

Received: 19 May, 2026

Accepted: 15 September, 2026

Published: 23 September, 2026

Information Analytics, Media Literacy, and Digital Challenges in European Communication and Public Relations Discourse

Liudmyla Mialkovska

Department of Media, Image and Communications, Faculty of Creative Industries, Marketing and Communications, Lutsk National Technical University, Lutsk, Ukraine; l.myalkovska@lutsk-ntu.com.ua

Iryna Zabiaka

Department of Foreign Philology and Applied Linguistics, Faculty of Digital Education and Social Technologies, Lutsk National Technical University, Lutsk, Ukraine

Yuliia Litkovych

Department of Foreign Philology and Applied Linguistics, Faculty of Digital Educational and Social Technologies, Lutsk National Technical University, Lutsk, Ukraine

Volodymyr Hrysiuk

Department of Film and Television Arts, Taras Shevchenko National University of Kyiv, Kyiv, Ukraine

Tetiana Bondar

Department of Foreign Philology and Applied Linguistics, Faculty of Digital Educational and Social Technologies, Lutsk National Technical University, Lutsk, Ukraine

Svitlana Prokhorenko

Department of Media, Image and Communications, Faculty of Creative Industries, Marketing and Communications, Lutsk National Technical University, Lutsk, Ukraine

Cite this article:

Mialkovska, L., Hrysiuk, V., Zabiaka, I., Bondar, T., Litkovych, Y., & Prokhorenko, S. (2026). Information Analytics, Media Literacy, and Digital Challenges in European Communication and Public Relations Discourse. *Revista Cultura Científica*, (24), pp. 1450–1465. <https://doi.org/10.70517/revcc2624120>

Abstract

The relevance of this research is determined by the rapid digital transformation of the information space, the active development of digital platforms and social networks, and the growth of information threats associated with the spread of disinformation, content manipulation, and the use of advanced digital technologies to influence public opinion. The study highlights contemporary theoretical approaches to the development of communication policy, analyzes the role of information analytics and media literacy as means of countering disinformation, considers current digital challenges that impede the normal functioning of the European information space, and examines European experience in developing strategic communications and digital regulation in this field. The study establishes that the successful development of communication and public relations in European media discourse depends on the multi-level integration of information analytics, media literacy, strategic communications, dig-

ital technologies, and a modern regulatory mechanism. It demonstrates that the most effective ways to guarantee the openness of the information space include developing the population's digital competencies, introducing advanced information-analysis tools, improving mechanisms for countering disinformation, increasing the transparency of digital-platform activities, and implementing European standards of communication policy. Applicability of the results: the findings can be used in the formation of national communication policy, the development of strategic communication systems, the improvement of media literacy programs, the development of mechanisms for countering disinformation, and the implementation of European approaches to ensuring an open and secure information space.

Keywords: communication, public relations, PR communication, media discourse, linguistic discourse, information analytics

1. INTRODUCTION

At the current pace of digital transformation in society, communication and public relations have become key mechanisms for shaping the information environment, developing democratic institutions, and ensuring productive cooperation among the state, communities, the mass media, and other social actors. Information policy in Europe is characterized by greater openness, the widespread use of digital platforms and interactive communication technologies, and continuous improvement of information-policy mechanisms. However, the digitalization of the information environment creates not only new tools for information exchange but also a range of challenges, including targeted information manipulation, disinformation, audience manipulation, fake news, algorithmic influence through social networks, and threats to information security. In this context, information analytics, understood as a tool for the comprehensive identification, assessment, and forecasting of information processes, is gaining particular importance. The use of modern data-analysis methods, digital technologies, artificial intelligence, and media-space monitoring tools enables the timely identification of information risks, assessment of the effectiveness of communication campaigns, and support for informed management decisions in the field of public relations. Therefore, the development of information analytics is an integral component of the modern communication policies of European countries. This growing dependence on integrated communication mechanisms makes linguistic clarity, analytical capacity, and responsible digital practice increasingly important within the same evolving information environment.

An equally important element of the modern European media space is media literacy, which is recognized as one of the key competencies required by citizens in the digital age. It includes the ability to approach information critically, verify its reliability, recognize manipulation, understand how digital platforms operate, and use information resources responsibly. Improving media literacy is therefore a necessary condition for strengthening society's information resilience, countering information threats, and developing a democratic culture of communication. In practical terms, these competencies help citizens interpret digital information more carefully and participate in communication processes with greater awareness and responsibility.

The European Union also pays particular attention to the development of digital communications, transparency in the information space, countering disinformation, and improving the digital literacy of the public. The relevant policies, rules, and instruments are implemented and continuously developed to create a safe, open, and responsible digital information space in which freedom of expression, protection of personal data, support for innovation, and counteraction to information threats can be appropriately balanced. Accordingly, the European approach combines communication development with safeguards intended to preserve both the accessibility and the reliability of the digital information environment.

The relevance of the study stems from the need for a comprehensive understanding of the characteristics of communication and public relations in European media discourse, modern approaches to information analytics, the role of media literacy in information security, and solutions to digital challenges associated with the continuing development of digital society. Research on these issues is important from both theoretical and practical perspectives because it can contribute to the improvement of communication policy, the development of effective mechanisms for interaction between society and the state, and the creation of a sustainable information environment consistent with European standards. A comprehensive perspective is therefore necessary because communication practices, analytical capabilities, media literacy, and digital governance increasingly operate as interconnected elements of one information system.

2. LITERATURE REVIEW

Modern research shows that the development of communication and public relations in European media discourse increasingly reflects processes of digital transformation, the growing dominance of the platform economy, and changes in models of interaction among the state, media, and civil society. Most authors describe contemporary communication not simply as a process of transmitting information but also as a complex process of social management associated with building public trust, developing democratic institutions, and ensuring access to the information space [1, 2]. This approach substantially broadens the traditional understanding of public relations by integrating digital technologies, information analytics, and strategic communications. The literature therefore increasingly connects communication effectiveness with the capacity to combine technological infrastructure, analytical interpretation, institutional openness, and meaningful interaction with different public groups.

Classical theories of media systems and communication development occupy a significant place in the literature. In particular, the work of [3] helped establish the modern concept of a two-way symmetrical model of public relations, in which public relations is understood as a dialogical process. These ideas were further developed by [4], who argue that the functioning of media systems is largely shaped by political, institutional, and cultural contexts. In turn, [1] considers digital networks to be the foundation of a new information society in which information serves as a major resource for political, economic, and social development. Together, these perspectives provide a theoretical basis for understanding how communication structures are influenced by both institutional arrangements and the changing organization of information

networks.

A separate area of modern research is devoted to transformations of the digital media space. [2] argue that digitalization not only changes the principles of social interaction but also produces a communication model based on the continuous mediatization of social relations. Similarly, [5] describe contemporary society as a platform society in which digital services have become key intermediaries in the dissemination of information. At the same time, [6] emphasizes the important role of digital platforms in moderating information content and the corresponding need for algorithmic transparency and accountability among digital intermediaries. These studies consequently shift attention from individual communication channels toward the broader structures through which digital information is selected, organized, distributed, and governed.

