



Analyzing Alternative Futures Facing Iranian News Organizations in the Post-Corona Era

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ABSTRACT

Objective: This study aims to analyze the alternative futures facing Iranian news organizations in the post-Corona era.

Methodology: To achieve this objective, a qualitative method was employed in two sections, including semi-structured interviews and the Delphi technique. In the present study, the statistical population comprises media managers and communication faculty members. A purposive sampling method was used to collect the sample.

Findings: The research findings indicate that increased speed in content production, audience inclination towards using capsule information, the decline of official media with the development of social media platforms, the phenomenon of influencers and their news authority, the use of artificial intelligence, the Internet of Things, and augmented reality in media and news production, the reduction of print media, the decrease in face-to-face communication content, the increase in superficial content, and the expansion of podcast use are considered the most significant transformations in the content produced by news organizations, especially from a technological perspective, in the future. Additionally, based on the results obtained from data analysis in the Delphi section, the most influential factors on the alternative futures facing Iranian news organizations in the post-Corona era are, respectively, the management and governance of the internet, algorithms, and big data, and the transformation of each individual into a separate information source.

Conclusion: Therefore, any organization, including media organizations, must incorporate these changes into their policy-setting and decision-making processes to ensure their continued existence.

Keywords: Media, News Organizations, News, Corona, Post-Corona.

1 Introduction

The COVID-19 pandemic has significantly impacted global social communications, politics, culture, and economy by threatening human health and forcing a choice between health and existing continuums, creating a form of social disruption. Some global experts have begun researching and theorizing about the post-COVID-19 world (Dubbelink et al., 2021). Similarly, our country has not been spared from the pandemic's repercussions, directly affecting various dimensions such as social communications, politics, economy, security, and culture. The COVID-19 pandemic, which spread globally and subsequently became prevalent in our country, has impacted all societal levels, from communication and information dissemination to health care, education, employment, trade, politics, diplomacy, and even global order.

If we consider COVID-19 as a driver and a sudden force that entered the country, we observe that this pandemic has significantly affected the media landscape. For instance, with the advent of the virus, many newspapers continued their activities in the virtual space, and citizens increasingly followed news through social networks rather than newspaper kiosks. In other words, after the arrival of COVID-19, people's news consumption in modern media spaces increased. Given the functions of the media, which include education, information dissemination, and entertainment, COVID-19 accentuated the informational role of the media more than ever before (Sheresheva et al., 2021). Additionally, COVID-19 acted as an accelerator, prompting many media professionals to present their topics in virtual spaces. In reality, COVID-19 accelerated the transition of traditional media towards the virtual realm, leading to a new media landscape. This shift has prompted media to invest more in online and rapid production while ensuring accuracy and precision of information (First et al., 2021).

Bell identifies the post-industrial society as an information society. In the pre-industrial era, life was a "game with nature"; individuals worked with unskilled muscle power. In the industrial era, dominated by machines, life became a "game with artifacts" in a technical and rational manner. Conversely, life in a post-industrial society is service-based, a "game among persons," where what counts is not unskilled muscle power or energy, but information. For instance, advertisers create and transmit images and institutions, and teachers exchange knowledge. Thus, service tasks are considered informational, and the

dominance of service work generates a larger volume of information (Zakaria & Buaben, 2021).

Manuel Castells, critiquing his previous theories, does not juxtapose "space of flows" against "space of places" but proposes concepts like the "popularization of space of flows," acknowledging the simultaneous existence of both, which can reflect conflicting social interests. However, their distinction is not necessarily between elites and the masses. Thus, in Castells' view, since cultures are founded on communication processes and all forms of communication are based on the production and consumption of symbols, there is no separation between reality and symbolic representation. The significant feature of the network society is not the imposition of virtual reality but the creation of real virtuality. He believes that the interaction among these processes has brought forth a new dominant social structure, the network society, fostering a culture of real virtuality. The logic underlying this economy, society, and culture will underpin actions and social institutions across the interconnected global landscape (Melchior & Oliveira, 2023).

The diffusion of innovations theory aims to describe the replacement of old methods with new ones. Therefore, one of the primary applications of mass communication is to encourage recipients to adopt innovations. This issue pertains to both developed and developing societies, where science is seen as a continuous need, and efforts are made to replace old methods with new ones amidst social and technical changes (Min et al., 2021). Thus, the current theory applies the virtual space and modern media to replace traditional mass communication methods like radio, television, and print media. Additionally, the rapid growth of the internet has prompted some development experts to pay more attention to this medium's capacity to disseminate innovations. Interactive innovations or those involving two-way communication can rapidly gain user adoption due to their engagement potential (Goh & Sigala, 2020).

