

# **Impact of the CultMedia Network on the historical and cultural context of the Dominican Republic**

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## **Summary**

The CultMedia–International Network on Cultural Diversity and New Media did not stay in European countries only, it managed to expand in countries of the Caribbean region such as the Dominican Republic.

The cyberworld, as a social, economic, political, educational and cultural system shaped by digital and artificial intelligence, is expanding more and more every day. It is in this cyberworld that CultMedia emerged as an international network of professors and researchers from different European countries (Germany, Czech Republic, Poland, Slovakia, Italy and Spain) and Latin America, including the Dominican Republic. This network set out to analyze the changes that are taking place in cultural practices (patterns, motivations and uses) as a result of the so-called new media, especially cyberspace and the Internet.

His philosophical, techno-scientific and cultural concerns revolved around Industry 4.0, as a social, economic and educational repercussion and which is characterized by robotics, the 3D printer, nanotechnology, the internet of things and cyber-physical production systems that lead to the massive automation of production supported by ICT, which until now was carried out in hierarchical solutions isolated from Industry 3.0.

All this new technological context and the entry of the Industrial Revolution 4.0 (IR4.0) and its new resources: robotics, cloud computing, 3D printing, nanotechnology, the internet of things, sensors, simulators, augmented reality, cyber-physical production systems, among others, has caused a rupture between the knowledge acquired so far and the new knowledge that we must develop in order to possess skills and competencies that we need to allow efficient management between a physical-virtual world, the Cyberworld.

In this sense, CutMedia considered a fundamental role, it is necessary to analyze and debate the main issues that drove the 4.0 revolution from its beginning, and in its last stage in the field of higher education, as it was in the Dominican Nation.

Before the arrival of the Network in the Dominican Republic, in 2019, no type of event had been held around this new IR4.0 technological reality. Their entry into the country was a boost for the opening of new work projects and new lines of research that have impacted the academic, research and intellectual events of the country.

Keywords: CultMedia, Industrial Revolution 4.0, Cyberworld, Cybermarketing.

## **1.1 Introduction**

The CultMedia Network has been an international organization made up of professors and researchers from different European countries (Germany, Czech Republic, Poland, Slovakia, Italy and Spain) and Latin America, including the Dominican Republic, as defined by its philosophy, its objective has been to analyze the changes that are taking place in cultural practices as a result of the entry of the uses of the

new mass media that move in the Cyberspace of the Internet and other networks, which imply an impact on the way of life of citizens living in the Cyberworld.

It is likely that before the Pandemic, our country, with the event of the CultMedia Network – International Network of Cultural Diversity and New Media, played a fundamental role in terms of the event in relation to these virtual issues and social and cybercultural networks, which shape the IR4.0.

When the shadow of the covid-19 coronavirus was barely looming in Wuhan, a Chinese city; in the Dominican Republic, the first Meeting of the CultMedia Network – International Network of Cultural Diversity and New Media was held from November 13 to 15, 2019, entitled: Industrial Revolution 4.0 in a Global World: Education, Economy and Society.

This meeting was held at the Autonomous University of Santo Domingo (UASD), the Academy of Sciences and the UASD-Higüey Center. The event lasted three days, where the conference "The importance of CTCs in the field of the Industrial Revolution 4.0" was held by Dr. Margarita Cedeño, then Vice President of the Dominican Republic and the German researcher Gerhard Banse, with the title of "Industry 4.0: Expectation and development in Germany. A point of view of the evaluation of technology".

The meeting was attended by prominent thinkers such as Dr. Gerhard Banse, Dr. Nicanor Ursua, Dr. Andreas Metzner-Szigeth, Dr. Xabier Insausti, Dr. Björn Egbert and Dr. Julius Erdmann, and national speakers such as several representatives of the UASD, Dr. Mauro Canario, the economist Dr. Antonio Ciriaco and the philosopher Erickson Minaya and the current executive president of INDOIC. Dr. Yvelisse Melo Castro. Among others. At that time, Dr. Andrés Merejo was the Director of the Digital Humanities Observatory of the UASD and the main representative of CultMedia in Latin America.

The event achieved a great impact on Dominican society, these impacts and their transcendence have been collected in this article, analyzed from a critical, complex, innovative and multidisciplinary thinking with the aim of making known the contribution made by the Network to the Dominican Republic.

## **1.2. The arrival of CultMedia in the Dominican Republic**

The Dominican Republic has a territory of 48 thousand square kilometers, is strategically located in the Caribbean, has historically been a point of cultural convergence between Europe, Africa and America. Its history is marked by the encounter and syncretism of cultures: from the indigenous Taino culture, through the impact of European colonization and the forced arrival of enslaved African populations, to modern migrations that have enriched its multicultural identity. This diversity is manifested in their music, gastronomy, language and traditions, they are easy to track in Cyberspace and in their social networks.

