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Introduction Special Edition on Emerging Technologies and Changing Dynamics of Information (ETCDI)

Information is always central to societal development. New technologies have been changing the face of information rapidly posing challenges to accessibility, equity, preservation, etc. This raises several socio-cultural and ethical issues which are needed in designing alternative strategies and policies. Information for All Programme (IFAP) of UNESCO has been actively engaged to address issues emerging in the realm of information generation and the concerns involved therein for attaining SDGs2030.

Against this background, the India Centre for Excellence for Information Ethics, University of Hyderabad, India, has organized a Three-day Online International Conference on "Emerging Technologies and Changing Dynamics of Information" under the auspices of UNESCO-IFAP, along with partners from Brazil, Russia, and South Africa in association with Confederation of Indian Industry (CII) Telangana during 07-09 September 2021. The main focus of the Conference was to look into how new technologies impact information focusing on all six priority areas of IFAP. Experts from different countries have presented their papers at this conference and IRIE has consented to publish the first set of papers in this current volume.

Papers in this volume cover a wide range of topics dealing with multilingualism in cyberspace, disinformation, gender and racial biases in AI, cyber-policing, declining of ethics in virtual space, psychological perspectives of new technologies, problems of accessibility, and finally use of digital technology in education.

Preservation of minority languages is possible through 'high-quality machine translation' as argued by Richard Harvey. He further emphasizes that building large-scale data sets for machine translation (MT) systems will enable minority languages 'to flourish without the usual economic and social costs associated with speaking'. The papers by Daniel Primenta and Gilvan Muller de Oliveira highlight a consistent decline of English users and a raise of users of languages of Asia and the Arabic world on the internet. They opine that the more the instruments, models, and translation practices evolve, the less we need one lingua franca. This, according to them, will contribute to multilingualism and the digital economy.

For analyzing disinformation, Thaiane Moreira de Oliveira and Ana Carollina Leitao propose an analytical framework based on emotions as disinformation is consolidated by belief systems. To attain this, they suggest focussing on political, scientific, and information literacy, using narrative strategies, and holding media regulation for institutional accountability. Besides disinformation, the gender and racial biases in AI require special attention, and Galit Wellner in her paper especially emphasizes the institution of ombudsmen on datasets, and algorithms to address these issues. In this regard, she suggests cooperation between companies (soft regulation) and State (hard regulation) for building ethical algorithms to avoid all biases. Antara Vats argues that 'inaccurate algorithmic outcomes' usually lead to unlawful preventive detentions of citizens. According to her, this happens because of using 'poor quality data sets' to train algorithms.

Ethics are important in adopting new technologies, including AI, and undermining them will have adverse consequences for the users. In this regard, Alfredo M. Ronchi in his paper discussed the role of relevant platforms and the monopolization of them by some countries leading to the undermining of ethics relating to privacy, freedom of expression, and personal data ownership. He further avers that 'instead of using the internet as a space for the free exchange of ideas, it is being used as a tool for supervision, management, and control'. This has consequences on users' psychology, as discussed by Jan Willem de Graf in his paper. He emphasizes that to regulate new technologies, psychological needs have to be taken into account.

Equity in accessibility is essential for the successful acceptance of new technologies. Different aspects of accessibility are discussed in the papers by Susana Finquelievich and Maria Belen Odena, and Mrinimayee Mandal and K. Srinivas by taking Argentina and India as case studies, respectively. Issues about public policies for digital inclusion are examined in the paper by Susana Finquelievich and Maria Belen Odena and suggested measures. In their paper, Mrinimayee Mandal and Kappagantula Srinivas underlined the role of the teacher in

using digital technologies in the teaching-learning process and the challenges faced by them while interacting with the students.

All these papers highlight different dimensions of the adoption of new technologies and the problems therein. They bring to the fore important issues relating to ethics, accessibility, biases, misuse, overuse, and algorithms that need to be taken into account in the use of information lifecycle while adopting new technologies, including AI.