# New Media as Modern Communication Technologies: The Digital Dimension

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## **Abstract**

The latest media nowadays is a set of interaction tools for expanding the subjects' communicative, sensory and cognitive capabilities involving information and communication technologies that correspond to the historical period of their development. Currently, these are technical means (PC equipment with a software complex, with various means of supporting network communications), information resources and communication platforms based on digital technologies. Modern media meet the needs of long-distance, international interactive communication and integrate a number of means for the individual's creative implementation, his social activity and participation in society's information processes. The purpose of the academic paper is a theoretical and practical description of the concept, individual types and features of using new media as technologies that provide communicative processes in the digital mode. Methodology. In the process of preparing the present research, several methods were applied. In particular, analytical and bibliographic methods, induction, deduction, analysis, and synthesis of information were used to study scientific literature on applying new media when working with communication processes in the digital dimension. System-structural, comparative, logical-linguistic methods, abstraction, and idealization were used to study and process data. The questionnaire survey was conducted by the research's authors in online mode for the practical clarification of media tools' certain aspects in the field of communications. Results. Based on the research results, the features of using new media types as modern communication technologies in the digital space were studied.

**Keywords:** New media, social communications, advertising, media communications, digital technologies, journalism

## Introduction

Currently, digital technologies are elements of a single system of remote network communication. However, the creation of interpersonal interaction under the conditions of the participants' different spatial locations in this communication process is not a goal in itself. The purposeful, meaningful, and intentional fulfillment of the potential for new functions of diverse information platforms and Internet resources is crucial to the work of media. This is indispensable material for developing the individual's cognitive abilities, and educational and communicative competencies nowadays.

The theoretical part of the present research substantiates the concepts, components and features of modern development and study of new media in the scientific literature from the perspective of applying in the digital space as modern communication technologies.

The practical part of the research includes establishing the respondents' standpoint regarding the main purpose of new media tools, media problems related to issues of freedom and responsibility in their activities, the role of the latest communication tools, and types of communication in media resources that are most effective and in demand in practical activity. It also determines forms of media tools that will be especially in demand in the future.

Based on the research results, conclusions were made regarding the issues raised. In particular, it was established that the purpose of new media tools is to create an information analogue of the social system, construct the world's certain images, as well as to provide mass communication. New approaches to tackling the issue of establishing uniform international standards for Internet relations and regulating the activities of legal entities as subjects of relations in the media sphere are especially urgently required among all the issues of new media work related to freedom and responsibility. At the same time, the most priority roles of new media in social development are their use as means for transformation, processing and storage of various types of data, the possibility of various external communications and the convergence of various types of data. The survey revealed that asynchronous communication is the media resource type that is most successful and in demand for practical activities. The most promising types of multimedia tools currently being used in new media, and according to the survey respondents' standpoint, are new media ensuring dialogue and possessing the function of personalization, providing interested individuals or groups of people with the necessary information.

# **Literature Review**

"Media" is a qualitative change in the communication system, the addition and expansion of the range of information activities, the achievement of what was impossible in the form of oral communication: recording an event, transmitting information, avoiding the interpretation of its immediate carrier (Rosič et al., 2022).

Currently, "new media" are called phenomena giving rise to previously non-existent social practices. They fundamentally change the cultural space of our existence, forasmuch as they become objects with the help of which a new reality is created. All of them are, in one way or another, computer programming products. They mainly cover two formats of modern human-machine interaction: virtual (augmented) reality and artificial intelligence (Humprecht, et al., 2022).

The format of "new media" as a type of modern information and communication interaction in a globalized society implements the image of the world nowadays. Media tools are not an ontological constant of culture. After all, they allow perceiving and modeling its various spectrums "as desired", or immerse oneself in the world of media reality, or depart from it as needed, that is, construct one's own reality for projecting media activity (Quach et al., 2022), (Valkenburg et al., 2022).

Currently, many scientists talk about the problem of responsibility in the age of new media. In the conditions of developing innovative technologies, every person, including future generations, becomes the subject of responsibility (Nick et al., 2018).

The list of opportunities opened up by the era of "new media" includes the possibility of creating qualitatively new information and educational environment as a basis for developing and improving the educational system. The use of new information and communication technologies accelerates the process of searching for and transmitting information. It changes the nature of the intellectual activity. The introduction of interactive methods in the field of distance learning contributes to the emergence of new forms of online learning and developing the principle of education accessibility (Valkenburg, Meier & Beyens, 2022).

Significant changes have also taken place in the field of professional communication activities of mass media. Access to the publication's archive and external electronic resources, databases, official websites of organizations, news feeds and video conference communication allowed journalists to obtain and broadcast a "more complete" vision of any topic (Meier & Reinecke, 2020).

The increase in the number and variety of communication channels makes it possible to activate a wider and more diverse audience. The new means of mass communication have ceased to be mass in the traditional sense, assuming that a homogeneous numerical audience receives a limited number of messages from a central source. Users contribute to further segmenting the audience and activating personal contacts by independently selecting messages and media (Johannes et al., 2021).