The Dominican Republic is part of the Cyberworld, which, as a global digital ecosystem, is characterized by the interconnection of digital devices and artificial intelligence (AI), as well as communication networks in which people, information, and technologies interact virtually. This digital world includes the Cyberspace of networks such as the internet and other networks that articulate e-commerce, education and public networks of digital government, as well as various interconnections of cyberthings and mobile applications articulated to virtual reality, AI-based systems and the emerging quantum computer. In the Cyberworld, geographical and temporal barriers are vanishing, allowing instant connectivity and unprecedented access to information and resources.

In this context, the presence of CultMedia in the Dominican Republic with its theme: Industrial Revolution 4.0 and its impact on education emerged as a key initiative to connect the cultural and academic diversity of the country, which as a nation was already part of the Cyberculture of the Cyberworld. This Network,

dedicated to cultural preservation, promotion and experimentation, contributed to the promotion of the new digital and virtual culture and the 4.0 Revolution.

The Industrial Revolution 4.0 (Kagermann, Wahlster, & Helbin, 2013) represents a new stage in technological evolution. Characterized by the integration of tools such as robotics, 3D printing, nanotechnology, the Internet of Things (IoT), Cyber-physical production systems, and artificial intelligence (AI), this revolution has profoundly transformed the way modern societies produce, consume, and relate to each other.

Unlike previous industrial revolutions, which focused on specific advances such as mechanization or electrification, as well as the digitalization of the processes of the 3.0 revolution and the simple navigation and commercialization in Cyberspace, IR4.0 proposes a holistic model where physical and digital systems and intelligent converge in the Cyberworld.

The CultMedia Network played a strategic role in the Dominican Republic, leading initiatives that connect digital technology with the social, cultural, and educational aspects of IR4.0. Their efforts contributed to the promotion of a technological culture based on innovation and disruptive change. CultMedia promoted an inclusive and critical methodological approach, which involved the complex relationship between technological progress and human development.

It is good to emphasize that the country as part of the Cyberworld, was not unfamiliar with the digital culture promoted by the CultMedia network; however, this International Network contributed to cybercultural dissemination, offering new approaches to the digital and virtual world in the country.

The CultMedia Network had an impact on a certain academic sphere in the country, as it was in the Autonomous University of Santo Domingo (UASD), since it was visualized as a means for digital, educational and techno-scientific cultural expression, as well as for the understanding of the existing digital divide and the inequitable and limited access to participation that is manifested in the cyberworld.

CultMedia's connection with the Dominican Republic contributed to the development of virtual culture. One of the most significant aspects of the impact of this Network on Dominican society was its contribution to the production of academic cyberculture. Through events, conferences and international collaborations he stimulated the richness and diversity of cyberculture in the field of digital in the Dominican Academy.

The CultMedia Network helped to promote debate and reflection in the country on the digital cultural practices that, through new digital media, such as social networks and various applications, were taking place. Part of these debates fostered by the CultMedia Network included the promotion of spaces such as the Digital Humanities Observatory and the Dominican Institute for Cybersphere Research (INDOIC). All this was done within the framework of the events organized in the country thanks to the connection achieved with the events held by the international CultMedia network in several countries of the European Union and exceptionally in the Dominican Republic.

The role played by the Autonomous University of Santo Domingo (UASD) in this context has been crucial, especially after the official entry of CultMedia into the country in 2019. This milestone not only marked a before and after in the way the nation approaches the arrival of the Industrial Revolution 4.0 (IR4.0) but also positioned CultMedia as an educational and cultural agent in the technological field for the good of the Dominican educational system. This international network was a pioneer in fostering an innovative approach to face the challenges of this revolution, promoting an interdisciplinary dialogue that connects technology, culture and education, as was the case in the Dominican Republic.

Prior to the arrival of CultMedia in 2019, the Dominican Republic lacked academic and cultural events focused on the Industrial Revolution 4.0. The celebration of the first Meeting of the CultMedia Network from November 13 to 15, 2019 marked a milestone. This event, entitled "Industrial Revolution 4.0 in a Global World: Education, Economy and Society", took place at the UASD, the Academy of Sciences and the UASD-Higüey Center.

The meeting brought together leading national and international experts, who shared perspectives on IR4.0. Among them were figures such as: Dr. Margarita Cedeño, then Vice President of the Dominican Republic, who spoke about the Importance of Community Technology Centers (CTCs) within the framework of the Revolution 4.0; Dr. Gerhard Banse, German researcher, who addressed the expectations and developments of Industry 4.0 from a technological point of view; Dr. Nicanor Ursua; Dr. Andreas Metzner-Szigeth and Dr. Xabier Insausti, who analyzed the philosophical, cultural and social aspects of the technological revolution. In addition to national speakers such as Dr. Mauro Canario, Dr. Antonio Ciriaco, Erickson Minaya and Dr. Yvelisse Melo Castro, among others.

