FOREWORD

— IRENE BLÁZQUEZ-NAVARRO

This report is an integral component of Tech4Democracy, a global initiative led by IE University in partnership with the U.S. Department of State that was incorporated into The Summit(s) for Democracy launched in 2021 by President Biden. The initiative showcased its achievements in March 2023 at the Second Summit for Democracy in Washington, DC.

Many academic institutions, think tanks, and other organizations joined this ambitious effort to harness the power of technology for social good that became a tangible reality thanks to Microsoft's strategic support.

The ultimate goal of Tech4Democracy is to engage different communities—international organizations, governments, businesses, innovators, investors, academia, and civil society as a whole —to strengthen our democracies through technological innovation and actively address the future needs of our political systems.

The first key goal of Tech4Democracy is to raise awareness about why democracy matters in an age of absolute technological disruption. A prime example is the swift deployment of OpenAI's ChatGPT, a Sputnik moment in the technological race. It is critical that we appreciate how emerging technologies have profound implications not only on prosperity, but also on the balances of power, the guiding principles of politics, the determinants of peace and security, and how we understand "humanity".

This is particularly important in an era when autocrats, nationalists, and populists around the world are gaining prominence. These groups are exploiting rapid changes brought by new technologies to undermine democratic systems and processes. As has been said by so many: Technology favors tyranny. Much has been written and discussed about how "in the coming few years either tech will destroy democracy and the social order as we know it, or politics will stamp its authority (…), [such that it is] becoming increasingly clear that technology is currently winning this battle (…)."[1] Some experts are echoing the sentiment that emerging and disruptive technologies could do more for autocracy than for democracy, as autocracies are unconstrained by "regulation with teeth" on privacy, data protection, equality, inclusion, or tech literacy. However, these experts are also making a case for how technology and AI can work to support democracy.[2]

Critical thinking about technology capabilities is all the more crucial and acquires growing relevance in social and democratic states governed by the rule of law. It is an are to be preserved and, probably in the near future, legally protected. Liberal democracies can leverage and generate citizen trust across diverse regional latitudes and work together with an empowered civil society, including academia, and an engaged private sector guided by the SDGs and ESG principles. Such technologies as AI will automatically convert unstructured information into actionable knowledge. But wisdom, as well as consciousness, will always belong to a tech-literate citizenry.

In an era of revisionism of the international liberal order and great competition for power, democracies must be able to revamp and effectively deliver to their citizens. This imperative becomes all the more critical as technology emerges as not only a distinct domain within international relations, but also one that significantly shapes a unique framework of international law and diplomatic relations. Such a framework is poised to take shape, mirroring the ongoing development of international environmental and climate law.

But "revamping democracy" remains a hollow phrase. Questions about how to modernize democracies and ensure not only "tech4democracy" but also "democracy4tech"[3] remain vital. Throughout history, democracies have consistently led in the provision of global public goods and have enhanced freedom, security, and prosperity for their citizens. Ensuring that the prevailing law accurately reflects the general will of the people is key to this success. Democracies also uphold the principle of legality that guarantees the division of powers. Public authorities' actions are subject to independent judicial control to prevent arbitrary overreach. Additionally, democracies prioritize the legal protection and effective realization of fundamental rights and freedoms.[4]How can our current democracies deliver and make progress as successful political system in a context of technological disruption?

This question informs the second main goal of the Tech4Democracy initiative: developing specific strategies to strengthen democracy through the use of technology. This approach not only embraces technological disruption, but also anticipates areas where technology can effectively enhance such democratic principles as checks and balances, respect for political rights and civil liberties, and informed debate.

Tech4Democracy aims to imbue "democracy-affirming technologies" with substance as well as actionable and enforceable qualities. This fresh concept born from the launch of the Summit for Democracy in 2021 presented a tremendous opportunity for those of us operating at the intersection of technology and policy, whether in government, private sector, entrepreneurial ventures, academia, or social media. To map the boundaries of democracy-affirming technologies for the very first time, we made the deliberate choice to launch this process within a distinctive space: entrepreneurship and innovation. This space serves as an ideal barometer for significant change trends and allows us to capture the pulse of emerging trends.

