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DIGITAL MEDIA AUDIENCE: CHALLENGES AND OPPORTUNITIES

Continuous research and study of technological advances in media communication is a modern requirement that is dictated by scientific needs. Technological possibilities are changing daily and being supplemented by new tools and mobile services, making it important to define the audience of the media communication. This article presents the results of survey that aimed to identify media literacy issues and identify gender and geo-regional characteristics of digital media users. The social status of the audience was also analyzed, as well as the coefficient of network usage.

The purpose of the scientific article was to evaluate the activity of social networking channels and personal information portals of major media companies in the country. To determine the scientific and practical relevance of the research, the level of news distribution in social networks and information portals was studied, and the impact of fake news on the audience was discussed. The most common formats in social networks, such as podcasts and infographics, were also tracked.

Methods such as survey, comparative content analysis, and monitoring were used to identify the main problems of the study. As a result, the audience of digital media in recent years was analyzed, and new data was provided on the users of the video hosting of the most viewed YouTube channels. It was determined that literacy in the use of open databases still needs to be developed.

The study found that media audiences are not yet capable of developing technological capabilities at this stage. The difference between independent and state-owned media was cited using specific examples. Ways to create competent content in the media space were evaluated, and solutions to audience problems in digital media were proposed based on scientific papers and expert opinions.

Key words: digital media, media audience, multimedia, audio, video content.

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Сандық медианың аудиториясы: мәселелері мен мүмкіндіктері

Медиакоммуникация саласындағы технологиялық жетістіктерді үздіксіз зерттеу, зерделеу заман талабы және ғылыми қажеттілікті тудырып отыр. Өйткені технологиялық мүмкіндіктер күн өткен сайын өзгеріп, жаңа құралдар, жаңа мобильді қосымшылармен толығып отырады. Сондықтан медиа коммуникацияның аудиториясын анықтау маңызды. Мақалада медиасауаттылық мәселелерін анықтауға арналған сауалнама қорытындысы ұсынылды. Сандық медианы қолданушылардың гендрлік және гео аймақтық ерекшеліктері анықталды. Сонымен қатар аудиторияның әлеуметтік жағдайы, желілерді қолдану коэффициенті көрсетілді.

Ғылыми мақаланың мақсаты еліміздегі ірі медиа компаниялардың әлеуметтік желі арналары мен жеке ақпараттық порталдардың қызметін бағалау болды.

Зерттеудің ғылыми және практикалық маңыздылығын анықтауда әлеуметтік желілер мен ақпараттық порталдардағы жаңалықтардың таралуы деңгейіне сараптама жасалды. Фейк жаңалықтардың аудиторияға әсері талқыланды. Әлеуметтік желіде көп қолданылатын форматтар: подкастинг және инфографика, визуалды материалдарға мониторинг жасалды.

Зерттеудің негізгі мәселелерін анықтауда сауалнама, салыстырмалы контент талдау және мониторинг жасау әдістері қолданылды. Соның нәтижесінде сандық медианың соңғы жылдардағы аудиториясына сараптама жасалды. Ең көп қаралатын YouTube арналардың видеохостинг пайдаланушылары туралы тың мәліметтер берілді. Ашық дерек қорларын қолдану сауаттылығының әлі де дамуды қажет ететіндігі айқындалды.

Нәтижесінде БАҚ аудиториясының дәл қазіргі кезеңде технологиялық мүмкіндіктерді әлі де дамыта алмай отырғандығы анықталды. Тәуелсіз және мемлекеттік медиа арналардың айырмашылығы нақты мысалдармен берілді. Медиакөңістікте сауатты контент қалыптастыру жолдары бағамдалды. Цифрлық медиадағы аудиторияның мәселелерін шешу жолдарын ұсынуда ғылыми еңбектер мен мамандар пікірлері негізге алынды.

Түйін сөздер: сандық медиа, БАҚ аудиториясы, мультимедиа, аудио, видеоконтент.

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Аудитория цифровых медиа: проблемы и возможности

Современный уровень цифровых медийных возможностей и потребности научного дискурса связаны с необходимостью постоянного мониторинга технологических достижений в области медиакоммуникаций. Это обусловлено быстро меняющимися технологическими разработками: новыми инструментами и мобильными сервисами. В этой связи определение аудитории медиакоммуникации является первостепенной задачей.

