UNIVERSITY of HYDERABAD

# HYDERABAD DECLARATION

on

# EMERGING TECHNOLOGIES AND CHANGING DYNAMICS OF INFORMATION (ETCDI)

HYDERABAD - 2021

Adopted by ETCDI Conference

**Preamble**

The Hyderabad Declaration was adopted by the participants of the three-day online International Conference on *"Emerging Technologies and Changing Dynamic of Information [ETCDI]"* 7–9, September 2021. The conference, hosted by the University of Hyderabad (India) in the framework of the UNESCO's *Intergovernmental Information for All Program*, brought together policymakers, government officials, industry representatives, civil society activists, scientists and international experts from Argentina, Belgium, Brazil, Chile, Dominican Republic, Egypt, Estonia, France, Ghana, Hong Kong, India, Israel, Italy, Jamaica, The Netherlands, Palestine, Peru, Philippines, Russian Federation, South Africa, Spain, UAE, Uganda, UK, USA and Zambia.

Participants of the conference have extensively deliberated on the themes of the Conference in the context of United Nations (UN) Sustainable Development Goals (SDGs) 4, 16 and 17, UN charter.

**Under the Hyderabad Declaration on ETCDI:**

We *acknowledge* the dynamically changing character of information under the influence of use of emerging technologies in an uneven world. We, therefore, commit to a more meaningful and responsible use of technologies in information.

*We, the participants of this conference and the signatories to the HYDERABAD DECLARATION on ETCDI, affirm the following:*

1. All languages, including the Indigenous and numerically weaker languages have right to receive the fruits of modernization by becoming technology enabled where new modes, channels and platforms are available to them to make their noises, voices, melodies and visuals available – usually unknown to the so-called 'civilized' languages.
2. National governments, Start-Ups and NGOs should invest heavily in the enablers for accurate and reliable machine translation with dictionaries, corpora and other tools. In this context, they should develop protocols for acceptance or rejection of MT systems to constantly improve upon them.
3. Authentic data on estimates of citizens of each country connected to the Internet may be provided to estimate the digital divide which often transforms into language divide. In the developed countries where national language is more powerful language of the Internet, localization of facilities in other languages may be ensured to fully integrate them in the digital world in all dimensions (users, contents, interfaces), and promote authentic multilingualism.

4. Sensitize students to engage in intercultural communication and inculcate analytical skills as well as develop critical thinking. How existing resources and tools may be used for structurally and lexically interconnected and more resource-intensive languages should be explored.
5. Ensure creation and development of Open Multilingual Internet Platforms in order to adjust linguistic and cultural resources and software for all languages. As an extension of this activity, encourage comparative and historical study of languages based on their lexical and grammatical correspondences and other features, as well as bring the specialists together in such studies by involving scientific teams and by using Internet Platforms.
6. Support and intensify the research and development in cognitive science to create Artificial Intelligence systems with cognitive structures that ensure interaction with a person at the level of "understanding each other".
7. Draft and adopt legislations at the State/regional level to ensure that lesser-used languages (RMLs), including smaller state languages, are provided with **digital platforms required** to function in the modern era. All citizens must have access to them in their own languages because such regional or minority languages should not considered as dead/museum languages only useful for the historians. Technology should become the key for their future sustainability.
8. International treaties protecting regional or minority languages (e.g., the Council of Europe's Charter for Regional or Minority Languages) should incorporate protocols added so as to ensure the **digital platforms in the public sector services** in RMLs to bridge the widening gap between majority and minority languages. Access to online services and information in lesser-used languages, and to use pre-existing language technology may be ensured.
9. Within the framework of the International Decade of Indigenous Languages (UN framework) a multi-country cosortium may undertake large-scale Regional Surveys on the status of language technologies and resources for all languages may be undertaken.
10. Funding may be ensured by the EU to develop innovative technologies and services, as well as contributing to the **reduction of the technology gap** between European languages to start with.

