PREFACE
MANAGING IMMERSIVE MEDIA

eXtended Reality (XR) is an umbrella term covering immersive technologies like virtual reality (VR), mixed reality (MR) and augmented reality (AR). eXtended realities called also virtual worlds or new virtual environments are challenging as they imply a new, different from the traditional, way of interactive creation, receipt, consumption by an individual. The user becomes not just a recipient, but the prosumer of his/her own user experience (virtual, real, hybrid). This change goes along with the Culture 3.0 concept and emphases the co-creation process of art and culture. However, as the "immersive" prosumer can consume, create and vice versa creating consume individually the content (in fact, in the format of an experiment); this liquid relation argues the established business models and the existing legal, ethical, and political implications of their use.

eXtended reality unlocks new opportunities for various industries. These technologies play an important role in enabling the new digital education, workplace and entertainment. Not only does XR stimulate audiovisual experience in a physical space, but also it brings the sense of touch into the virtual space.

Introducing virtual technologies that connect physical and digital realms raises questions over what impact eXtended reality would have on the world around us and how XR would change the future. Therefore it is of high importance to explore the nature of prospective immersive technologies covering the practical XR application process and the creative use of virtual environments as novel forms of media, affording human-computer communication and digitally mediated social interaction.

This special English-language issue of "Media Management Review" deals with theoretical and practical issues related to immersive technologies and their present and future educational, entertainment and corporate applications. Scholars and practitioners explore the problems of media convergence, immersive multimedia, XR content production and XR education and they contribute to this volume.

XR Workflows in Film Production: Demonstration for Educational Purposes, authored by Filip Gabriel Pudło, Małgorzata Kotlińska, Wojciech Olchowski, Katarzyna Kopeć and Marta Materska-Samek describe how the use of the XR production technologies influenced the film production process. They explore the differences

between diverse XR production workflows showing criteria for workflow paths of traditional approach to film production and XR production flow, including workflow structure, skills, education, and equipment.

Magdalena Sobocińska and Katarzyna Kopeć explore the potential and determinants for the virtual reality usage in education at the higher education level. They focus also on generational changes determining the VR usage in tertiary education. Then the features of virtual reality and related terms are explained to make a basis for discussing VR as a learning aid of the 21st century.

Technological, social and legal aspects of the metaverse are reviewed by Malwina Popiołek, Barbara Cyrek, Maciej Giermak and Marzena Barańska. The authors have reviewed selected issues related to the metaverse concept, taking into account selected social, technological, and legal aspects. This qualitative content analysis of the literature revealed the most promising and most threatening aspects of metaverse development and dissemination within the scope of technology, social sciences, and law.

Dimitris Delinikolas, Monika Hapek and Michał Wójciak in the article *The Spectrum of XR Marketing – Collective Case Study* discussed XR in marketing in the context of phygital category. Five examples from 2016–2022 have been selected to respond on the impact of XR on marketing, the similarities and differences between the XR marketing projects, the importance of XR in the context of phygital and the value of the combination of physical and digital elements in helping the audience to get accustomed to immersive media.

As the topic of new virtual environments (Ves) becomes enormous field of research, the reader can find XR related papers also in the next issue of "Media Management Review" (1/2023).

Caterina Antonopoulou, Natalia Arsenopoulou, Fabrizio Calì, Penny Papageorgopoulou, and Charalampos Rizopoulos highlight various aspects of the design, development, and evaluation processes of immersive XR experiences. Medium-related challenges are discussed in relation to the design and implementation of user interaction, 3D content creation, 3D composition and social engagement in VEs.

How a digital film scouting for Virtual Production (VP) affects the process of creating diverse audiovisual works is the question raise by Marta Materska-Samek, Małgorzata Kotlińska, Katarzyna Kopeć, Filip Gabriel Pudło and Wojciech Olchowski. Authors discuss, what criteria should be taken into account when choosing a location, what techniques can be used to make the best use of its potential, and how film locations fit into the broader context of the film.

Adnan Hadziselimovic, Krzysztof Pijarski in *Freedom of Expression in Privacy vs. Public Interest, a case for Open Justice in Extended Reality* continue the discussion on advanced jurisprudence, outlined in Algorithms, Ethics and Justice (Hadzi, 2022), where restorative justice was proposed for the mitigation of artificial intelligence (AI) crimes.

All these papers were developed within the framework of the Erasmus XR project „Experience and immersive technologies – from creative practice to educational theory" in partnership with Jagiellonian University, Lodz Film School, University of Malta and University of Athens (project ID number: 2020-1-PL01-KA226-HE-095891).

Marta Materska-Samek, PhD