В данной научной статье представлены результаты опроса, направленного на выявление проблем медиаграмотности, а также гендерных и георегиональных характеристик пользователей цифровых медиа. Проанализирован социальный статус аудитории и коэффициент использования сетей.

Целью данного исследования была оценка активности каналов социальных сетей и персональных информационных порталов крупных медиакомпаний в стране. В рамках определения научной и практической значимости научной работы, изучены эффективные модели распространения новостей в социальных сетях и информационных порталах, а также влияние фейковых новостей на аудиторию. В работе значительное внимание уделяется анализу наиболее распространенных форматов в социальных сетях: подкастам, инфографике и визуальным материалам.

Для достижения цели исследования использованы методы опроса, сравнительного контент-анализа и мониторинга. В результате была проанализирована аудитория цифровых медиа за последние годы, и предоставлены новые данные о пользователях самых просматриваемых каналов на видеохостинге YouTube. Авторы приходят к выводу, что грамотность использования открытых баз данных еще нуждается в дальнейшем развитии.

В ходе исследования установлено, что современная аудитория СМИ еще не готова к полноценному использованию технологических возможностей. Кроме того, продемонстрированы примеры различий между независимыми и государственными СМИ. Проведена оценка методов создания качественного контента в медиапространстве и рассмотрены различные научные работы и мнения экспертов, которые позволили предложить эффективные решения проблем аудитории в цифровых медиа.

Ключевые слова: цифровые медиа, аудитория СМИ, мультимедиа, аудио, видеоконтент.

Introduction

Technological advancements in the media have resulted in the widespread dissemination of media and other related sectors. The concept of media literacy was first introduced in the declarations of Grundwald and Alexandria in 1982 (Wilson K., 2018). Since then, researchers specializing in media and information literacy, such as C. Wilson, A. Grizzle, R. Tuazon, K. Akem-pong, and Chi-Kim Chun, have published their first works in France in 2011. Major projects were implemented in South Africa, Latin America, and South Asia.

In 2015, UNESCO introduced a program for training in media and information literacy as a part of academic education in Kazakhstan. Al-Farabi

Kazakh National University conducted several events dedicated to media and information literacy. Furthermore, the III International Summer School of Journalism and Communication had a significant impact on Kyrgyzstan during the Global Media and Information Literacy Week (UNESCO).

The International Mobile School “Shymkent – City on the Way to Sustainable Development through Access to Information and Media Literate Population,” which was dedicated to World Press Freedom Day in 2016 as part of the UN Sustainable Development Goals, covered several areas, such as Shymkent, Shaulder, Arystanbab, Turkestan, Kentau, Shayan, Akmeshit, and Domalak Ana. The media dialogue platform helped increase the level of information literacy among experienced profes-

sionals and aspiring journalists. Participants in the Silk Road media caravan were able to learn about the history and culture of Central Asia and improve their media literacy.

Materials and methods:

In 2018, media and information literacy projects were presented at Nazarbayev University in Astana, where the experiences of Kyrgyzstan, Tajikistan, and Kazakhstan were analyzed. Last year, under the state program “Rukhani Zhangyru”, the “100 New Kazakh Textbooks Project” was launched, which involved translating leading textbooks from around the world into Kazakh. Among the first translated

textbooks were Lee Anne Peck and Guy S. Reel’s “Media Ethics”, “Media and Journalism: New Approaches to Theory and Practice” by Jason Bainbridge, Nicola Goc, Elizabeth Tynan, and “Writing for Television, Radio, and New Media (Broadcast and Production)” by Robert L. Hilliard. Additionally, video lectures on all publications can be found on the educational portal OpenU.

Media and information literacy can be compared to an ecosystem as the expansion of global media requires constant literacy in all areas. The table below illustrates the differences in information and media literacy.

Table 1 – Main functions of information and media literacy (Alimzhanova A.B. Almaty, 2020).