Issues of media literacy and the development of the population's digital competencies are widely discussed in contemporary literature. One of the foundational works in this area is the study by [7], in which media literacy is associated with the critical analysis of information and the effective use of digital technologies. Further development of this concept is presented in [8–10], which emphasize that modern media education should cultivate conscious and responsible users of information by developing not only awareness of information processes but also critical thinking, digital ethics, and responsible behavior in the information space. This broader understanding places media literacy within an educational and social framework that includes both practical digital skills and reflective evaluation of information.

An important aspect of contemporary research is the study of disinformation, information manipulation, and the information resilience of society. [11] investigate mechanisms of media manipulation and their consequences for the formation of public opinion, while [12] considers the trajectories and needs associated with digital media literacy among different social groups in Ukraine. Works by [13–16] are also of practical interest because they discuss contemporary strategic developments, scientific approaches to social networks in the information space, educational resilience, and European approaches to information threats. A separate category of sources includes international regulatory documents and recommendations that define modern standards for the functioning of the digital information space. The European Democracy Action Plan [17] identifies major areas for strengthening democratic communication, supporting independent media, and responding to disinformation. The Digital Services Act [18] is also important because it establishes requirements concerning digital platforms, algorithmic transparency, and user protection. These approaches are further complemented by UNESCO guidance [19, 20], which treats media and information literacy as a fundamental competence of the contemporary information age and emphasizes its integration into education systems and public information policy. Taken together, these sources show that the contemporary research field combines academic analysis with regulatory and educational approaches to the management of information risks.

An extensive area of modern literature is also devoted to assessing current digital challenges. [21] identifies disinformation, risks associated with generative artificial intelligence, manipulation, cyber risks, and the expanding influence of digital platforms among important global concerns. These conclusions are consistent with studies of the contemporary digital media environment that propose combining information analytics, media literacy, strategic communications, and modern digital regulation within an integrated system for strengthening information resilience. The common emphasis across this literature is that technological change and information risks should be considered together rather than treated as completely separate research problems.

Overall, the literature review demonstrates a high level of development in individual areas of communication, media literacy, digital transformation, and strategic communications. At the same time, the integrated consideration of information analytics, media literacy, digital regulation, and strategic public relations in the context of contemporary European media discourse remains insufficiently studied, because many studies focus mainly on one or two elements of this broader field. This gap highlights the importance of integrated communication-policy models that combine advanced digital technologies, analytical tools, measures for countering disinformation, and European standards for building an open and resilient information space. Such integration is especially relevant because the effectiveness of communication policy depends on how technological, educational, analytical, and regulatory components interact in practice.

3. METHODS

General and specialized scientific methods formed the theoretical and methodological basis of the research. Methods of analysis and synthesis were applied to summarize theories concerning the development of communication and public relations in European media discourse and to examine the roles of information analytics, media literacy, and digital technologies in supporting the openness of the information space. A systems approach was used to study comprehensively the relationships among strategic communications, information analytics, media literacy, and societal information resilience. The comparative method was applied to analyze European approaches to communication policy, countering disinformation, and regulating the digital media environment. The generalization method made it possible to structure the findings of contemporary scientific research and international practice and to develop tables reflecting the authors' analytical conclusions and conceptual models. The logical method was used to substantiate the conclusions and identify promising directions for improving communication policy and public relations in accordance with contemporary European

standards. The selected methods were used in a complementary manner so that theoretical interpretation, comparison of European practice, and systematic generalization could support one coherent analytical framework.

Aims. The purpose of the research is to provide a comprehensive assessment of the characteristics of communication and public relations in European media discourse, determine the role of information analytics and media education in developing effective communication policy, and examine contemporary digital challenges and possible ways to overcome them in the context of the continuing development of the information society. This purpose also involves identifying how these elements interact rather than examining communication, information analytics, media education, and digital challenges as completely isolated areas.

4. RESULTS

The contemporary development of the European information space is accompanied by substantial changes in communication processes driven by the rapid growth of digital technologies, the emergence of new media, and changing models of interaction among public authorities at different levels, civil society, business, and the media. Whereas communication in traditional society served primarily to transmit information, in the digital economy it has become a strategic resource for building public trust, supporting democratic institutions, and increasing the transparency of governance processes. Communication and public relations are therefore regarded as important mechanisms for building a democratic society: they support effective dialogue between the state and citizens, contribute to greater openness of the information space, and create conditions for implementing the principles of good governance [1, 4]. The principles of freedom of expression, diversity of opinion, media independence, and transparency in the information environment form the basis of European media discourse. At the same time, the current stage of development is characterized by a transition from the traditional model of mass communication to a network model in which information is produced and distributed not only by professional media organizations but also by state institutions, civil society organizations, business entities, and individual users of digital platforms. This expansion of the communication environment substantially increases the speed of information exchange while simultaneously complicating information verification and quality control [2]. Thus, the changing structure of communication affects not only the volume and speed of information exchange but also the responsibilities associated with verification, interpretation, and public interaction.

Modern communication draws on the theoretical foundations of classical concepts concerning the public sphere, communicative action, and the social responsibility of the media. The concept of the public sphere, in which the information space functions as an environment for open public discussion and citizens can participate in decisions of public importance, represents an important stage in the development of communication theory. Democratic institutions, the formation of public opinion, and political culture depend substantially on the openness of information and the accessibility of communication channels. In the contemporary digital environment, these principles are interpreted in new ways because digital technologies have transformed how citizens engage in public life while simultaneously creating additional risks of information manipulation and algorithmic influence through digital platforms. The digital context therefore does not replace classical communication principles; instead, it changes the conditions under which those principles are applied and evaluated.

Among contemporary theories, the network theory of communication is particularly influential. The network-society approach developed by [1] considers information networks to be a principal form of social organization. According to this approach, information is not merely an economic good but also a source of political power, a means of social integration, and a resource for the development of civil society. Under these conditions, public relations is no longer limited to an informational function; it increasingly operates as a strategic management function that helps organizations build and maintain relationships with diverse key audiences [1]. This interpretation expands the management role of public relations by connecting communication strategy with the structure and circulation of information throughout networked social environments.

Scientific approaches to public relations have also changed substantially. The classical model presented by [3] proposed a gradual transition from one-way communication to two-way symmetrical communication based on mutual trust and understanding between organizations and their publics. This model underlies many contemporary European communication strategies that emphasize transparency, openness in decision-making, and active citizen participation in public-administration processes. In the modern European information space, communication activities are increasingly shaped by organizations' ability to use advanced digital tools for information analytics. Information analytics provides opportunities not only to monitor the media environment but also to analyze public sentiment, anticipate the development of information campaigns, measure trust in institutions, and respond proactively to information threats. Through big-data methods, machine learning, and artificial intelligence technologies, modern communication systems can become more adaptive; this capacity can improve interaction and strengthen cooperation among institutions, communities, and citizens [6]. In this sense, digital tools are valuable not simply because they accelerate communication but because they can support more systematic interpretation of complex information environments.

Works devoted to the platformization of society have also made an important contribution to the modern conceptualization of digital communications. In line with [5], digital platforms can be understood as a new model of information interaction in which private technology companies are becoming increasingly influential in the production, distribution, ranking, and visibility of information. This growing intermediary role creates a corresponding need for mechanisms that support openness of information, limit manipulation, strengthen algorithmic transparency, and protect democratic values. Table 1 summarizes the principal theoretical approaches used to interpret the development of communication and public relations in European media discourse. The platform perspective therefore helps explain why contemporary communication policy increasingly addresses both opportunities for rapid interaction and risks associated with privately mediated information flows.