11. Independent ethics committees must be established in every country or region to evaluate cultural, gender, race, and sexual orientation diversity in the language-related datasets used for artificial intelligence. Companies and system designers must actively engage in discussions regarding the impact of the digital divide and systemic prejudices to take the necessary measurement to avoid racial and gender bias, even if these incur for them additional costs in the operation of AI algorithms.
12. AI developers and the companies who operate these systems should train the "in the loop" humans how to avoid racial and gender biases in the development, data training and usage phases. There should be inter-governmentalregulators around the world to consider the complaints against companies operating biased AI algorithms. An approval mechanism for algorithms should be seriously thought about.
13. Make Wikipedia and such other comparable sites available as multilingual resources for information and knowledge, and also develop such facilities for the differently able users, maintain NO DISCRMINATION policy towards them, formulate a clearly delineated library policy for them, and create Accessibility Signs in all library sections. Many more resources and search tools may be made accessible to the challenged users.
14. Nations should strive to facilitate knowledge sharing and exchange through various international forums such as IFLA, UNESCO, and WSIS about the online environment, strike a proper balance between national security concerns and the respect for the right to privacy and freedom of expression and rebuild the trust of Internet users, which has been seriously eroded by online surveillance activities.
15. To promote ethical dimension of Information Society and i4.0, there is a need for Inclusive legislation, policy and standards, raising awareness, developing appropriate tools, robust legal framework for privacy and confidentiality, data policy protocols, expanding connectivity, promoting R&D, quality assurance in i4.0, capacity building & building awareness.
16. There is need to design artificial intelligence projects (such as a Centre for training journalists on the use of artificial intelligence in Africa) that will help journalists and media owners to embrace artificial intelligence for effective and efficient news production.

17. A technological solution created as a civil initiative in one country can be used in other countries, it is imperative to maintain independence from any political forces. For example, training of functionalities and limitations of predictive policing tools may be designed and developed for police officials irrespective of their role and department. Here, predictive policing algorithms may include aspects of local knowledge and practical insights for crime prevention and control.
18. Each state should be in a position to develop its own GEOINT system and databases on spatial data and information on the population on its own territory, in order to maintain control over one's destiny and sovereignty, and avoid all kinds of emergencies with the widest possible international cooperation in GEOINT technology.
19. These new technologies could also be used to revitalize the global partnership and achieve sustainable development by enhancing North-South, South-South and regional international cooperation both for civilians use like natural disasters and pandemics, but also to improve geopolitical stability against terrorism or international destabilizations.
20. Promote broadband access and connectivity that is genuinely affordable and of satisfactory quality in remote, rural and semi-urban areas, and in vulnerable neighborhoods with the help of alternative connectivity providers such as cooperatives, community networks, rural operators and cost-efficient technologies.
21. Strengthen innovative digital, technical and professional skills and competencies in the educational system, enterprises, and governmental organizations, and provide incentives and opportunities for continuous learning.
22. Stimulate telework, updating labor policies to defend adequate social protection, social dialogue, proper work and participation of workers in the digital economy, and establish a gender inclusive perspective in public policies for digital inclusion, guaranteeing full access and use of digital technologies for women, girls and older persons, and promoting their online participation and safety.
23. Reinforce distance education programs in national education systems, bearing in mind the use of digital tools specially designed for low-connectivity situations and to support training in digital literacy of teachers and others in Media and Information Literacy programs worldwide.

24. Promote strategies and programs on digital health, including training of health professionals, reinforcement of public and private telemedicine services, interoperability of health information and records systems, regulations to protect patient privacy, and new means of delivering health services.
25. Finalize the World Trade Organization discussions concerning rules that will govern the digital economy and share resources across countries to level the global playing field
26. Create and strengthen existing regional/local organizations so that they can work in partnership with existing global entities – for which a strategic global plan may be developed, comparable to the global campaign for the eradication of polio.
27. An independent evaluation of the risks incurred not only by individuals but also by group of individuals and by our democracy and rule of law's must be ensured. In particular, the societal and environmental impacts of ICT must never be overlooked.
28. Self-regulation and new ethics for the digital media became essential need to stop fake news.