Information literacy	Media literacy
Identifying and articulating information needs	Understanding the role and functions of media in a democratic society
Finding information	Understanding the conditions in which media can perform their functions
Information evaluation	Critically reviewing media content
Information categorization	Participation in public processes and openness to self-expression
Application of information using ethical standards	Application of information using ethical standards
Information dissemination	Using relevant skills for building custom content
Information processing using multimedia technologies	Development of multimedia services and applications, forming of publishing skills

A total of 520 people were surveyed regarding media literacy issues, with respondents divided by age groups as follows: under 18 – 64 (12.3%), 18-25 years old – 265 (51.3%), 26-34 years old – 74 (13.8%), 35-48 years old – 91 (17.5%), 49-58 years old – 23 (4.4%), older than 59 years old – 3 (0.6%). As the majority of respondents were university students, most were between 18 and 25 years old. In terms of gender, the majority of participants were female – 369 (71%), while male respondents numbered 151 (29%). This indicates that female internet users were more willing to participate in the study.

The questionnaire was designed to consider media literacy as a whole, taking into account competencies, knowledge, and skills, without dividing respondents by age, gender, or disability. All respondents were equally addressed on media literacy issues (Goggin, Martin, 2015). The questionnaire also included a question about respondents’ marital status, with 349 (67.1%) respondents single and 171 (32.9%) married.

The majority of participants lived in urban areas, with 446 (85.8%) respondents living in cities, 41 (7.9%) living in rural areas, and 33 (6.3%) respondents being Kazakhstan citizens living in foreign countries. However, a problem arose when rural respondents were unable to participate in the study as they did not have Gmail accounts, preferring Mail.ru instead. It is worth noting that Gmail is a free email service used by over 5 billion people worldwide since its launch in 2004. Refusing to use this service raises questions about the respondents’ level of media literacy. Google has been the most popular email service in the world since 2012. Moreover, more feedback was received from urban respondents than rural ones.

According to the survey results, the majority of respondents were university students, with 347 (66.7%) participants belonging to this group. Among the other participants, 32 (6.2%) were individual entrepreneurs, 36 (6.9%) were public servants, 53 (10.8%) were educators, 36 (6.9%) were contracted workers, 4 (0.8%) were full-time

employees in private companies, 3 (0.6%) were retired, and 8 (1.5%) were employed in other sectors. The survey involved students majoring in journalism and philology from various universities, including al-Farabi Kazakh National University, L.N. Gumilyov Eurasian National University, Akhmet Yassawi International Kazakh-Turkish University, S. Toraighyrov Pavlodar State University, Sarsen Amanzholov East Kazakhstan State University, and Kazakh National Academy of Arts. Responses were also collected via email and social networks from government officials, individual entrepreneurs, and other users.

The statistics provided by Brand Analytics for Kazakhstan in October 2019 show that VKontakte had 1,601,897 users and 23,448,303 messages, Instagram had 1,496,022 users and 10,676,390 posts, Facebook had 382,720 users and 10,660,960 messages, and Twitter had 23,657 users and 651,441 posts.

According to the Ministry of Information and Social Development of the Republic of Kazakhstan, by the end of 2018, only 10.6% of citizens did not subscribe to any social network. The media survey conducted in Kazakhstan also confirmed the popularity of Instagram, VKontakte, and WhatsApp among respondents. Facebook is widely used by government officials and teachers for business purposes, while Telegram, Viber, and Twitter are among the most popular social networks for students studying abroad.

Literature review

The observation was made that only 1 out of 5 people watch the news on television. Instead, government officials and teachers often use newspapers and radio as their primary news sources. Radio listening is also common among journalists. However, social networks are still frequently used for information retrieval, and all media outlets now have their own pages on social networks (Young, Jamieson, Poulsen, Goldring, 2017).

Researcher R. Bivens, who specializes in journalism and academic affairs, has noted that advances in information and communication technology have transformed the way news is broadcast. He further predicts that the evolution of multimedia technologies will lead to the emergence of public television channels on the Internet (Bivens, 2014).

This prediction is still relevant today, as evidenced by the launch of Atameken Business Channel in 2016 in Kazakhstan, which aims to cover business news and offers online live streaming. It is hoped that initiatives like this will attract more viewers to quality content in the future. Interestingly, the media survey revealed that most respondents paid special attention to videos and photos from social networks.

YouTube is a video-sharing platform headquartered in San Bruno, California, USA. Chad Hurley, Steve Chen, and Jawed Karim created the service in February of 2005. The platform was acquired by Google in 2006. Each month, YouTube gets 1.8 billion views (Belair-Gagnon, Agur, Frisch, 2017). In accordance with U.S. copyright laws, YouTube's terms of service have changed in 2019. The service prohibits any materials that include sexually explicit content, videos of animal abuse, shock videos, content uploaded without the copyright holder's consent, hate speech, etc.