In response to these challenges, the European Union has developed a comprehensive legal and policy framework that defines important principles for the functioning of the digital information environment. The European Democracy Action Plan, the Digital Services Act, and media-literacy initiatives play significant roles in this process by seeking to increase the transparency and accountability of digital platforms, counter disinformation, and strengthen citizens' confidence in the information environment [17, 18]. These instruments are relevant to communication practice because they connect the operation of digital services with broader requirements concerning openness, accountability, and responsible information exchange.

Table 1. *Evolution of theoretical approaches to the development of communication and public relations in European media discourse*

Theoretical approach	Main provisions	Role in ensuring openness of the information space	Significance for the development of democratic communication
Public sphere theory	The information space is considered an environment for open public dialogue between the state and citizens.	Provides free access to information and opportunities for public discussion of socially important issues	Fosters democratic culture, increases trust in state institutions, and supports the development of civil society
Network society theory	Communication is carried out through global digital networks that integrate the state, business, media, and citizens	Promotes the rapid dissemination of information and the integration of different communication platforms	Supports horizontal interaction among participants in information relations and expands opportunities for public participation
Two-way symmetrical public relations model	Communication is based on mutual exchange of information, consideration of the interests of all parties, and partnership-based interaction.	Increases the openness of organizations' activities, contributes to the formation of a positive reputation, and supports long-term relationships with the public	Creates conditions for effective public dialogue and the development of democratic governance
Comparative Media Systems Theory	Media systems function in relation to the political, economic, and socio-cultural characteristics of states	Supports balanced media functioning and helps limit excessive political influence on the information space	Contributes to stronger democratic institutions, the development of independent journalism, and information pluralism
Theory of platformization of digital society	Digital platforms and social networks are becoming major intermediaries of information exchange	Enables rapid dissemination of information while requiring mechanisms for countering disinformation and increasing algorithmic transparency	Shapes modern approaches to digital governance, media literacy, and the regulation of digital platforms
European Concept of Strategic Communications	Communication is viewed as a tool for supporting democratic values, information security, and societal resilience	Promotes transparency in the activities of state institutions and increases trust in public authorities and information resources	Contributes to stronger democratic governance, development of digital democracy, and creation of a sustainable information environment

Source: summarized by the author based on [1, 3–5, 17, 19].

The analysis of the theoretical foundations of communication and public relations in European media discourse shows that the modern communication model derives from a combination of classical concepts of the public sphere, network society, two-way symmetrical communication, and newer conceptual approaches to the platformization of the information space. In contrast to the traditional informational model, contemporary European communications focus on maintaining continuous dialogue among the state, civil society, business, and the media, thereby contributing to greater openness of the information environment, stronger trust in institutions, and the development of democratic governance mechanisms. It is also established that public relations in the European media space performs not only an informational function but also a strategic one by supporting effective communication among the participants in the communication process. The use of advanced digital technologies, information analytics, media-monitoring tools, and digital platforms makes it possible to

respond in real time to changes in the information environment, improve the quality of communication policy, and reduce risks associated with disinformation. At the same time, the effectiveness of these processes is closely linked to adherence to principles of transparency, openness, professional ethics, and media literacy, which form an important foundation of contemporary European information policy. The resulting model is therefore simultaneously technological, institutional, and communicative, because each dimension affects how information is produced, interpreted, shared, and trusted.

The systematization of contemporary theoretical provisions makes it possible to argue that the future development of European media discourse will be characterized by the continuing combination of digital innovation, improvement of strategic communication mechanisms, and wider use of advanced information-analytics tools. This combination creates important conditions for maintaining the openness of the information space, strengthening democratic values, increasing society's information resilience, and developing an effective system of interaction among public authorities, the media, and the public in accordance with contemporary European standards. In this perspective, innovation is most useful when it is accompanied by communication practices and institutional arrangements that support responsible and transparent information exchange.

The further development of European media discourse is shaped by continuous transformations in the information sphere, where digital technologies change not only the speed of information transmission but also the methods used to create, distribute, analyze, and perceive information within communities. Whereas traditional media long dominated as the principal producers of information content, the contemporary digital environment is characterized by active user participation in creating information, shaping public opinion, and developing public debate. This transformation creates a need to reconsider traditional approaches to organizing communication and public relations, which are becoming increasingly focused on interactivity, responsiveness, and personalization of communication processes [2, 5]. Consequently, users increasingly participate in communication processes as both recipients and producers of information, which further complicates the management of public communication.

A distinctive feature of the European communication model is the combination of freedom of information flows with effective mechanisms for regulating the digital environment. The information space can be viewed as a virtual information market whose operation depends on interactions among advertisers, news agencies, internet service providers, digital platforms, and end users. From the European policy perspective, ongoing reforms of the digital environment increasingly involve the coordinated use of legal, organizational, technological, and educational mechanisms intended to increase platform transparency, protect personal data, counter disinformation, and support independent media [17, 18]. This combined approach reflects the need to preserve open information exchange while also addressing the practical risks created by increasingly complex digital infrastructures.

One important factor in contemporary European media discourse is the growing role of coordinated strategic communications at the European level. Unlike conventional information campaigns, strategic communications are planned for the long term, combine multiple channels of information dissemination, and employ modern methods for analyzing audience behavior. Their effectiveness is evaluated according to their capacity to maintain message consistency, support institutional reputation, and respond appropriately to information crises. European practice also shows that strategic communications are increasingly used to strengthen democratic governance, encourage civic participation, and support social cohesion [13]. Over the past decade, a digital communication ecosystem has developed in which governmental institutions, international organizations, civil society organizations, and the media operate within a common information space. Such coordination enables real-time information exchange, can improve the management of public services, and creates additional conditions for the development of e-democracy. At the same time, the expanding role of digital platforms creates new challenges related to manipulation of public opinion, recommendation mechanisms, information attacks, and the dissemination of unreliable content. European countries therefore increasingly prioritize the development of digital resilience and information security [21]. In this context, media literacy is particularly important as a set of knowledge, skills, and competencies that enables citizens to evaluate information critically, analyze its sources, understand the functioning of digital platforms, and use information resources responsibly. Unlike traditional information literacy, the modern European model of media literacy also encompasses digital ethics, information security, personal-data protection, and the development of a culture of responsible digital communication. Such strategies are reflected in national educational programs and in the activities of UNESCO, the European Commission, and other international bodies that treat media literacy as an important factor in supporting a democratic society [19, 22]. Media literacy therefore complements strategic communication by strengthening the ability of individuals to interpret the same digital environment in which institutions conduct communication activities.

An important aspect of contemporary communication-policy development is the integration of information analytics into decision-making processes. Big-data processing technologies, automated tools for monitoring the information environment, and artificial-intelligence-based instruments increasingly make it possible to assess the effectiveness of information campaigns in real time, predict possible public reactions to management decisions, identify information risks, and recognize potential threats to information security. These technologies can also reduce the resources required for monitoring and analysis when they are implemented appropriately. Information analytics therefore supports a transition

from reactive communication management to the proactive development of information policy in accordance with contemporary principles of European governance [12]. The value of this approach lies in combining technological processing with managerial interpretation so that communication decisions can be based on more timely and structured information.