In terms of using new media in journalism, their diversity also makes it possible for independent journalistic integrity to be more successful. The role of the audience has also changed. Various forms of feedback allow the reader, listener and viewer to participate in creating an information product. New creative communication strategies are required in a technologically changing environment. Thus, news picked up by non-professional media embedded in television news programs has become a structural element of the media flow and not just a basis for creating professional media texts (Meier & Schäfer, 2018).

Interactive forms of information, combined with other organizational forms, go beyond the previously closed boundaries of the media system under new technologies' influence. As a result, the mass media system is challenged to create new aspects of activity and define new boundaries of responsibility while carrying out institutional functions. It should also be noted that in addition to the enormous communicative potential of "new media", which enables using innovative constructive models of social interaction, positions of instability are also created, which in the modern world are considered a threat to security (Hoareau, Bagès & Guerrien, 2021).

## Aims

The purpose of the research is to determine the standpoint of scientists in the field of media technology development and practicing journalists working with new media technologies regarding the features of using media technologies in communication.

#### Materials and Methods

A practical study of modern tendencies in using the latest media tools in the field of communications in the digital space was conducted by surveying 317 practicing journalists in the media field, as well as 102 teachers-scientists conducting research and teaching activities at 14 higher educational institutions in Vinnytsia,

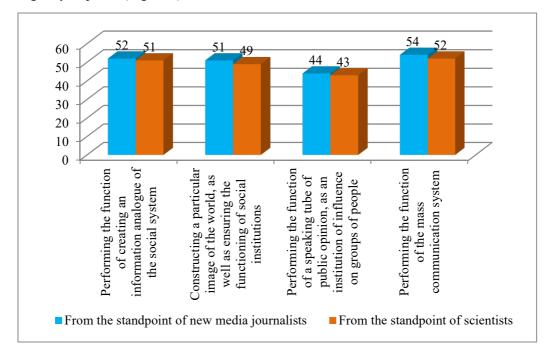
Khmelnytskyi, Rivne, Zhytomyr and Kyiv regions of Ukraine. The survey was conducted using the Survey Planet service.

# Results

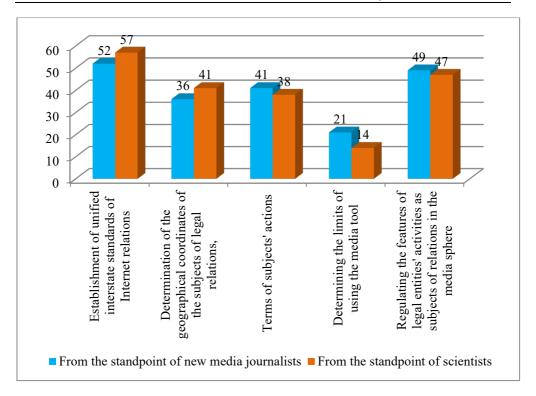
According to the survey respondents' standpoint, given the conditions of today's global development of distant communications, the main objectives of new media tools are as follows (Figure 1).

The survey has revealed that the main and most significant types of the purpose of new media functioning are that they perform the function of creating an information analogue of the social system, construct certain images of the world, and also provide mass communication.

In the course of the research, the respondents found out that among all the problems of new media work related to freedom and responsibility, new approaches to solving the creation of uniform interstate standards of Internet relations and regulation of legal entities' activities as subjects of relations in the media sphere are especially urgently required (Figure 2).



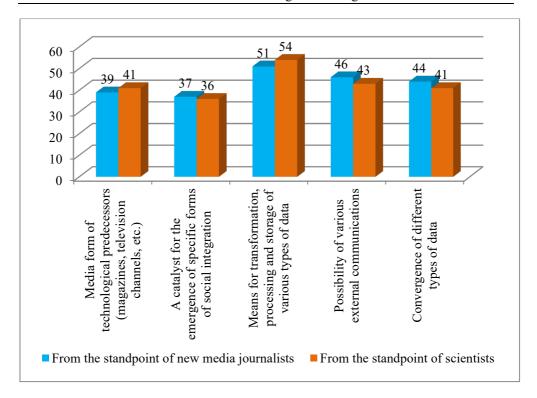
**Figure 1.** The main objectives of new media tools, %. Source: compiled by the authors.



**Figure 2.** Media problems related to issues of freedom and responsibility in their activities, which require new approaches to solving, %.

The important issues to be established during the survey are the implementation of new media's most priority roles in social development (Figure 3):

- tools for transformation, processing and storage of various types of data;
- the possibility of various external communications;
- convergence of different types of data.