The most significant structural change is the integration of remote communications, data communications, and mass communications into a single medium. This process of convergence, made possible by digitization, allows different content such as sound, image, and data to be produced, broadcast, and stored within a unified structure and accessed through a wide range of technologies like computers, mobile phones, and televisions. The convergence of all media technologies into digital formats and their integration into computer networks is evident. The media convergence theory posits that new technologies bring together various

media, redefining the media environment. According to this theory, changes in communication and information technologies reshape daily life, altering production, consumption, learning, and interpersonal interaction patterns. New technologies redefine content and change human interactions with social institutions such as government, education, and commerce (Quandt & Wahl-Jorgensen, 2021, 2022; Tirgar Fakheri et al., 2021).

New media are distinct communication technologies characterized by their modernity, digital capabilities, and widespread availability for personal use as communication tools. Generally, new media have been well-received (even by old media), attracting considerable interest, optimistic predictions, and even exaggerated emphasis on their importance. However, amidst this enthusiasm, more conscious discussions have emerged, warning of the widespread phenomenon's consequences, particularly in the absence of legal frameworks and necessary controls. Perceptions of new media's impact have often exceeded reality, prompting research to temper these expectations (Melchior & Oliveira, 2023).

Tirgar Fakhri et al. (2020) concluded that factors such as the state of the education system for political news reporters in the Islamic Republic of Iran Broadcasting (creative and multi-skilled), citizens' news consumption patterns, the budget allocated to news networks, political trust levels, regulations governing the organization, and the professionalism of news network management are significant key uncertainties. The professionalism of news network management and political trust levels were identified as key uncertainties (Tirgar Fakheri et al., 2021). Kashi and Shahriari (2021) categorized the initial impacts of the COVID-19 outbreak into ten clusters: shortage of medical equipment, neglect of quarantine, news and rumors, psychological conditions, awareness of symptoms, prevention, control and treatment, government and public actions, non-compliance with personal hygiene, mortality rates among patients, burial methods, suspension of educational activities, and economic problems (Kashi & Shahriari, 2021). Yasmin et al. (2023) identified five factors affecting performance management in media organizations during the COVID-19 pandemic: causal conditions (attention to media duties), intervening conditions (audience, competition, political factors), contextual conditions (internal organizational characteristics), strategies (managing internal and external challenges), and consequences (achieving cultural media objectives) (Yasamin et al., 2023). Quandt and Wahl-Jorgensen (2021)

found that the COVID-19 pandemic profoundly impacted all societal sectors, including journalism, causing significant changes in journalistic practices and audience behaviors (Quandt & Wahl-Jorgensen, 2021). Quandt and Wahl-Jorgensen (2022) indicated that COVID-19 had a considerable impact on journalism, presenting both positive and negative effects. The main positive outcomes include increased news consumption and the promotion of new information formats and products such as infographics and newsletters (Quandt & Wahl-Jorgensen, 2022).

Despite the negative impacts of COVID-19 on various fields, the crisis accelerated the digital transformation globally, profoundly affecting news media and journalism. This transformation not only altered news focus but also revolutionized newsroom operations, with COVID-19 dominating headlines and driving a shift toward online press conferences, virtual interviews, and remote work. Journalists quickly adapted to these changes, producing and disseminating content from home (Patma et al., 2021).

Given the scope and significance of this issue and the fundamental role of media in guiding public opinion, this study, titled "Investigating the Role of COVID-19 in Transforming News and Technological Activities in Iranian News Organizations in the Future," aims to examine expert opinions on the impact of the COVID-19 pandemic on news organizations, content, and audience. This research will explore the positive and negative impacts, the role of news organizations in the potential new post-COVID-19 order, growth opportunities, threats, and potential changes in news production and dissemination methods from remote work to virtual approaches. Therefore, the primary research question is: What is the role of COVID-19 in transforming news and technological activities in Iranian news organizations in the future?