Another important area is the research of Ukrainian scholars examining the development of digital communications under contemporary information challenges. In particular, [15] shows that social networks can no longer be regarded merely as platforms for interpersonal communication; they function as a comprehensive communication infrastructure that influences public opinion, language culture, and patterns of information interaction. The digitalization of the communication space has consequently brought issues of information security, cyber protection, critical thinking, and improved mechanisms for countering harmful information influence to the forefront [15]. In the context of Ukraine's European integration, harmonizing national information policy with principles of openness, transparency, and democratic governance reflected in European standards is particularly important. The implementation of these approaches can contribute to the development of an effective strategic-communications system, stronger public trust in state institutions, improved interaction between government and society, and greater information resilience in the face of hybrid challenges. Figure 1 presents a conceptual model of the development of communication and public relations in European media discourse. These developments show that digital communication policy is closely connected with broader questions of institutional trust, public participation, information security, and communication resilience.

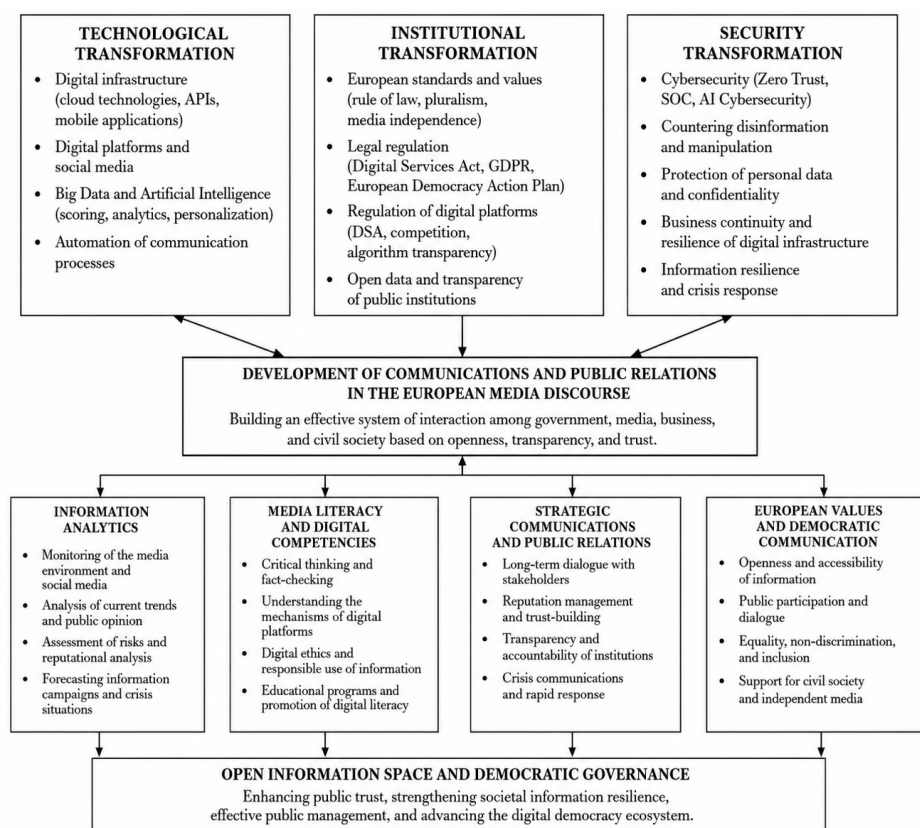


Figure 1. Conceptual model of the development of communication and public relations in European media discourse

Source: developed by the author based on [1, 3, 4, 13, 17–19]

In today's digital society, information has become a key strategic resource influencing political processes, social interaction, economic development, and the functioning of democratic institutions. The spread of digital technologies, social networks, and online communication platforms has substantially changed traditional models of information production, distribution, and consumption. On the one hand, these technologies provide unprecedented opportunities for open access to information; on the other hand, they create new risks, including disinformation, manipulative information campaigns, false content, and psychological and informational influence on society. In this context, information analytics and media literacy acquire strategic importance as complementary tools for strengthening information resilience, supporting democratic communication, and improving public relations [1, 19]. The importance of these complementary tools increases as the same digital environment simultaneously supports access to information and enables faster circulation of misleading or manipulative content.

The European Union considers information resilience an important component of democratic development because the quality of the information environment affects citizens' trust in state institutions, the effectiveness of policy implementation,

and society's capacity to resist harmful information influence. In this sense, information analytics is not only a method for collecting and systematizing information but also a tool for the strategic management of information processes. The use of modern digital technologies for data analysis makes it possible to monitor the information field continuously, assess reputational risks, anticipate information crises, and develop effective communication responses [17]. Information resilience can therefore be understood as involving both institutional capacity and the ability to interpret, assess, and respond to changing information conditions.

Scientific approaches to information analytics have changed substantially under the influence of digital-platform development. Whereas analysis of the information environment previously relied mainly on the content of traditional media, contemporary information flows are formed within a complex network of digital services, social platforms, video-hosting services, messaging applications, and interactive media resources. This environment creates a need for comprehensive analytical tools that combine big-data analytics, machine learning, automated monitoring, and predictive modeling of information processes [6]. The analytical task has consequently expanded from examining individual media messages to studying interconnected flows of information across multiple platforms and technical environments.

The essence of information analytics lies in transforming large volumes of unstructured information into organized knowledge that can support decision-making. It can identify information trends, assess the societal impact of specific information events, measure the effectiveness of communication campaigns, and anticipate potential information threats. As information analytics becomes increasingly integrated into the strategic-communications systems of states, international organizations, and large corporations, it can support timely responses to crises and greater transparency in information policy [13]. In this way, information analytics links data collection with interpretation and makes large information flows more usable for communication planning and organizational decision-making.

Information analytics is especially relevant in the context of countering disinformation. Modern information attacks are characterized by rapid dissemination, the use of social-network algorithms, artificial intelligence technologies, and psychological mechanisms of influence on mass consciousness. Under these conditions, traditional methods of information verification are no longer sufficient by themselves to ensure the desired level of information security. Effective counteraction to disinformation increasingly requires automated processing of information flows to detect anomalous activity, analyze sources and pathways of content distribution, and assess the reliability of information. The integrated use of analytical technologies makes it possible to detect information threats in a timely manner and mitigate their harmful effects on society [21]. This analytical dimension is especially important when the scale and speed of information circulation exceed the capacity of exclusively manual monitoring and verification procedures.

The growing use of information analytics also strengthens the role of media literacy as one of the fundamental means of ensuring information resilience. In contemporary scholarship, media literacy is understood as a set of competencies that enables individuals to identify, analyze, evaluate, interpret, create, and responsibly use information regardless of the channel through which it is distributed. Unlike traditional information literacy, media literacy also involves critical thinking, digital ethics, fact-checking skills, an understanding of how digital-platform algorithms function, and the ability to recognize manipulative techniques [7, 8]. These competencies are mutually reinforcing because technical access to information does not by itself guarantee critical understanding or responsible participation in digital communication.