The entrepreneurship space, as beacon of change, provided valuable insights and outcomes to identify and refine the essential components of this emerging concept. In a sector teeming with talent where creatives and pioneering minds converge, technology intertwines with the pursuit of knowledge and the creation of transformative societal spaces. IE University holds the distinguished rank of fourth in the world and first in Europe by the Financial Times in the field of entrepreneurship and innovation, so it was only natural that this exercise should start there.

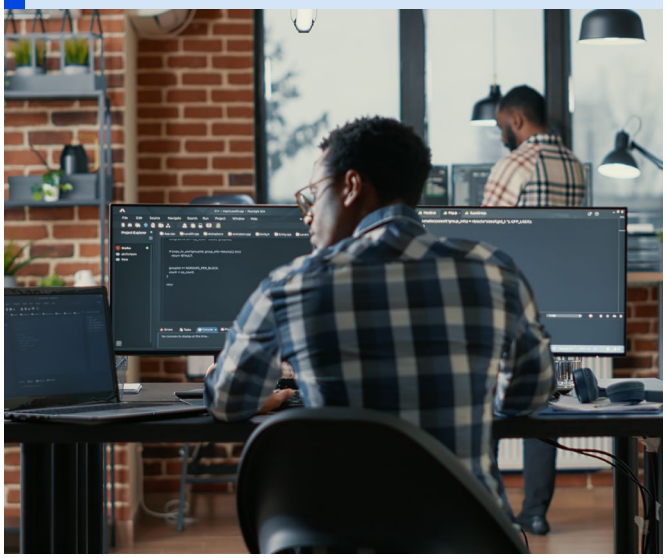
Between 2022 and 2023, Tech4Democracy conducted a Global Entrepreneurship Challenge to select promising innovators committed to fostering technology for social good through competitions (Venture Days) held on all five continents. Utilizing this sample as a foundation, we have built the initial framework for the category of democracy-affirming technologies. More than 300 startups from 66 countries participated in the Global Entrepreneurship Challenge and attended competitions in Madrid, Bogota, Stanford, Delhi, and Cape Town. Prominent academics, thinkers, and investors joined the juries. Featured keynote speakers included Jacinda Ardern, former Prime Minister of New Zealand, Samantha Power, Administrator of USAID, and Vitalik Buterin, Founder of Ethereum.

The framework is informed by the experiences of the Global Entrepreneurship Challenge and the drafting of the report itself. It is, moreover, consistent with the liberal principles of technological humanism and the principles of progress, innovation and justice that it enshrines.

A technological humanism means placing individuals and their fundamental rights and freedoms at the center and making them the unit by which both the progress driven by new technologies and the challenges they pose are measured.

To contribute to the crystallization of this category, we propose the comprehensive definition that encompasses both procedural and finalistic aspects as well as the entire life cycle of the technology, starting from its ideation phase through implementation and reaching its peak, the purpose and utilization of the technology, and the effects it generates, with particular emphasis on unintended consequences and existential risks:

> Democracy-affirming technologies are intentionally designed, developed, and deployed to actively promote and uphold a set of fundamental values, principles, and rights. These essential components encompass the right to liberty and personal autonomy, the protection of privacy and private data, the principles of inclusion and equitable access, the dissemination of truthful information, the fostering of citizens' tech critical thinking, the utilization of technology to enhance legislative bodies, participation in free elections, the separation of powers, the principle of legality, and the safeguarding the rule of law.



A scrutiny of the suitability, ability, and capacity of these technologies to promote these pillars will be required and could well follow the model of international standards developed and certified by the International Organization for Standardization.

At a crucial juncture marked by such impending regulations as the approval of significant measures like the EU AI Act the precise delineation of categories of this cross-cutting and encompassing nature remains to be determined. These categories span across the various political systems, each with their own distinct regional priorities and technology diplomacy agendas.