At that time, Dr. Emma Polanco held the rectorship of the UASD and Dr. Andrés Merejo, was in the direction of the Observatory of Digital Humanities of the UASD. They were the hosts of this event, which had the support of the Academy of Science of the Dominican Republic, the Office of the Vice President at the time, the Dominican Institute for Cybersphere Research (INDOIC) and the support of Banco Popular Dominicano.

Dr. Merejo emerged as the main representative of CultMedia in Latin America, which was key to consolidating the links between the network and Dominican Academic Institutions. The event was more than a conference; it represented a call to action. Fundamental topics such as digital literacy, technological inclusion and the role of universities in the formation of digital citizens capable of facing the challenges of IR4.0 were discussed. In addition, the importance of adapting public policies that promote equitable access to these technologies and the challenges of artificial intelligence was highlighted.

The impact of the CultMedia event in the Dominican Republic was profound in the cyber and digital spheres. The celebration of this meeting not only inaugurated a new chapter in the academic debate on IR4.0 but also generated a series of initiatives that have contributed to a new approach, to a new look at what was happening in Dominican society in the field of Cyberspace.

The UASD, as host, thanks to this event managed to increase academic awareness and adapt to technological changes. This included cybercultural awareness initiatives aimed at teachers, students, employees and general participants.

All this took place when in the panorama of the Dominican Republic, digital divides persist such as inequality in access to digital technologies, in which many rural communities lack adequate infrastructure, which limits their participation in the technological revolution. In addition to the low investment in the training of human resources, in the investment in the training of professionals with specific skills in areas such as artificial intelligence, robotics and data analysis.

It is good to point out that there was a CultMedia International Conference in that same week of November 2019, at the UASD-Higüey Center, La Altagracia Province. The celebration of this event in this region showed how academic communities can lead this effort, becoming aware of their role in the construction of a future where technology and culture are harmoniously integrated for the benefit of society.

At that time, the Director of the center was Jorge Guerrero and CultMedia helped employees, students and academics understand that the IR4.0 and artificial intelligence were transforming and revolutionizing

the cyberworld. It was also highlighted that these advances would significantly impact, in a short time, the entire social and educational scenario of the country.

During the academic day at the UASD-Higüey Center, the role of technology and culture in the Dominican context was reflected. In this space, the importance of technological cultural awareness was highlighted, a concept that highlights the need to integrate cultural identity with technological innovations to ensure balanced and sustainable development.

CutMedia's entry into the UASD marked a key moment to analyze how new digital media influence cultural identity and academic training, and its legacy inspires us to continue working on the creation of collaborative spaces that link the local with the global in the cyberworld.

### **1.3 Instituto Dominicano de Investigación de la Ciberesferea (INDOIC)**

Another important impact, thanks also to the international interconnection that took place with CutMedia, in the various international events in which Andrés Merejo and Yvelisse Melo were present, has been the creation of the Dominican Institute for Research in the Cybersphere (INDOIC), a non-profit institution that has the purpose of studying and researching in the complex philosophical field, educational, social and cultural everything related to the framework constituted by the social, political and economic networks made up of the digital, cyberspace and its articulation to the physical and cultural, technological and social aspects of the world and the cyberworld, which make up a Cybersphere in this XXI century.

Since then, we have been developing research work, talks and events to discuss these issues and develop a critical and productive awareness of the management and impact of these new technologies that we use in a hyperconnected world, a new physical and virtual world, the Cyberworld.

INDOIC has set out to be a beacon of light in the transition from a physical world to a planetary hybrid, the Cyberworld as defined by Merejo (2015a) for which it also sponsors works and events related to all cybernetic, technological and philosophical events. In 2023, it sponsors 2 works of great value that promote the understanding the current moments and phenomena that occur because of the impact of the entry of these new technologies and our interaction in the virtual world as a "Cybernetic Subject" (Merejo, 2015b) and as a crucial part in the formation of these virtual spaces.

The works authored by Dr. Andrés Merejo (2023b): *Cibermundo transido: enredo de postpandemia, guerra y ciberguerra* (Downcast Cyberworld: Post-Pandemic, War and Cyberwar Entanglement); and *Filosofía para Tiempos Transidos y Cibernéticos* (Philosophy for Past and Cybernetic Times). The first work is, in the words of the same author, [...] "moves in an approach of thinking about the event in the twenty-first century, different from other thinkers who have built their own path to the extent that they were thinking about what happened."