UNESCO recognizes media and information literacy as an important competence for citizens in the twenty-first century and emphasizes its role in supporting freedom of expression, democratic societies, and the quality of public dialogue [19]. A similar position is reflected in European Commission initiatives, which treat the promotion of media literacy as an important element of digital transformation and efforts to counter disinformation. Implementing relevant programs requires the integration of media education into formal and non-formal education, support for independent fact-checking organizations, improvement of the population's digital competencies, and development of citizens' information culture [22]. Table 2 summarizes practical applications of information analytics and media literacy for countering disinformation in European countries and organizations. The educational dimension is therefore closely connected with wider communication-policy objectives concerning reliable information, informed participation, and resilience against misleading digital content.

The study showed that under conditions of digital transformation of the information space, information analytics and media literacy function as interdependent elements within the toolkit of modern strategic communications. Together, they support effective counteraction to disinformation, improve the quality of communication processes, and strengthen society's information resilience. Information analytics provides systematic monitoring of the information field, identification of destructive information influences, assessment of public sentiment, and forecasting of potential threats, whereas media literacy develops citizens' ability to perceive information critically, verify its reliability, recognize manipulative content, and interact responsibly with digital media. The combined use of these tools makes it possible not only to reduce the harmful effects of information threats but also to support a higher-quality information environment based on openness, reliability, and trust among members of society. Their interaction is important because analytical systems can identify risks, while media-literate users are better equipped to interpret information and respond to those risks responsibly.

Table 2. *Practical application of information analytics and media literacy in countering disinformation in European countries*

Country / organization	Information challenge	Information analytics tools used	Media literacy development activities	Practical result
European Union	Coordinated disinformation campaigns concerning the activities of EU institutions	European Digital Media Observatory (EDMO), digital-platform monitoring, and analysis of information flows	Pan-European media-literacy development programs and support for independent fact-checking centers	Faster detection of false information and improved coordination among Member States
Finland	Information influence and the spread of false or misleading information	Continuous monitoring of the information environment and social-media analytics	Integration of media literacy into educational programs at different levels	Building one of the highest levels of population resilience to disinformation in Europe
Estonia	Cyberattacks and information operations	Cyber-incident analysis and digital monitoring of government information resources	National digital-literacy and cyber-hygiene programs	Stronger information security and digital resilience of government institutions
Ukraine	Large-scale information and psychological operations and wartime disinformation	OSINT analytics, social-media monitoring, and automated analysis of information campaigns	Nationwide media-literacy programs, fact-checking platforms, and educational courses	Stronger critical assessment of information and more rapid responses to disinformation
UNESCO and European Commission	Low levels of digital competence among certain social groups	Research on population information behavior and assessment of digital-literacy levels	Development of international Media and Information Literacy (MIL) programs	Increased digital competence and development of a culture of responsible information use

Source: summarized by the author based on [7, 8, 12, 13, 17, 19, 22].

European experience indicates that an effective response to disinformation requires a comprehensive approach combining advanced analytical tools, legal regulation, development of the population's digital competencies, and implementation of media-literacy programs. The practices of the European Union, Finland, Estonia, and Ukraine show that the systematic use of information analytics, automated monitoring of digital platforms, fact-checking, and educational activities can strengthen strategic communications, support timely identification of information threats, and increase citizens' confidence in reliable sources of information. These examples illustrate that societal information resilience is not created by isolated technological solutions but by an integrated system of interaction among public institutions, the media, the educational environment, and civil society. The overall approach therefore combines institutional action with individual competencies, recognizing that information resilience depends on both organized systems and informed participation by citizens.

The generalization of the research results indicates that the future development of European media discourse should be supported by broader use of artificial intelligence and big-data analytics, stronger communication strategies, effective practices in media literacy, and continued harmonization of national approaches to digital governance with European standards. The systematic convergence of information analytics and media literacy provides a basis for improving communication processes, strengthening information security, developing a democratic information space, and increasing society's capacity to resist modern digital threats. The rapid digitalization of society has become one of the major factors shaping the contemporary European media landscape, contributing to new principles of communication, new forms of interaction between the state and civil society, and new mechanisms for the formation of public opinion. At the same time, the evolution of digital technologies is accompanied by challenges affecting the effectiveness of information policy, the security of the information space, and the resilience of democratic institutions. Unlike many traditional information-security threats, contemporary digital risks can spread rapidly across borders, rely on automated technologies, and be difficult to identify at an early stage. European states are therefore increasingly focused on developing integrated communication policies that combine legal, organizational, technological, and educational measures to strengthen information resilience [17, 21]. This integrated perspective treats technological innovation, communication management, and media education as mutually connected responses to a digital environment that continues to change rapidly.

Among the most pressing digital challenges is the spread of disinformation and manipulative content, which can substantially affect social and political processes, electoral environments, citizens' trust in state institutions, and the functioning of democratic mechanisms. Social networks, digital platforms, and recommendation algorithms enable information to spread extremely rapidly regardless of its accuracy. As a result, false or misleading messages can sometimes reach large audiences before corrective information is available, creating additional risks for information security and democratic communication [5, 6]. The central problem is therefore not only the existence of false information but also the speed, scale, and technical mechanisms through which it can circulate.

Another problematic aspect is the growing use of artificial intelligence technologies for automated content production. Generative artificial intelligence models simplify the creation of text, images, audio, and video, substantially expanding the scale and speed of digital communication. At the same time, these technologies can be misused to create deepfakes, automate disinformation campaigns, and manipulate public opinion. The continuing development of generative artificial intelligence is therefore one of the fastest-changing factors in the contemporary information environment and, according to international risk assessments, requires updated approaches to digital regulation, information verification, and information security [21]. The challenge is consequently dual: the same technologies that expand communication possibilities can also increase the efficiency with which deceptive or manipulated content is produced and distributed.

The algorithmization of information flows also significantly affects the functioning of the European media space. Modern digital platforms use complex content-personalization algorithms that determine the order and visibility of information according to users' behavioral characteristics. Although such mechanisms can improve the relevance and

efficiency of digital services, they can simultaneously contribute to so-called “information bubbles”, in which users are repeatedly exposed to information that primarily confirms their previous views. This dynamic can weaken pluralism of opinion, intensify social polarization, and reduce the quality of democratic dialogue [2]. The communication consequences of personalization therefore depend not only on technical performance but also on how algorithmic selection influences the diversity of information encountered by users.

Cyber threats, which are increasingly combined with information operations, remain an important component of contemporary digital challenges. Cyberattacks targeting state information systems, media organizations, digital infrastructure, and public registries may be accompanied by information campaigns intended to discredit institutions or create uncertainty among the population. For this reason, contemporary European approaches to information security increasingly emphasize the integration of cybersecurity, strategic communications, digital literacy, and information analytics within a unified system for strengthening institutional and societal resilience [18]. This convergence of technical and communicative threats explains why information-security strategies increasingly require cooperation across technological, institutional, educational, and communication domains.

In response to these challenges, the European Union has developed a comprehensive set of rules and policy instruments that establish important principles for the contemporary digital environment. The Digital Services Act represents a major step in regulating digital platforms by introducing requirements related to platform accountability, transparency, and user protection, while the European Democracy Action Plan includes measures intended to support independent media, strengthen fact-checking, increase transparency in political advertising, and reinforce democratic processes in the digital environment [17, 18]. Together, these measures illustrate an approach in which platform regulation and democratic communication are treated as connected parts of the wider governance of digital information.