2 Methods and Materials

This research aims to explore the alternative futures facing Iranian news organizations in the post-COVID-19 era using a qualitative method in two parts: in-depth interviews and the Delphi method. The post-COVID-19 era in this study refers to the period following the global health, social, and economic crisis caused by the COVID-19 pandemic, which appears to have accelerated the transition towards the Fourth Industrial Revolution. In the in-depth interview section, the statistical population includes media managers and communication professors. Purposeful sampling was used to collect the sample, and the sample selection continued until

theoretical saturation was achieved. In total, with the selection of 10 individuals, the research achieved its goals. The selected individuals include the editor-in-chief of Asr-e Eghtesad newspaper, the director of foreign news at IRNA, the CEO of Ana News Agency, the director of domestic news at the Islamic Republic of Iran Broadcasting (IRIB) news agency, the director of the international news network Al-Alam, the editor-in-chief of Jahan-e Eghtesad newspaper and Bazaar Packaging magazine, radio editors, the media futures research group at IRIB Research Center, the head of the Communication Research Institute at the Culture, Art, and Communication Research Center, and professors of communication and media management. Considering the respondents' characteristics, approximately half held master's degrees, and the other half held doctoral degrees. Additionally, all respondents had over 15 years of work experience, with an average of 25 years.

To utilize the Delphi technique in this research, the first stage involved document and library research to gather the factors influencing the alternative futures of Iranian news organizations in the post-COVID-19 era. After identifying and compiling these factors, a database of influential factors

on the alternative futures of Iranian news organizations in the post-COVID-19 era was created. In the next stage, recognizing the limitations in obtaining precise information and designing valid mathematical and statistical models to achieve the study's main objective, the Delphi method (calculating three indices: consensus, importance, and priority) was employed. The primary reason for this choice is to create consensus and agreement among experts and elites in designing the alternative futures of Iranian news organizations in the post-COVID-19 era.

3 Findings and Results

To address the first research question regarding the current status of news organizations in Iran during the COVID-19 pandemic, three questions were posed to interviewees. These questions focused on the requirements for operating under pandemic conditions, the differences in news organizations' activities before and after the outbreak, and the protocols and restrictions related to face-to-face and physical communications. The initial and extracted codes from these interviews are in [Table 1](#).

Table 1

Extracted Codes from Interviews Regarding the Current Status of News Organizations During the COVID-19 Pandemic

Category	Extracted Codes
Requirements in News Organizations Due to COVID-19 Conditions	Reduction in print media circulation and role (2), Remote communications replacing in-person gatherings (5), Radio's success compared to other news organizations (1), Expansion of digital media (5), Reduced field presence of media (4), Requirement for online news delivery (1), Increased public trust in official media during the pandemic (1), Disruption in the information dissemination process (3), Growth of social networks (1)
Differences Between News Organizations Before and After the COVID-19 Outbreak	Change in work methods, news content, and reporting style (2), COVID-19 becoming a headline topic (1), Reduction in workforce (1), Decreased print media circulation (1), Increased capacity of radio and television (1), Increased speed of information transmission (2), Increased use of virtual space (3), Transition from broadcast to broadband (1), Crisis communication training (1), Increased remote and non-face-to-face communications (4), Improved social communication processes (1), Focus on analytical content (1), Enhanced role of media in education (2), Reduced operational costs for media (1), Emergence of new media roles (1)
Journalists' Activities During COVID-19	Use of mobile images instead of professional TV cameras (2), Halt in international news activities (5), Production of multimedia content (1), Physical communication restrictions (1), Online interviews and conferences (1), Guesswork in content production (uncertainties) (1), Uncertainty in statistics (1), Lack of precise and regular communication with scientific centers (1), Lack of in-depth and challenging interviews (1), Use of social networks (1), Increased telephone and internet costs for journalists (1), Reduced content production (1), Increased translations, phone and written interviews (1), Increased use of quotations (1), Damage to professional activities of journalists (1), Expanded use of virtual networks (1), Strengthening backpack journalism (1), Increased internet penetration (1)

Based on the research findings, the primary requirements for news organizations operating under COVID-19 conditions include reduced print media circulation and role, remote communications replacing in-person gatherings, greater reliance on radio compared to other news organizations, expansion of digital media, reduced field presence of media, the requirement for online news delivery, increased public trust in official media during the pandemic, and the growth of social networks. Additionally, significant

differences between news organizations before and after the COVID-19 outbreak include changes in work methods, news content, and reporting style; COVID-19 becoming a headline topic; reduction in workforce; decreased print media circulation; increased capacity of radio and television; increased speed of information transmission; increased use of virtual space; transition from broadcast to broadband; crisis communication training; increased remote and non-face-to-face communications; improved social

communication processes; focus on analytical content; enhanced role of media in education; reduced operational costs for media; and the emergence of new media roles.