Review

Nowadays, YouTube has started to play a role similar to mainstream television channels, especially since major media outlets have launched their own channels on the platform (Alper, 2017). In recent years, almost all of Kazakhstan's TV channels and some publications have also started their official YouTube channels, such as "Egemen TV" and "Aiqyn gazeti", as a result of the migration of print media to the internet. However, due to the inability to compete with television channels, we have noticed that most of our readers have switched to watching various TV series. Currently, locally produced and directed TV series are popular among Kazakhstan YouTube viewers. The second most popular TV dramas and movies are from South Korea. Russian documentaries are also in demand. Turkish TV dramas and movies are popular among viewers who are interested in learning Turkish. Viewers with sufficient proficiency in the English language prefer American and British movies and shows (Karen, 2021). The demand for Indian films has declined. The following table shows that most respondents would like to watch domestic films on YouTube.

Table 2 – Information about the most viewed YouTube channels (Kazakhstan)

Channel name	Number of views 2019	Number of subscribers
Toi Duman	1.0 b	1.5 m
Agugai	675 m	1.1 m
Informburo 31	528.3 m	1.1 m
Qazaqstan TV	369.6 m	1.4 m
Azattyq TV	290.6 m	718 thsnd
Jaidarman	298.4 m	753.0 thsnd
KTK news	232.2 m	617.0 thsnd
Tengri TV	181.8 m	381.0 thsnd
Almaty TV	172.4 m	466.0 thsnd
Atameken Business News	57.7 m	260.0 thsnd

Notice: thsnd – thousand, m – million, b – billion

Video bloggers have gained popularity on YouTube, but audio blogging, or podcasting, has also become increasingly popular in recent years. In Kazakhstan, there is a Kazakh-language podcast site called “Oyan, batyr!” hosted on Findyoururb.com, which features around 60 podcast interviews. Some of the interviews include Arman Almenbet discussing “Why we don’t have a book market” and Makpal Zhumabay talking about how “Any changes start with one person,” among others. These interviews are available for listening on the website.

Adebietportal.kz launched its “Blog” section in 2017, attracting young literature enthusiasts, as well as established poets and writers, to share their creative works. To date, 196 posts have been published in various genres, including prose, poetry, drama, criticism, essay, satire, genealogy, life hacks, showbiz, translation, reviews, and interviews. The internet has become an important platform for creative development, and we believe it will continue to evolve and flourish. However, the nature of the text format differs from other media formats.

Due to the communicative nature of online media, the style of presentation in online journalism has changed. The uniqueness of the online environment, where information is received from a monitor screen, is one of the main features of online text. Some Russian researchers suggest that journalistic blogs can be considered as a genre, and there are also personal blogs with their own messages.

Changes in genre are closely related to audience reception. Therefore, today we will focus on the changes in genre that have arisen with the emergence of multimedia journalism.

The concept of multimedia journalism depends on two main factors: it must be published on an in-

formation platform and incorporate multimedia elements. A “information molecule” can be made up of three to five photos or a slideshow, as well as video illustrations or videos.

There are several types of “information molecule” theory to consider. The classic example of multimedia data creation is a static illustration, which serves as a photo illustration in traditional journalism. The difference is that the multimedia version includes visual elements.

Modern photo-reporting differs from traditional journalism in that it incorporates visuals. Online platforms can collect daily or weekly photo reports, such as those found on El.kz. For example, the photo report “Astana Media Week – 2019” was viewed 2443 times.

The audio report is similar to a traditional radio report, but in addition to the text, it also includes the voice of the announcer, quotes from newsmakers, and interludes. The length of an audio story in a multimedia note usually does not exceed 60 seconds.

A video story is a self-contained message presented in a video format with a clear beginning, middle, and end. Unlike traditional television news reports, a multimedia video story does not require the journalist to appear on camera multiple times during the shoot from the scene. Instead, relevant hyperlinks can be provided within the video to supplement the story. The typical duration of an information video is 60-90 seconds.

Multimedia journalism also allows for live video broadcasts from the scene of an incident or event. Online media outlets, such as Azattyq.org in Kazakhstan, frequently use this method to broadcast breaking news events to their audience. Talk show

programs and press conferences also gather viewers through live streaming on social networks. Viewers can actively participate in these broadcasts by asking questions and leaving comments.