The experience of individual European countries indicates that the effectiveness of communication policy is strongly influenced by the degree to which digital technologies, information analytics, and media-literacy programs are integrated. Finland traditionally occupies leading positions among EU Member States in the population’s ability to counter disinformation, reflecting a comprehensive approach to media education, critical thinking, and digital literacy within the education system. Estonia provides a successful example of combining digital governance with contemporary cybersecurity and information-analytics mechanisms, contributing to a high level of citizens’ trust in digital government services. Ukraine’s experience has become especially relevant under conditions of full-scale information warfare, in which rapid analysis of information flows, the use of OSINT technologies, the development of fact-checking platforms, and implementation of national media-literacy programs have become key elements of efforts to strengthen the state’s information resilience. Table 3 presents a comparative analysis of major digital challenges and mechanisms for addressing them in the European media environment. These cases demonstrate different institutional contexts, but each illustrates the importance of connecting technological tools with education, analysis, and organized communication practices.

The development of communication policy in the European media environment is increasingly based on aligning digital practices with the principles of open governance and democratic participation. Communication effectiveness is determined not only by the speed of information dissemination but also by the capacity of state institutions to maintain two-way communication with society, respond promptly to citizens’ information needs, and ensure transparency in management procedures. The digitalization of communication activities is therefore increasingly interpreted as a systemic process that includes the development of e-government, consolidation of digital services, use of artificial intelligence for information processing, and adoption of new approaches to measuring communication effectiveness [1, 17]. One important direction in contemporary communication policy is the expansion of digital analytics in public relations. Big-data analysis tools, automated monitoring of the information field, and machine-learning algorithms support a transition from a reactive model of communication management to a predictive and proactive model of information-risk management. This approach provides opportunities for continuous monitoring of changes in public opinion, evaluation of information campaigns, and development of response scenarios for potential communication crises. Information analytics consequently occupies an important place in strategic management by improving the quality of managerial decisions and supporting trust between public authorities and citizens [6]. At the same time, the development of ethical principles governing digital platforms is becoming increasingly important. European practice demonstrates a gradual transition from minimal intervention toward a model of responsible digital governance that requires clearer rules for algorithmic transparency, platform responsibility concerning illegal content, and protection of users’ personal data. The adoption of the Digital Services Act and the continuing development of a legal framework for artificial intelligence indicate an effort to create a balanced regulatory model that combines freedom of expression with information security and the protection of democratic values [18]. The effectiveness of this model ultimately depends on the coordinated use of technological, analytical, ethical, and institutional instruments rather than on any single communication tool.

Table 3. *Comparative analysis of modern digital challenges and mechanisms for overcoming them in the European media environment*

Digital challenge	Potential consequences	Examples of European practices	Communication policy tools	Expected effect
Disinformation and fake news	Manipulation of public opinion and declining trust in institutions	EDMO, fact-checking networks eC	Strategic communications, information analytics, and fact-checking	Increasing the reliability and credibility of the information space
Deepfakes and generative AI	Distribution of false or manipulated audio and video content	AI Act and European Commission guidance	AI-content labeling, digital regulation, and detection algorithms	Reducing risks associated with manipulative uses of AI
Algorithmic personalization	Formation of information “bubbles” and polarization of society	Digital Services Act	Algorithmic transparency and independent auditing of digital platforms	Expanding information pluralism
Cyberattacks and information operations	Disruption of state information systems and digital public services	Practices of Estonia and the European Union Agency for Cybersecurity (ENISA)	Integration of cybersecurity with strategic communications	Strengthening the digital resilience of the state
Low level of digital competences	Greater vulnerability of the population to manipulative content	Media-literacy programs in Finland and UNESCO initiatives	Media education, digital literacy, and development of critical thinking	Formation of a more informed and resilient society

Source: summarized by the author based on [15, 17–19, 21].

The integration of media literacy into lifelong learning is a promising direction for the development of communication policy. Until recently, media competencies were associated primarily with formal education, but contemporary European approaches increasingly treat the development of critical information skills as a lifelong process. Particular attention is given to training civil servants, journalists, local-government employees, educators, and representatives of civil society whose work is closely connected with information and communication. Such an approach can improve the quality of communication processes and create conditions for the development of a more resilient information environment [19, 22]. Lifelong learning broadens the target audience of media education and recognizes that digital information practices continue to evolve throughout professional and civic life.

Another direction for improving modern communication policy is the development of international cooperation in countering information threats. Digital challenges are transnational; therefore, efforts to counter disinformation, cyber threats, and manipulative information campaigns require continuing coordination among states, international organizations, digital platforms, and independent analytical centers. For this reason, the European Union has supported the development of joint information and analytical networks, digital-space monitoring centers, and international information-exchange platforms that can provide operational support in responding to contemporary information threats [17]. International cooperation is especially relevant because information flows frequently cross national boundaries and digital platforms operate within communication environments extending beyond individual jurisdictions.

Practical experience in European countries confirms that the effectiveness of communication policy also depends on systematic methods for evaluating outcomes. Indicators increasingly used in such assessments include digital audience reach, levels of public trust, speed of response to information crises, effectiveness of fact-checking mechanisms, and the level of digital competence among the population. These indicators make it possible to evaluate individual information campaigns and identify areas in which communication policy may require further development in accordance with contemporary European standards [13]. A systematic evaluation framework therefore makes communication policy more measurable and provides a clearer basis for comparing intended objectives with observed communication outcomes.

In the context of Ukraine’s European integration, these approaches have particular practical significance. A modern system of strategic communications should be developed through the coordinated digitalization of public administration, expansion of information analytics, improvement of the regulatory framework governing digital platforms, broader media-literacy programs, and incorporation of international experience in countering information threats. The development of the population’s digital culture remains especially important because critical thinking and responsible information consumption directly influence society’s capacity to withstand contemporary forms of harmful information influence [12, 15]. Figure 2 presents a conceptual model for improving communication policy and public relations in accordance with European standards under contemporary digital challenges. These measures are interconnected because the effectiveness of digital tools depends partly on institutional capacity, professional practice, and the information competencies of the population.

The study showed that contemporary digital challenges are changing the European media landscape in terms of both its functioning and the requirements placed on communication policy and public relations systems. The information environment is increasingly affected by disinformation, artificial intelligence technologies, algorithmic personalization of content, cyber threats, and the growing influence of digital platforms, creating a need to move beyond conventional information campaigns toward comprehensive systems of strategic communication. The analysis of European practice indicates that effective communication policy requires the integration of contemporary analytical instruments, appropriate regulatory mechanisms, higher levels of media literacy, and proactive use of digital tools for public engagement. This transition requires communication systems that can respond to rapidly changing information conditions while maintaining transparency, consistency, and meaningful engagement with different audiences.

Promising directions for improving communication policy in the European context include the use of information-analytics systems based on big-data technologies, artificial intelligence, and OSINT; increased transparency of digital-platform algorithms; expansion of media-literacy programs; further development of crisis communications; and stronger cross-sectoral cooperation among public institutions, media organizations, research institutions, and civil society. The

coordinated use of these instruments can improve communication processes, strengthen trust in public institutions, increase society's information resilience, and support the development of an open democratic information environment consistent with contemporary European standards. In combination, these directions emphasize that technological modernization should be accompanied by institutional coordination, educational development, and responsible approaches to communication governance.