Moreover, findings indicate that the use of mobile images instead of professional TV cameras, the halt in international news activities, physical communication restrictions, online interviews and conferences, guesswork in content production (uncertainties), uncertainty in statistics, lack of precise and regular communication with scientific centers, lack of in-depth and challenging interviews, use of social networks, increased telephone and internet costs for journalists, reduced content production, increased translations, phone and written interviews, increased use of quotations, damage to professional activities of journalists,

expanded use of virtual networks, strengthening backpack journalism, and increased internet penetration are the major challenges faced by journalists during COVID-19 conditions.

To address the second research question regarding changes in news and technological activities in the future, two questions were posed to interviewees. These questions focused on changes in content production processes in news organizations, especially from a technological perspective during crises such as the COVID-19 pandemic, and changes in the content produced by news organizations, particularly from a technological perspective during crises like the COVID-19 pandemic. The initial codes and meaningful units are presented in [Table 2](#).

Table 2

Extracted Codes from Interviews on Content Production Processes in News Organizations, Especially from a Technological Perspective

Category	Extracted Codes
Content Production Processes in News Organizations from a Technological Perspective	Broadcasting various media productions on social network platforms (3), Viewing messages in the night sky with future technologies (1), Satellite broadcasting of "4K" quality content (1), Increased speed in content production (2), Audience inclination towards capsule information (1), Death of traditional media with the rise of social network platforms (2), The phenomenon of influencers and their news authority (1), Use of artificial intelligence, IoT, and augmented reality in media and news production (1), The future world of content with the rise of platforms (1), Increased use of video conferences (1), News delivery on small mobile screens (1), Transformation of radio with audio-related technologies (1), Remote work capabilities in content production (1), Use of virtual technologies for information gathering, interviews, and news production (1)
Changes in Content Produced by News Organizations from a Technological Perspective During the COVID-19 Pandemic	Prevalence of multimedia content (1), Shift from broadcasting to production (1), Decline in high-quality technical content (1), Prevalence of short and capsule content (2), Focus on headlines over content (1), Lack of adherence to professional ethics (1), Decrease in print media (1), Reduction in face-to-face content (1), Increase in motion graphics (1), Breaking the monopoly in content broadcasting and production with social network platforms (1), Expansion of video comments and photo comments (1), Increase in superficial content (3), Expansion of podcasts and vodcasts (1)

Based on the findings, significant content production processes in news organizations from a technological perspective include broadcasting various media productions on social network platforms, viewing messages in the night sky with future technologies, satellite broadcasting of "4K" quality content, increased speed in content production, audience inclination towards capsule information, the death of traditional media with the rise of social network platforms, the phenomenon of influencers and their news authority, the use of artificial intelligence, IoT, and augmented reality in media and news production, the future world of content with the rise of platforms, increased use of video conferences, news delivery on small mobile screens, transformation of radio with audio-related technologies, remote work capabilities in content production, and the use of virtual technologies for information gathering, interviews, and news production.

Moreover, findings indicate that the prevalence of multimedia content, the shift from broadcasting to

production, the decline in high-quality technical content, the prevalence of short and capsule content, focus on headlines over content, lack of adherence to professional ethics, decrease in print media, reduction in face-to-face content, increase in motion graphics, breaking the monopoly in content broadcasting and production with social network platforms, expansion of video comments and photo comments, increase in superficial content, and the expansion of podcasts and vodcasts are significant changes in the content produced by news organizations from a technological perspective during the COVID-19 pandemic.

To address the third research question regarding the role of crises like the COVID-19 pandemic in accelerating the use of virtual space and social media in various countries, and the role of central countries and technology owners in the news and media domain in utilizing the space created by the COVID-19 pandemic to establish a new order in peripheral countries from an informational perspective (shifting the flow of information from the center to the

periphery), initial codes and meaningful units are presented in Table 3.