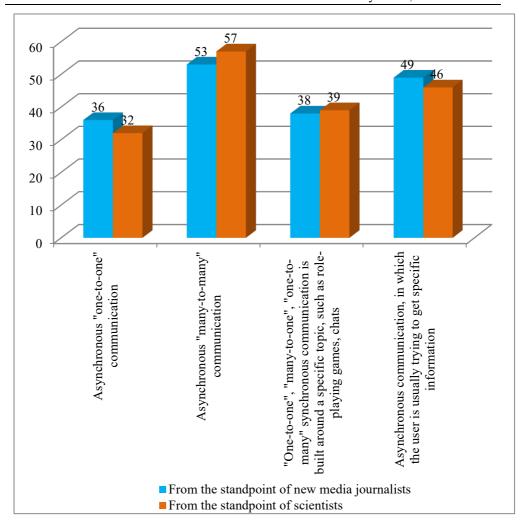


**Figure 3.** The role of the latest communication tools created with the use of media technologies, %.

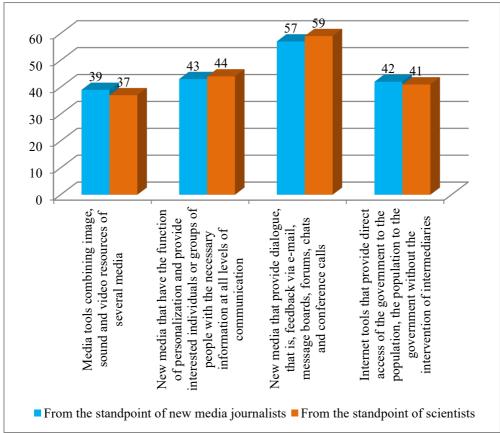
During the research, the respondents were asked to identify the types of communications in media resources that are the most effective and in demand in practical activities (Figure 4).

It can be observed in Figure 4 that these types are asynchronous "many-to-many" communication and asynchronous communication in which the user usually tries to find a website to get specific information ("many-to-one", "one-to-one", and "one-to-many").

The survey participants believe that the following most promising forms of multimedia tools used in new media, will be especially in demand in the future (Figure 5):



**Figure 4.** Types of communications in media resources that are most effective and in demand in practical activities, %.



**Figure 5.** The forms of multimedia used in new media, which will be especially in demand in the future, %.

From among such means, respondents singled out new media providing dialogue, that is, feedback via e-mail, bulletin boards, forums, chats and conference calls, and media that have a personalization function. They provide interested individuals or groups of people with the necessary information at all levels of communication.

# **Discussion**

Technological progress always leads to changes in social life. A feature of our time is the acceleration of technological innovation. Moreover, technological evolution is currently outpacing cultural evolution, and the gap is increasing. However, despite the fact that the information revolution is recognized as a factor essentially changing society's fundamentals, the issues of new telecommunication and computer

technologies and the "new media" based on them are discussed mainly in the context of professional problems, various types of information activities, and less often – in relation to mental problems posing a threat to a person's personal life. At the same time, the communication component plays a major role in any type of activity, and underestimating this factor can lead to tangible negative consequences (Bowman-Smith, Sosa-Hernandez & Nilsen, 2021), (Dienlin & Johannes, 2020).

Digital media culture indicates the acceleration of information and communication processes, a change in the type of communication relations. This is ensured by the widespread use of communication's new technological means across all fields of activity as well as by the notion of telecommunication convergence, which serves as the cornerstone of a new framework for mass media engagement (Paddock & Bell, 2021).

Features of the modern situation open up new opportunities for creating innovative models of human life: principles of "electronic democracy", forms of work of electronic governments and municipalities, remote work conditions for citizens with disabilities, etc. Digital media culture expands communication opportunities, removes geographical barriers, and fosters a sense of proximity to any location in contemporary space (Noon & Meier, 2019).

Innovative information and telecommunication technologies nowadays should be considered as a risk factor, even if we are talking not only about the legal, but also about the moral aspects of new media's activities. Researchers studying contemporary issues involving new media have frequently expressed concerns that the world will become homogenized as a result of the era's technological advancements and that cross-border communications, which are flows of unified information products, pose a threat to national identity (Schreurs &Vandenbosch, 2022), (Kaaniche et al., 2020).

Power and capital acquire a global character in the era of new media. Moreover, the institutions of global governance in the modern world are not national territories in the usual geopolitical dimension of industrial civilization (Gomez-Baya, Rubio-Gonzalez & de Matos, 2019).

The transformation of the media nowadays takes place at the crossroads of civilizations, when the post-industrial (information) society has replaced the industrial one. That is precisely why such a transformation became a new stage in society development and the information and computer revolution, that is, the process of computerization of all spheres of life, becomes its quintessence (Girelli et al., 2019).

The latest technologies have extremely powerfully and radically changed the material, industrial and social spheres of humanity. At the same time, there have been significant changes in the processing, production and transmission of information and the approach to its transmission. Computerization, Internetization, mediation and virtualization of information became the driving forces of these transformations (Przybylko et al., 2021).

The significantly renewed media sphere in general and new media in particular have become its most important expression. Moreover, it is the most decisive factor in the final transition from a consumer-oriented industrial society to a post-industrial society in which knowledge and information are development's central aspects (Verbeij et al., 2021).

#### **Conclusions**

Therefore, as evidenced by the analysis of scientific literature on the research topic and the questionnaire's results, the rapid introduction of innovative technologies into everyday life has both positive and negative consequences for forming the digital media culture of the society in general and the individual in particular.

A feature of introducing new media as a component of the information society's media culture in the context of developing innovative technologies is that every person, including future generations, becomes the subject of responsibility for society's spiritual values. New media contribute to a significant increase in knowledge nowadays, a colossal expansion of information boundaries and, as a result, the creation of the world's new information picture.

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