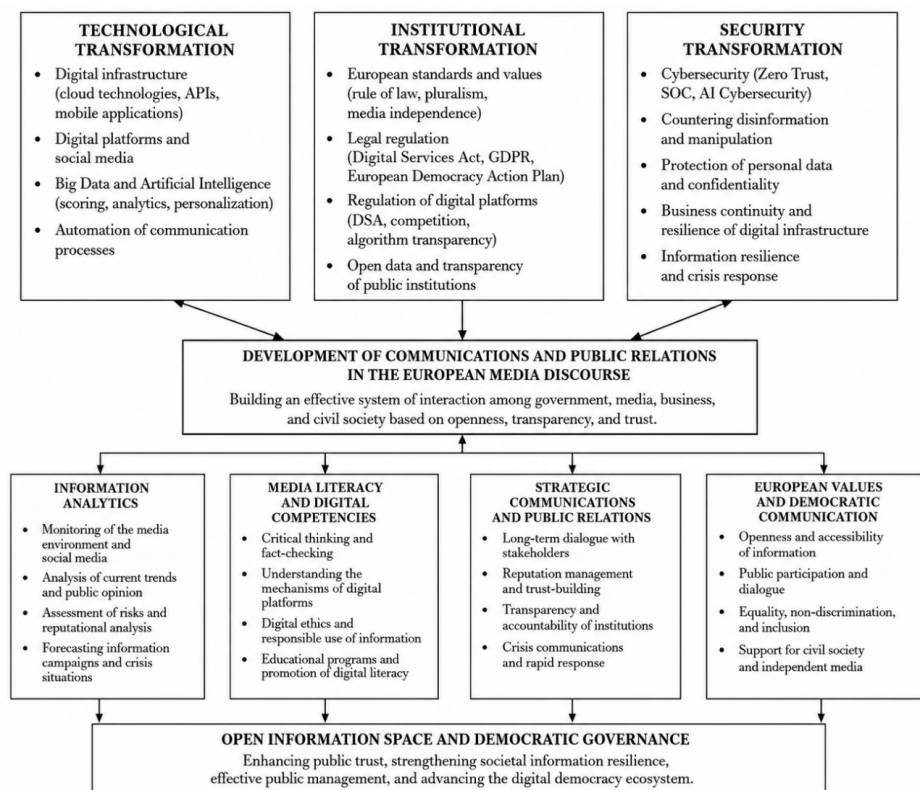


Figure 2. Conceptual model for improving communication policy and public relations in accordance with European standards in the face of modern digital challenges

Source: developed by the author based on [1, 13, 15, 17–19, 21].

5. DISCUSSION

The development of communication and public relations in contemporary European media discourse has been shaped by the interaction of digital technologies, democratic models of media-system functioning, and institutional mechanisms for regulating the information space. The findings are consistent with theoretical approaches that interpret digital communication not only as a technologically oriented process of information transmission but also as a strategic instrument for building public trust, supporting democratic governance, and ensuring productive interaction among public authorities, the media, and civil society [1, 2]. At the same time, the study complements existing approaches by showing that, in the contemporary European media space, communication effectiveness increasingly depends on the integration of information analytics, media literacy, and strategic communications within a broader system for strengthening information resilience. This interpretation places communication policy at the intersection of technological change, institutional development, public interaction, and the continuing transformation of media systems.

Comparison of the results with contemporary research indicates that the democratic functioning of the information space is closely associated with the openness of media systems, the transparency of digital platforms, and the development of mechanisms for public dialogue. These conclusions are consistent with comparative approaches to media systems and with theories of network society that emphasize the roles of independent media, digital interaction, and open access to information in democratic institutions [4, 5]. At the same time, the findings indicate that communication openness cannot be effectively sustained, even in a highly digitalized information environment, without developing the population's digital skills and systematically applying information analytics. The results therefore reinforce the view that technological access and institutional openness become more effective when citizens also possess the skills needed to interpret digital information critically.

The study paid particular attention to assessing the role of information analytics and media literacy in countering disinformation. The results are consistent with contemporary scientific approaches according to which information analytics supports rapid detection of information threats, analysis of trends in the digital environment, and evidence-

informed decision-making, whereas media literacy develops citizens' critical evaluation of information, fact-checking skills, and ability to identify manipulative content [7, 8, 19]. At the same time, the findings extend these approaches by indicating that the greatest effectiveness in countering disinformation is achieved when technological instruments for information analysis are combined with the development of the population's digital competencies rather than when either mechanism is implemented in isolation. This combined approach recognizes that technological detection and human interpretation address different parts of the same problem and are more useful when applied together.

The results are also consistent with contemporary European approaches to regulating the digital environment. In particular, the European Democracy Action Plan and the Digital Services Act emphasize issues such as platform transparency, strategic communication, accountability of online intermediaries, and support for measures that strengthen the integrity of the information environment [17, 18]. The analysis also indicates that regulation alone cannot ensure a high level of information security; its effectiveness also depends on users' digital literacy, the capacity of public institutions to employ modern analytical tools, and cooperation among government, media organizations, and civil society. The study further confirmed the substantial influence of contemporary digital challenges on the evolution of European media discourse. Disinformation, algorithmic personalization, generative artificial intelligence, cyber threats, and deepfake technologies create new risks for democratic communication. These findings are consistent with current global risk assessments and studies of digital-platform functioning that identify information manipulation as an important challenge for the contemporary information society [6, 21]. At the same time, the findings show that the development of digital technologies also creates opportunities to improve strategic communications through artificial intelligence, automated monitoring of the information space, big-data analysis, and forecasting of information risks. The regulatory and analytical dimensions should therefore be considered complementary, because rules governing platforms and tools for interpreting information address different aspects of digital communication risk.

Comparison of the findings of this study with contemporary research by Ukrainian and international scholars confirms that social networks function not only as communication platforms but also as environments for the formation of public opinion, political mobilization, and socio-cultural interaction. This observation is consistent with studies of the linguistic and communicative features of social networks, information threats in digital environments, and contemporary models of strategic-communications development [13, 15, 16]. At the same time, the present study indicates that increased information resilience is supported by the integration of information analytics, media literacy, and modern digital technologies rather than by exclusive reliance on administrative or regulatory instruments. This finding supports an integrated perspective in which communication practices are examined together with the analytical, educational, and institutional conditions that shape their effects.

Particular attention should be paid to the practical significance of the findings for the development of communication policy in Ukraine in the context of European integration. The generalization of European experience indicates the importance of aligning the national system of strategic communications with relevant European Union standards, developing media-literacy programs, introducing modern information and analytical tools, and expanding international cooperation in countering disinformation. This approach is consistent with contemporary recommendations concerning digital education, media literacy, and the development of societal information resilience [9, 10, 23]. For Ukraine, the practical significance of these measures lies in adapting European experience to national communication needs while maintaining compatibility with broader European approaches.