Table 3

Extracted Codes from Interviews on How the COVID-19 Pandemic Accelerated the Use of Virtual Space and Social Media in Various Countries

Category	Extracted Codes
How the COVID-19 Pandemic Accelerated the Use of Virtual Space and Social Media	Provision of electronic infrastructure for virtual space usage (2), Transformation of virtual space into an information and educational necessity for schools and universities (3), High speed and low-cost service delivery in virtual space (1), Reduction in government costs in virtual space (1), Disruption of classical information flow processes (1), Need for rapid information acquisition in crisis conditions (1), Formalization and legalization of news dissemination in virtual space (1)
How Central Countries and Technology Owners Utilize the Space Created by the COVID-19 Pandemic to Establish a New Order in Peripheral Countries from an Informational Perspective	Widespread application of new technologies in news (2), Control over internet management, algorithms, and big data (3), Leveraging media power dynamics by investing in digital media (1), Attaining persuasion power and public opinion control (1), Extensive access to nations' information and the ability to analyze and process it (1), Expansion of technology and social network usage (1), Reduction in physical information volume (1), Transforming each individual into a separate information source (1), Transitioning business models from traditional to digital (1), High-scale content production and dissemination (1)

Based on the research findings, the primary impacts of the COVID-19 pandemic on accelerating the use of virtual space and social media in various countries include the provision of electronic infrastructure for virtual space usage, the transformation of virtual space into an information and educational necessity for schools and universities, high speed and low-cost service delivery in virtual space, reduction in government costs in virtual space, disruption of classical information flow processes, the need for rapid information acquisition in crisis conditions, and the formalization and legalization of news dissemination in virtual space.

Moreover, findings indicate that the widespread application of new technologies in news, control over internet management, algorithms, and big data, leveraging media power dynamics by investing in digital media, attaining persuasion power and public opinion control, extensive access to nations' information and the ability to analyze and process it, expansion of technology and social network usage, reduction in physical information volume, transforming each individual into a separate information source, transitioning business models from traditional to digital, and high-scale content production and dissemination are significant ways central countries and technology owners are utilizing the space created by the COVID-19 pandemic to establish a new order in peripheral countries from an informational perspective.

4 Discussion and Conclusion

In today's world, media plays an unparalleled role in shaping, managing, and guiding public opinion. Based on the findings of this research, it can be concluded that the operations of news organizations in the post-COVID-19 era have undergone extensive transformations. Therefore, any organization, including media organizations, must incorporate these changes into their policy-setting and decision-making processes to ensure their continued existence. They must plan resiliently and sustainably for the future, using received signals, monitoring, and environmental scanning, and manage their resources and investments with a comprehensive and holistic perspective. Accordingly, the structural forms, mechanisms, and procedures of media can be redefined and made flexible in response to various transformations, trends, and events.

Risks and crises are imminent for any organization and business, whether they are infectious diseases like COVID-19, which create immediate and widespread impacts, or climate changes that result in long-term effects. Multiple risks are possible, and with intelligence, one can avoid being caught off guard by them, whether they are natural disasters or cyber-attacks. In such conditions, media must redefine their position and functionally play roles in education, guidance, information dissemination, and awareness to help improve societal conditions. The COVID-19 outbreak has heightened the sensitivity of organizations and governments towards future studies and the exploration of intelligent

strategies for living in a new era, which is a promising development.

With the development of online journalism, while access to news is widespread, comprehensive, and inexpensive, local issues are more threatened. People follow topics related to politics, finance, entertainment, and sports more closely, but there is concern about the publication of news related to public interests aimed at pursuing societal issues (democracy, participation, and development) overshadowed by lifestyle and entertainment news, which threatens quality journalism. Although news is increasingly shared on social media, the spread of misinformation and fake news exacerbates these concerns, as observed with COVID-19. Media face reductions in staff, local offices, and access to investment resources, requiring media to re-engineer their structure and processes to find suitable solutions for the times. Media business models and revenue generation methods are changing. Previously, advertising and circulation were the main sources of revenue for publications, but today, online advertising and leveraging business intelligence offer new opportunities for media and technology companies. Simultaneously, while the number of media staff decreases, the nature of collaboration changes. Remote work and reduced office hours are examples. A facet of this workforce adjustment is the smartening of systems and equipping newsrooms with modern technologies, including artificial intelligence, seen in media compatible with the ecosystem. These media redefine their position, not only maintaining revenue but significantly enhancing it. However, the consequence of this transformation in other media is reduced revenue, circulation (audience loss), and advertising orders. Thus, media need business consultants and collaboration with futurists to innovate, employ technology, and design their business models.