Were *democracy-affirming technologies* to establish a foundational framework that garners a resolute and robust international consensus and were the Tech4Democracy community to continue to flourish with the significant momentum of recent accomplishments, we could then forge ahead to progressively identify and refine the essential components of these technologies. This, in turn, would provide a valuable benchmark of best practices for all the communities mentioned in this foreword at their different levels of competence, responsibility, and commited interest.

Moreover, democracies should cooperate to establish a shared set of rules and norms pertaining to new technologies. This would lay the groundwork for a Universal Declaration of Human Technology Rights fostered under the auspices of the United Nations and upheld by a global monitoring agency.

A new plan is needed to adapt democracy to tech and vice versa: new global governance and regulation, new codes of conduct for the tech industry, new rights and obligations, and new public agencies, bodies and institutions.[5]

Efforts should be directed toward devising effective strategies to bridge the gaps created by rapid technological advancements that often outpace the finely tuned responses of democratic societies.

Simultaneously, there is a need to prioritize the application of cutting-edge, emerging, and disruptive critical technologies to key sectors that require institutional commitment and reinforcement to serving the ultimate purpose of delivering social good.

This report contributes to the two main objectives of the Tech4Democracy initiative, namely to raise awareness about why democracy matters and to develop specific strategies to strengthen democracy through the use of technology that cultivates informed situational knowledge about the importance of fostering a future for democracy in an era of technological disruption. The report also includes a summary of the continental competitions held to identify "innovators for democracy" around the world, a *Tech4Democracy Radar*. We were moved by the desire to establish synergies between awareness and avenues of action.

Both the Tech4Democracy initiative and this report date in their origin and related development to the end of 2021. They do not address head-on the "constitutional moment" that the foundation models, including generative AI, have brought about since March 2023. Another key issue in the current debate is left out of this document. I refer here to what many call *digital public infrastructures*, with an estimated eight distinct attributes for providing *global public goods*:[6] enabling SDGs, inclusive, citizen-centric, trustworthy, supportive of innovation, interoperable, resilient, and politically viable.[7] Finally, the report flags a window of opportunity to summon voices from democracies around the world in the future when heretofore in geopolitics the focus has been given to the Euro-Atlantic vision.

The report begins with an introduction by Jeremy Cliffe. Working from the premise that all technology is human, Cliffe explores the increasing divisions in democratic societies. His thesis contends that democracy-affirming technologies are surprisingly under-explored, and he cites the Tech4Democracy-Global Entrepreneurship Challenge as a model for technologies and applications that can support democratic resilience. Cliffe reminds us that there is such verve and originality out there that the challenge lies in harnessing these for the task at hand.

The backbone of this report is the Tech4Democracy Radar developed by Darío García de Viedma and Alex Roche. This radar uses the international sample from the startup ecosystem to show how the sector is using existing technologies to build applications that support democracy. The authors observe that there is no deliberate effort to create democracy-affirming technologies per se. This leads them to consider a wide range of interpretations about the potential risks and opportunities that come with the ongoing development and establishment of democracy-affirming technologies. Sixteen categories of technologies with a varying degree of sophistication (NLP, DLT, ML, quantum computing, AR, VR, etc.) are taken into account and are measured in light of the patents they are granted. García de Viedma's and Roche's essay is sure to insightful and raise further proposals.

After this introduction, the report unfolds in two sections on the governance of technology and the rights that technology has to strengthen to foster the technological humanism discussed above. It concludes with a piece on the new social contract required by this technological transformation. "Geopolitics, Governance and Diplomacy of Technology: Recent Trends" comprises contributions by Cathryn Clüver Ashbrook, Ignacio Torreblanca, Tyson Barker, Maria Paz Canales, and Trisha Ray.

Clüver opens with the big picture: technology is becoming the frontline of geopolitical competition and control. She presents us with avenues for the governance of technology that advocate, *in toto*, a "patched and 'nodalized' governance structure" instead of a wider governance structure. Subsequent contributions are a logical continuation of Clüver's portico that deepen and explore the discussion of how technological governance will be shaped in the context of accelerating rivalry between democracies and autocracies.