For instance, on the TV channel “Kazakhstan” viewers actively participate and ask questions during live broadcasts of some programs on social networks. Video feature and video commentary are the most popular genres of multimedia journalism. In the current situation, video commentary has become a developed way of disseminating summaries. Video commentary on any information or product is also a way of disseminating information. The growth of online media has led to the development of short film genres in an interactive mode

Interactive video conference allows participants to express their opinions and write comments while joining a video conference remotely. This makes the live broadcast more engaging.

Multiscript (interactive video) is a new format for presenting information. It provides tools for effectively presenting voluminous video material such as “player”, “transcript”, and “content”. The multiscript format is effective for presenting various types of information, including interviews and reports. Currently, the multiscript format is widely used for sports reporting (Alimzhanova, 2020).

After identifying the needs of video hosting users, we also wanted to determine the number of users of electronic books and audiobooks. Out of the total respondents, 34 (6.5%) were daily users, 240 (46.2%) used e-books and audiobooks occasionally, 121 (23.3%) had never used these formats, and 125 (24%) respondents said that they only used e-books and audiobooks when they needed them.

The media literacy and information literacy library also deserves attention. The Kazakhstan Foundation of the National Electronic Library, Kazneb.kz, updates its collection of electronic books every year. Today, online catalogs of any library collection can be browsed. For example, the National Academic Library of the Republic of Kazakhstan has an online presence at Nabr.kz, as does the library of the al-Farabi Kazakh National University at Elibrary.kaznu.kz. Digital libraries are widely used in many parts of the world, containing books, magazines, and journals on the latest technology. Online databases such as Springer Link, Scopus, Elsevier, Oxford Academic, Russian Urait, and E-Lanbook are also widely used in scientific libraries.

The next question in the survey was about the frequency of using open databases. The survey participants gave the following answers: data.egov.kz

– 88 (16%), adilet.zan.kz – 69 (13.3%), goszakup.gov.kz – 55 (10.6%), kazpatent.kz – 18 (3.5%), kase.kz – 17 (3.3%), and “I do not use them” – 278 (53.5%).

As evident from the replies, more than half of the respondents do not use any type of open databases. This may be due to a lack of economic interest among the survey participants, who were mostly first and second-year students and may not yet need to use such databases. Kase.kz was the least used database, with only a few participants monitoring it, possibly due to a lack of relevance to their interests. However, some researchers suggest that open source financial databases should be considered if media professionals write articles on economics (Sandra, 2019). These findings suggest that there may be a limited number of journalists who still write about business topics and highlight the need to improve the media literacy skills of the population, especially with regard to the use of open data sources by media professionals (Steen, 2011).

An open database in other Central Asian countries is available on the Opendata.kg portal in Kyrgyzstan. It is the first open database created in Central Asia.

Big data technology for the effective use of open-source code in the development of multimedia journalism is in demand in many countries of the world.

The survey results showed that most respondents used search engines, with Google being the most popular at 88.3%, followed by Yandex at 6.5%, Mail.ru at 3.3%, and Bing at 1.9%. Google, which was founded in 1998, is the most visited website globally and offers a wide range of services focused on work and productivity. As technology has advanced, numerous search engine services have emerged. However, further discussion on general search engines is available to the public (Coddington, 2015).

Another question in the survey asked about the average daily length of internet usage. Responses indicated that 52.9% of participants spent five or more hours a day online, with 3-4 hours being the second most common response at 32.7%, followed by 2-3 hours at 9%, and 1-2 hours at 5.4%. Although people spend a significant amount of time online, it's crucial to make the most of it. As mentioned earlier, utilizing e-books and open libraries is one way to do this. Regarding media literacy opportunities and challenges, the following conclusions can be drawn.

Conclusion

To increase media literacy among the audience, we need to strengthen social media channels and provide interesting content that draws readers' attention. It's crucial to keep up with technological advances and constantly improve our media literacy skills.

Although most media are considered independent, mainstream media can be influenced by the

government. Kazakhstan needs new approaches in information technology and media literacy to promote democratic development.

It's essential to increase requirements for objectivity in disseminating information and promote competent, grammatically correct content in the Kazakh language. All content creators should provide high-quality multimedia technologies that deliver informed and relevant information to the media.

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