Undoubtedly, the news market is evolving as online journalism changes the way people consume news. In the digital age, media must align with a fluid economy. The fluid economy relies on defining, redefining, and repositioning its space. To do this, accumulated experiences must be assessed, stakeholders identified, appropriate strategies designed, new revenue sources in the new position determined, and drivers for moving in this competitive space identified and utilized.

Based on the research findings, it can be said that the COVID-19 pandemic has been a "stress test" not only for the economies and healthcare systems of countries but also for news organizations. We live in an era of modern uncertainties, with questions multiplying daily, requiring

even the most prominent forward-looking analyses to be reconsidered. COVID-19 has challenged the old belief that planning for the future is possible even during challenges. Nonetheless, the research findings regarding media suggest plausible speculations for the post-COVID-19 era. In the future, the daily operations of media will be influenced by the consequences of COVID-19, affecting not only the content but also news distribution, business models, and even human resource management.

These findings align with the prior results (Quandt & Wahl-Jorgensen, 2021, 2022; Tirgar Fakheri et al., 2021; Trifonova Price & Antonova, 2024). Furthermore, analyzing the findings obtained from interviews with experts and specialists, it can be said that the digital age has transformed all aspects of our lives. Therefore, in the post-COVID-19 era, content creators and content strategists are viewed as the most crucial organizational arm, as the impact of content on audience attraction is increasing daily. Today, content is considered king, managed and controlled by experts for our benefit.

These results align with the prior (Quandt & Wahl-Jorgensen, 2021, 2022; Yasamin et al., 2023). Additionally, based on the results of this research, it can be said that many areas and sectors under the current media order will undergo significant changes. Crises generally form the basis for shaping the periods following them, and this is true for the post-COVID-19 era. This period, emerging from the economic losses caused by months of global stagnation and experiences gained in all areas, is akin to the years following World War II. We may witness the formation of a mindset that uses preparedness for similar future situations as an excuse for new norm-setting. Stable and powerful governments, with economic capabilities, trust-building, and effective governance tools, can guide their societies through such crises with minimal casualties.

These findings align with the prior results (Yasamin et al., 2023). In explaining the results obtained from this research based on the presented theories, it can be said that as the theory of diffusion of innovations emphasizes, innovations accepted by recipients possess several characteristics: relative advantage, compatibility, greater visibility, and less complexity. They should also be easier and quicker to adopt than other innovations. Therefore, it can be said that new communication and information technologies, especially social networks, which are expanding and developing based on the theories of the information society and network society, can be considered as new technologies with greater

compatibility, visibility, and less complexity in the media space compared to traditional media.

On the other hand, based on the theory of media convergence, the importance of new media and the role of media technologies, audiences, producers, and participants in the content cycle and news production can be emphasized. This point has been corroborated by the interviewees in this research.

In conclusion, media in the post-COVID-19 era must be able to align with this ecosystem and adjust their policies, strategies, and plans accordingly. Governments must increasingly prioritize digital governance and attempt to shift their media policies from focusing on official media to non-official media and social networks. Media professionals need to understand new concepts, review their behaviors, develop skills, acquire new abilities, and improve their performance to succeed in this arena.

It is recommended that digital governance requires digital thinking. Digital transformation changes paradigms, creating and replacing new strategies and solutions for old methods. In the digital age, organizations need new perspectives, innovation, and creative approaches. Investment in emerging technologies is growing daily. Therefore, Iranian news organizations need to focus more on using new communication and information technologies. Utilizing artificial intelligence capabilities is a crucial tool in this field. The reduction in print circulation can be seen as the surface of media transformation, while structure and content are its core. The importance and nature of media and their necessity do not undergo significant changes; rather, the transformation mainly lies in access methods, distribution, revenue models, and the expansion of choices, personalization, and interest search. In this space, images, videos, and games hold a superior position. Visualizing content drives new media towards producing and sharing photos and videos. Therefore, creating visually appealing content on social networks can attract more users and draw new users.

Artificial intelligence will play a central role in future journalism. The commercial market, accompanied by media and technologies, thinking and art, and the combination of machine learning, natural language processing, and neural networks, will transform industries, businesses, and media, leading to the formation of a digital value chain. Therefore, media need to use this technology, especially in content production, to attract audiences and efficiently convey the intended message.