The second work, *Filosofía para Tiempos Transidos y Cibernéticos* (Philosophy for Past and Cybernetic Times), in the words of Gomez Pin (2023. p. 9. a), referring to the author [...] "has found in our civilization a theoretical avoidance of the first magnitude: the status of the virtual, its relationship with the real and the way in which this dialectical bond determines the subject who fails to discern a boundary between the two."

## **1.4 First Master's Program in Cybermarketing Strategies**

In addition, because of our research, the design of the first Postgraduate Program aimed at the development of digital competencies and skills and according to the technologies of the IR4.0, a Master's degree in Cybermarketing Strategy, was finalized.

This Program is aimed at developing technological and digital skills that allow professionals to graduate from the discipline of marketing. This novel study program has completed two cohorts, and a third cohort is in progress.

The challenges faced by professionals in these cyber times are multiple, complex and seemingly irreversible. Increasingly sophisticated and disruptive technology forces us to develop new competencies and skills. Innovation, resilience and constant change are underlying conditions in the development of technologies.

As J. Andrés and Doménech (2020) say, we are in the era of digital disruption, to which I can specify that more than digital it is a technological disruption; taking into consideration that there are other technologies such as quantum technology. Based on this analysis and supported by research that began in 2013 and that with the celebration of the event of the Cultmedia Network in the country, which took place from November 13 to 15, 2019, the first Meeting of the CultMedia Network – International Network of Cultural Diversity and New Media, entitled: "Industrial Revolution 4.0 in a Global World: Education, Economy and Society"; a strengthening of the proposal is seen.

In addition to our previous participation in the event held by the Network in September 2018: Industry 4.0, Culture 2.0 and the new media Realities, trends, myths. This was held at the Academy of Sciences of the Czech Republic, where we participated with the presentation "Cybermarketing in the Revolution 4.0 : case study, academic programs of 4th. level of the School of Marketing, Faculty of Economic and Social Sciences. Autonomous University of Santo Domingo, Dominican Republic"; Undoubtedly, the proposals of the 4th. level becomes more striking and interesting for Academia and formally begins its first cohort 2019-2021.

The first cohort of the Master's degree in Cybermarketing Strategies (50781) was approved in RESOLUTION NO. 129-2019, dated March 25, 2019, DGPG No. 571/2019. It is a training Program that contemplates responding to the approaches of UNESCO (2020) and Ávila (2016) that emphasize the new competencies that today's professionals must have, such as critical thinking, problem solving, self-management, management of technological skills and competencies, creativity, emotional intelligence and the development of technical competencies that arise from the knowledge of cyber-physical networks and digital ecosystems that uses the discipline of marketing.

In the area of business, to which the marketing discipline belongs, there are expectations of a 29.3% growth in the share of purchases in virtual markets by 2030. In addition, this discipline linked to technological competencies, is in the first places of demand in the labor market according to a report by the National Association of Young Entrepreneurs, ANJE (2022, p.71), in the Dominican market and currently has three cohorts opened and has been included in the VECA Programs granted by the Ministry of Higher Education of Science and Technology (MESCyT) of the Dominican Republic.

## **1.5 Conclusion**

The CultMedia–International Network on Cultural Diversity and New Media, contributed to the promotion of a space for debate to analyze the changes that have occurred and are taking place in digital cultural practices because of the so-called new media, especially cyberspace and the Internet.

This international network brought together professors and researchers from different European Countries such as Germany, the Czech Republic, Poland, Slovakia, Italy and Spain; and Latin America, such as the Dominican Republic. This International Network left a legacy that drives us to continue working to build a more inclusive and connected digital future.

The entry of CultMedia into the UASD was a milestone that inspired the creation of collaborative spaces that link the local with the global in the Cyberworld, its influence served as a catalyst to reflect on how digital media shape our identity and our education.

Therefore, it is imperative to create spaces for dialogue and debate that allow us to fully understand the impact of these new technologies and their implications on our society. The proliferation of digital tools, artificial intelligence and constant interconnection demand that we develop new skills and abilities to navigate this new virtual environment.

It is essential to foster digital literacy and continuing education, equipping people with the necessary skills to make the most of the opportunities offered by the cyberworld era while mitigating the associated risks.

The transition to an increasingly hybrid world, where the physical and the virtual are intertwined, poses unprecedented challenges and complexities. Cybersecurity, data privacy, and ethics in the use of technologies are crucial issues that require our attention. It is essential to promote a responsible digital culture and build a safe and trusted Cyberspace for all.

In conclusion, the CultMedia Network opened a space for us to reflect on our role in this new world and to take proactive measures to adapt and make the most of its benefits. By fostering dialogue, education and awareness, we can build a more just, equitable and sustainable future.

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