*Article 4 - No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.*

- Recommend Member States to agree on global regulations on technologies potentiality framing humans like intelligent algorithms, sensors, connection always on, and tracing tools active 24/7 (e.g., to optimize productivity despite human mental and physical health –, to ensure availability online 24/7, to use wearable sensors to track human activities - robotisation of workers).

*Article 19 - Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.*

a) Establish independent social and information platforms, invite Member States to be responsible for ensuring several such fully independent, inclusive, relevant, and up-to-date platforms, and provide as well as improve digital media literacy campaign.
b) Invest in preservation of multilingualism and wellbeing of indigenous languages may lead to effective conflict prevention and resolution and embodies the inclusive model of multilateral diplomacy.

c) All concerned must provide general right to disconnect as well as *Continental Property Right* to withdraw personal data, so as to follow global regulations concerning privacy protection and risk analysis, nd foster a "culture of cyber security."
d) The platforms may ensure dynamic enhancement of cyber security levels and provide up to date regulation concerning big data and open data.
e) UNESCO's MIL Curriculum for Teachers must be adapted and adopted by all democratic nations and MIL must be an integral part of the national education and other related policies at all levels and across frontiers focussing on children, youth and women.
f) Traditional media need to acknowledge the importance of collaboration with the digital media, and the two may complement each other, by turning their competition into a kind of collaboration. MIL, especially its critical aspect, is not used as a form of contestation and creation of new epistemic authorities.
g) A code of ethics to regulate the practices on digital media may be urgently developed, tried out and modified at local levels in different countries.
h) Ensure that communication professionals act in favour of MIL in schools, without making teachers (whose workloads need to be reworked) responsible for this role, and ensure that private trusts, business houses and companies do not see the school as a business space for implementing their own agendas.
i) Regulation of legacy media and emerging media in the mediatization of controversies may be ensured. Increase awareness of AI technologies and the effects of their implementation for staff and ordinary users, and demonstrate the practical advantages for their owners.
j) Adopt a more holistic and planned long-term approach towards teacher training and pre-service to in-service professional development with a blended approach that takes care of content, pedagogy as well as technology, along the lines of TPACK for the success of education technology.
k) Ensure a regular review of the infrastructure provided to teachers in the context of the school – in terms of location, student population, PTR, level of ICT achieved and allocate appropriate resources to provide more computer labs, projectors, stable internet connection and multiple units of devices like K-Yan to ensure proper use of education technology.

l) Ensure 'Language Documentation' activities to explore deeper investigation of the correlation between linguistic diversity and biodiversity, especially among indigenous peoples. It will give voice to experiencers in the indigenous communities - their history, geography, and human condition through heritage language. Create trusted repositories of digital resources to support community language revitalization efforts.

m) Evaluate the websites, documents and articles shared through social media to eliminate undue sensationalization and fake news items. Establish methods and eans to verify outrageous titles and wild claims to unearth evidence behind such claims as there is a need for argument-based policy initiatives.

n) The policymakers at the government levels may see that psychological needs should be taken into account much more strictly when making policy, and that they should not be carried away by the BigTech/Science groups.

- **Be Open and Inclusive**: Every digital library should make open contents available for all sections of readers and encourage open contributions to its collection. It should integrate with National Digital Library of India for wider dissemination.

- **Honour Copyright**: Every digital library must honour the copyright of its contents and follow the "Copyright Guide for Indian Libraries", as published by National Digital Library of India, for understanding of copyright according to Indian Law.

**Conclusion**

The signatories of the Hyderabad Declaration on ETCDI will therefore make an effort to promote responsible use of technologies, including language technologies, in Information.

This document was drafted and agreed by the participants of the conference.

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