisation? The reorganisation of global value chains in a changing world <https://www.oecd.org/publications/deglobalisation-the-reorganisation-of-global-value-chains-in-a-changing-world-b15b74fe-en.htm>, OCSE
- [7.] Risk or reality? European Central Bank – 2023 <https://www.ecb.europa.eu/press/blog/date/2023/html/ecb.blog230712~085871737a.en.ht>
- [8.] Christoph Stuckelberger, Pavan Duggal (2018), Cyber Ethics 4.0: Serving Humanity with Values, ISBN 978-88931-265-8, Globethicsnet
- [9.] Ronchi A.M., (2024), Is it All Gold that Glitters? The "New Normal", Vol 9 No 1 (2024), Communications. Media. Design journal of the Faculty of Creative Industries, HSE University.
- [10.] Ronchi A.M., (2019), e-Citizens: Toward a New Model of (Inter)active Citizenry, ISBN 978-3-030-00746-1, Springer (D)
- [11.] Ronchi Alfredo M., (2020). Digital transformation, proceedings ICCS New Delhi, Cyberlaw ISBN:978-0-385-50386-0