These are rich essays because of the diversity they represent in their regional approach and, thus, to a large extent, "principled" approach. Torreblanca, asks us an always topical question (especially for convinced pro-Europeans such as myself) in connection with Cliffe's presentation of statistics on the decline of democracy: Is the EU a force for (digital) good?

Barker continues with an essay on the EU/USA transatlantic relationship as mediated by the Trade and Technology Council (TTC), where technological issues that go beyond the "trade" label are settled; this is always the deciding body when it comes to technology because it crosses all domains, including security and defense, politics, and prosperity. The fourth summit of the TTC in Sweden, May 30-31, addressed an AI roadmap and a warning mechanism for disruptions in semiconductor supply chains.

The chapter also incorporates a regional perspective. Canales draws attention to the need to re-balance the relationship between north and south to ensure the protection of digital rights across the globe. Here, this global south refers to any stakeholder from less developed countries that are in majority, but not exclusively, located in the southern hemisphere. As Canales underlines, most of the world's inhabitants are located in those jurisdictions.

The first section ends with Trisha Ray's thesis: there is a limiting Eurocentric, Americentric perspective about what the "correct" practice of democracy should be. She discusses how digital technologies have improved government service delivery, enhanced transparency, enabled wider political participation, and provided spaces for underrepresented voices in Asia.

The second section, "Deployment and Regulation of Technology to Ensure Rights," is more closely tied to the overarching vision of technological humanism that forms the foundation of the suggested approach to the concept of democracy-affirming technologies. Contributions by Daniel Innerarity, D.J. Flynn, Marcin Kilanowski, and Peter Loewen, highlight that data, truthful information, and tech literacy are core elements that must be addressed by *democracy-affirming technologies*.

Innerarity argues that the resilience of politics as a human activity cannot be replaced by technology, though it should undoubtedly benefit from it. In this sense, Flynn addresses the role of an informed public in democratic systems and argues that its functioning depends in large part on an informed citizenry. He also discusses three recent changes in the information environment: media fragmentation and selective exposure; social and media polarization; and fake news and opinion distortion.

Two successive pieces can be read as the flipped sides of a coin. Whereas Kilanowski deals with a series of rights of the citizen, namely right to truth, right to privacy, and right to know, Lowen puts argues that public authorities need to understand the preferences of their administrators to democratically deliver. Governments should know as much about what citizens want and think as possible such that they can perform better. Lowen distinguishes between this goal and a surveillance State.

Elisabeth Braw's essay on "The Need for a New Social Contract" is included as a conclusion. As the author explains, technological transformation has created a new empowered citizen who must be heard through various platforms.

As a coda, I would like to stress that Tech4Democracy is a global initiative aimed at leveraging technology to defend and promote democracy today and for future generations. The urgency of our call to action has become clear with recent events, including the aggression against Ukraine. If democracies must revamp in an era of great power competition with autocratic regimes, then technology must play a significant role.

Technology drives the world at an unprecedented speed. This can be for the better if properly guided and governed. It is up to us to anticipate how the use of technology can serve our rights and principles and to determine the steps that need to be taken to guarantee that democracy as a political system thrives.

Time is of the essence, and we all have a crucial role to play. If we want democracy to succeed in continuing to deliver global public goods, we must align technology with the best interests of humankind and build alliances that mobilize the tech for social good and progress for geopolitical leadership.

ENDNOTES

1 Bartlett, J. (2018). The people vs tech.

2 Buchanan, B. & Imbrie, A. (2022). War, peace, and democracy in the age of artificial intelligence

3 Azhar, A. (2021). The exponential age: How accelerating technology is transforming business, politics and society.

4 Díaz, E. (1966). Estado de derecho y sociedad democrática.

5 Susskind, J. (2022). The digital republic: On freedom and democracy in the 21st century.

6 Hubbard, S., Moore, S., Rong, H., & Trivedi, A. (2023). Fostering a Digital Commons: Internet-Native Experiments For Sustainable Open-Source Software. Perspectives on Public Purpose.

7 Chakravorti, B. (2023). The case for investing in Digital Public Infrastructure. Harvard Business Review.