Given the importance of digital governance, it is recommended that policymakers prioritize future-oriented strategies to adopt efficient and effective digital governance models, emphasizing resilient planning. Additionally, in developing digital governance in the post-COVID-19 era, it is recommended to leverage local capacities and opportunities while also utilizing Western experiences in this field.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

References

- Dubbelink, S. I., Herrando, C., & Constantinides, E. (2021). Social Media Marketing as a Branding Strategy in Extraordinary Times: Lessons from the COVID-19 Pandemic. *Sustainability*, 13(18). <https://doi.org/10.3390/su131810310>
- First, J. M., Shin, H., Ranjit, Y. S., & Houston, J. B. (2021). COVID-19 Stress and Depression: Examining Social Media, Traditional Media, and Interpersonal Communication.

- Journal of Loss and Trauma*, 26(2), 101-115.
<https://doi.org/10.1080/15325024.2020.1835386>
- Goh, E., & Sigala, M. (2020). Integrating Information & Communication Technologies (ICT) into classroom instruction: teaching tips for hospitality educators from a diffusion of innovation approach. *Journal of Teaching in Travel & Tourism*, 20(2), 156-165.
<https://doi.org/10.1080/15313220.2020.1740636>
- Kashi, E., & Shahriari, M. (2021). Monitor People's Mental Challenges in Cyberspace During the COVID-19. *Business Intelligence Management Studies*, 10(37), 215-232.
<https://doi.org/10.22054/ims.2021.53311.1751>
- Melchior, C., & Oliveira, M. (2023). A systematic literature review of the motivations to share fake news on social media platforms and how to fight them. *New Media & Society*, 26(2), 1127-1150. <https://doi.org/10.1177/14614448231174224>
- Min, S., So, K. K. F., & Jeong, M. (2021). Consumer adoption of the Uber mobile application: Insights from diffusion of innovation theory and technology acceptance model. In *Future of tourism marketing* (pp. 2-15). Routledge.
<https://www.taylorfrancis.com/chapters/edit/10.4324/9781003176039-2/consumer-adoption-uber-mobile-application-insights-diffusion-innovation-theory-technology-acceptance-model-somang-min-kevin-kam-fung-miyoung-jeong>
- Patma, T. S., Wardana, L. W., Wibowo, A., Narmaditya, B. S., & Akbarina, F. (2021). The impact of social media marketing for Indonesian SMEs sustainability: Lesson from Covid-19 pandemic. *Cogent Business & Management*, 8(1), 1953679.
<https://doi.org/10.1080/23311975.2021.1953679>
- Quandt, T., & Wahl-Jorgensen, K. (2021). The Coronavirus Pandemic as a Critical Moment for Digital Journalism. *Digital Journalism*, 9(9), 1199-1207.
<https://doi.org/10.1080/21670811.2021.1996253>
- Quandt, T., & Wahl-Jorgensen, K. (2022). The Coronavirus Pandemic and the Transformation of (Digital) Journalism. *Digital Journalism*, 10(6), 923-929.
<https://doi.org/10.1080/21670811.2022.2090018>
- Sheresheva, M., Skakovskaya, L., Bryzgalova, E., Antonov-Ovseenko, A., & Shitikova, H. (2021). The Print Media Convergence: Overall Trends and the COVID-19 Pandemic Impact. *Journal of Risk and Financial Management*, 14(8).
- Tirgar Fakheri, F., Jafari, A., Ahmadi, A., & Jahanshahi, O. (2021). Identifying Influential Factors Affecting the Future of IRIN Over 10-Year Horizon. *Quarterly Scientific Journal of Audio-Visual Media*, 14(36), 33-59.
<https://doi.org/10.22085/javm.2021.250656.1599>
- Trifonova Price, L., & Antonova, V. (2024). Challenges and Opportunities for Journalism in the Bulgarian COVID-19 Communication Ecology. *Journalism Practice*, 18(1), 119-136. <https://doi.org/10.1080/17512786.2022.2118154>
- Yasamin, S., Nemati Anarki, D., Danei, A., & Rashidi, E. (2023). Designing a Model of Operational Management in Media Organizations During A Disease Epidemic (Case: IRIB in Corona Pandemic). *Communication Research*, 30(114), 33-59. <https://doi.org/10.22082/cr.2023.1990244.2500>
- Zakaria, W. F. A. W., & Buaben, J. M. (2021). The Theory of Post-Industrial Society (Teori Masyarakat Pasca-Industri). *Akademika*, 91(1).
<http://journalarticle.ukm.my/16728/1/44022-154720-1-PB.pdf>