Thus, the findings are consistent with contemporary scientific approaches to communication and public relations in the digital sphere while also extending them by emphasizing the importance of convergence among information analytics, media literacy, strategic communications, and digital governance. The scientific novelty of the study lies in its argument that societal information resilience is determined not only by technological development or regulatory support but also by the effectiveness of interaction among the state, media organizations, digital platforms, educational institutions, and civil society. A promising direction for further research is the development of an integrated model for assessing strategic-communication effectiveness that combines quantitative indicators of information resilience, indicators of media-literacy development, results of information analytics, and criteria for evaluating citizens' trust in digital communications under contemporary conditions of digital transformation. Such a model could also provide a clearer analytical connection between institutional communication practices, citizens' competencies, measurable information risks, and public perceptions of trust.

6. CONCLUSIONS

The study confirmed the importance of communication and public relations in European media discourse as key components in the development of an open information space, democratic governance, and societal information resilience. It found that the contemporary communication model is based on a combination of openness, transparency, strategic communication, and digital transformation, thereby supporting effective interaction among state institutions, the media, and civil society. These components operate together because openness without effective communication, or digitalization

without transparency, would provide only a partial basis for sustainable public interaction.

It was determined that information analytics and media literacy together form a comprehensive set of tools for countering disinformation and improving the quality of communication processes. Information analytics enables monitoring of the information environment, identification of information threats, and support for informed managerial decisions, whereas media literacy develops critical thinking, fact-checking skills, and responsible use of digital resources. Their combined application can increase trust in reliable information sources and strengthen societal information resilience. The complementary nature of these tools is important because analytical capacity and individual critical competence address different stages of the same information process.

The study highlights that the principal digital challenges in the contemporary European media environment include disinformation, the spread and misuse of generative artificial intelligence, algorithmic personalization of content, cyber threats, and the growing influence of digital platforms. Analysis of European experience indicates that an adequate response to these challenges requires comprehensive integration of modern information-analytics technologies, development of media literacy, improvement of strategic communications, effective regulatory and legal mechanisms, and international cooperation. The synthesis of the findings provides grounds to argue that communication policy over the coming decade should increasingly focus on integrating digital innovation, artificial intelligence, information analytics, and educational programs in media literacy. Such integration can contribute to higher-quality public relations, greater openness of the information space, stronger democratic institutions, and the development of a sustainable information environment in accordance with contemporary European standards. The overall conclusion is therefore not limited to technological modernization; it emphasizes coordinated development across communication practice, regulation, analytical capacity, education, and institutional cooperation.

AUTHORSHIP AND CONTRIBUTIONS

Liudmyla Mialkovska: Conceptualization, methodology, formal analysis, investigation, supervision, writing – original draft, writing – review and editing. Volodymyr Hrysiuk: Conceptualization, investigation, data curation, analysis, writing – original draft. Iryna Zabiia: Investigation, data curation, formal analysis, writing – original draft, writing – review and editing. Tetiana Bondar: Methodology, formal analysis, interpretation of results, writing – review and editing. Yuliia Litkovych: Investigation, interpretation of results, writing – original draft, writing – review and editing. Svitlana Prokhorenko: Resources, visualization, writing – review and editing. All authors contributed substantially to the conception and development of the study, critically reviewed the manuscript, approved the final version, and agreed to be accountable for all aspects of the work.

FUNDING STATEMENT

This research received no external funding.

CONFLICTS OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data are available from the corresponding author upon reasonable request.

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this manuscript, the authors used ChatGPT to improve the linguistic quality and readability of the text. After using this AI-assisted tool, the authors conducted a comprehensive review and made the necessary revisions to ensure the accuracy, integrity, and scientific rigor of the manuscript. All authors accept full responsibility for the final content of the published work, including any errors or inconsistencies that may remain.

REFERENCES

- [1] Castells, Manuel. *Communication Power*. Oxford University Press, 2009.
- [2] Couldry, Nick, and Andreas Hepp. *The Mediated Construction of Reality*. Polity Press, 2017.
- [3] Grunig, James E., and Todd Hunt. *Managing Public Relations*. Holt, Rinehart and Winston, 1984.
- [4] Hallin, Daniel C., and Paolo Mancini. *Comparing Media Systems: Three Models of Media and Politics*. Cambridge University Press, 2004.

- [5] van Dijck, José, et al. *The Platform Society: Public Values in a Connective World*. Oxford University Press, 2018.
- [6] Gillespie, Tarleton. *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media*. Yale University Press, 2018.
- [7] Livingstone, Sonia. "Media Literacy and the Challenge of New Information and Communication Technologies." *The Communication Review*, vol. 7, no. 1, 2004, pp. 3–14.
- [8] Hobbs, Renee. *Digital and Media Literacy: A Plan of Action*. The Aspen Institute, 2010.
- [9] Buckingham, David. *The Media Education Manifesto*. Polity Press, 2019.
- [10] Gómez-Galán, José. "Media Education as Theoretical and Practical Paradigm for Digital Literacy: An Interdisciplinary Analysis." *European Journal of Science and Theology*, vol. 11, no. 3, 2015, pp. 31–44.
- [11] Khoma, Ivan, et al. "Media Manipulations in the Coverage of Events of the Ukrainian Revolution of Dignity: Historical, Linguistic, and Psychological Approaches." *arXiv*, 2024.
- [12] Pasitselska, Olga. "Frontline Knowledge: Digital Media Literacy of Older Adults in Ukraine." *Media and Communication*, vol. 12, 2024, article 8277.
- [13] Mialkovska, Liudmyla, et al. "Leveraging Media and Public Relations Strategies to Advance Sustainable Development: Approaches, Frameworks, and Tactics in Modern Conditions." *Grassroots Journal of Natural Resources*, vol. 7, no. 3ukr, 2024, pp. s253–s269.
- [14] Mialkovska, Liudmyla, et al. "Foreign Models of Educational Stability during Crises." *Revista on Line de Política e Gestão Educacional*, vol. 29, no. esp. 2, 2025, article e025053.
- [15] Mialkovska, Liudmyla, et al. "Social Networks as a Linguistic Environment: A Study of Communicative Manifestations in Cultural-Linguistic and Cognitive Contexts." *Lengua y Habla*, vol. 31, 2026, pp. 148–173.
- [16] Mialkovska, Liudmyla, et al. "Social Networks as a Communication Environment for Young People: Information Threats and European Approaches." *Journal of Theoretical and Applied Information Technology*, vol. 104, no. 4, 2026, pp. 107–120.
- [17] European Commission. *European Democracy Action Plan*. European Commission, 2 Dec. 2020.
- [18] European Parliament and Council of the European Union. "Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and Amending Directive 2000/31/EC (Digital Services Act)." *Official Journal of the European Union*, L 277, 27 Oct. 2022, pp. 1–102.
- [19] Grizzle, Alton, et al. *Media and Information Literate Citizens: Think Critically, Click Wisely!*. UNESCO, 2021.
- [20] UNESCO. "Media and Information Literacy." *UNESCO*. Accessed 15 Sept. 2026.
- [21] World Economic Forum. *The Global Risks Report 2024*. 19th ed., World Economic Forum, 2024.
- [22] European Commission. "Media Literacy." *Shaping Europe's Digital Future*, 22 June 2026.
- [23] OSCE Secretariat Extra-Budgetary Support Programme for Ukraine. *Media Literacy: Training Manual*. Organization for Security and Co-operation in Europe, 2025.