

## Media Consumption Trends in Russia under Digitalization

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The paper analyses media consumption in Russia and media business strategies. The authors describe the media environment and identify the central trends typical of the transition to digital communication in society. The research approach implies evaluating the volume and distinguishing features of information consumption using the main media resources (the Internet, television, radio and print media). The information and empirical base of the research include the data of the Mediascope analytical agency, the statistical data provided by the Russian Federal State Statistic Service (Rosstat) and the results of research studies performed by consulting companies for the period of 2003-2017/2018. The paper presents the dynamics and specificity of transformation in the media environment and discusses a range of trends in media consumption: such as communication technology development; changes in the structure of media consumption; an increase in online advertising; a gradual transformation of media, etc. The results obtained show that the share of organizations and households in Russia that use the Internet in their work is constantly growing, but this growth is uneven and heterogeneous. Our findings prove that there are age (generation) differences in using traditional and new media, and the frequency of using information resources is changing.

**Keywords:** Media consumption, information, digital environment, media business, public communication

The crucial processes happening in mass media today are convergence, the emergence of new forms of media and globalization. All of them require business models of media to be adapted to the conditions of digital reality, as well as the search and choice of new strategic solutions (Müller-Lietzkow, 2014). Digital technologies transformed the practice of media consumption through rethinking the orthodox ideas of media as channels and improved the availability of media content on various technological platforms (Poluekhtova, 2016). The audience was granted more opportunities to choose not only the content but also the ways to consume it. The practices of media consumption became more individualized and variable, and the audience turned out to be even more fragmented.

The communication technologies applied form some kind of media environment (media space) of society. On the one hand, the transformation of the media environment is a result of the social power's influence on introducing such communication innovation. The central avenue of innovation development in the field of mass communication is

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attributed to the development of digital technologies. On the other hand, this is the most important factor in social transformations, since it changes people's lifestyles, social practices and, as a result, individual mindsets and the ways to perceive the world (Kolomiets, 2010). Undoubtedly, the media environment is a factor of individualization, which partly explains the growing fragmentation of society.

The multidimensional nature of the media space made social practices more selective, dynamic and innovative. Thus, we can discover age (generational) features of using traditional and new forms of media; information resources are used more frequently and widely; preferences for the media source are transformed, etc. We support the view of Malyuchenko (2008), who claims that, despite its relevance, the problem of developing an individual and group culture of media consumption is still one of the most poorly studied topics. Yessenbekova (2015) explores the role of media culture as a source for the restoration and preservation of national traditions to give future generations the information of historical and cultural past nation. Against the backdrop of media addiction expanding at an epidemic pace, the range of studies looking at the applied development of a culture of media consumption and its impact on human potential is very scarce (for more details, see (Allabouche et al., 2016)).

Under these severe conditions, communication technologies are evolving and acquiring new features. Over the past decade, the structure of media consumption has changed significantly due to some factors, such as digitalization of society life, enhancing the availability of personal devices that facilitate access to information, etc. According to the data of the consulting company Deloitte (2017), there is a general continuing steady growth in the volume of media consumption. It is typical of such resources like the Internet and video games. The opposite trend of falling media consumption is characteristic of print media, television and radio. The increasing time of using personal devices, such as smartphones, tablets, laptops, etc., exerts a marked effect on the trends in media consumption. As a result, the proliferation of mobile devices and the growing internet connection speed enhance the time spent by users on searching or consuming new information. These and other reasons highlight the special relevance of studying media consumption.

One of the primary problems with the applied research on modern media is a huge amount of data on media consumption circulating in the market (Poluekhtova, 2016). Therefore, the main purpose of the current research is to investigate the trends in media consumption and media business strategies in the digital environment. To achieve the stated purpose, we aim to fulfil the following scientific tasks: to examine the main approaches to defining the term "media consumption"; to develop a system of indicators to evaluate the empirical data; to analyze media consumption in Russia and identify its dominant trends, and to discuss the respond of media business to these changes.

## Literature Review

Media consumption is viewed as a social practice of using communication means (media). The object of media consumption is a symbolic material that can be "infused" in various media products: texts, musical pieces, and video products and delivered using various technical (media) means (Kolomiets, 2010).

In recent years, the issue of media consumption has been addressed by such scholars as Bakulev (2008), Vartanova (2009), Kolomiets (2010), Krivosheev and Fedunin (2000), Yessenbekova (2018a, 2018b), Muzikant (2014) et al. For instance, Kolomiets (2010) defines media consumption as a field of media sociology that embraces various practices

of information product consumption. In a narrow sense, he looks at media consumption as a practice of using media to gain information and utilize it for social interaction. Such an interpretation allows concluding that individuals operate information to meet their needs and achieve their objectives.

Seufert and Wilhelm (2009) view media consumption as a “job” that an individual performs to assign some kind of “cultural capital” to climb up the social ladder. This is what enhances the social baggage of the individual allowing them to achieve some recognition. A team of US scientists (Sundar, 2015) defines media consumption as the art of using a limited number of sources (repertoires) among their wide variety. They introduce a new term “egocasting,” which means choosing only those information sources that provide information in compliance with one’s standpoint.

Przywara (2012) explores the effect of media on public consciousness. As in the process of media consumption individuals perceive information through the prism of only those sources that are in line with their opinion, they are unable to grasp alternative information. In our view, such an influence is especially dangerous during the “information war,” since news agencies get an opportunity to give information a certain emotional and semantic color that is designed to attract those people who adhere to the same point of view.

It is noteworthy that the media consumption market is experiencing a novel trend called “media multitasking” (Roberts and Foehr, 2008). This phenomenon implies the simultaneous use of media resources to meet one’s communication needs. The two researchers study the relationship between media consumption and media influence. They find that an average person spends 8.5 hours a day on consuming media information, which hurts their social and economic life reducing the time of interacting within society. This thesis was first presented by American researchers (Klein et al., 1993). In their work, they point out that frequent media exposure negatively affects the psychological state of young people, as well as their social behavior. The influence of media exposure frequency on the psychological state of people is also addressed in the works by Baker and Algorta (2016), Wilmer and Chein (2016), et al. According to Hunt et al. (2018), the frequent use of social media, such as Instagram, Snapchat, etc. causes depression in adolescents. This conclusion was confirmed during the empirical survey of respondents.

Urban (1981) analyses the relationship between the preferences of different generations and the level of media consumption. Since representatives of the same generation exhibit similar behavioral characteristics, the author hypothesizes that information perception and resources for gaining it are predetermined by the features of this or that generation. From the perspective of generation theory, Russia is a well-known phenomenon for researchers (Semenova, 2001). This is due to some reasons, such as, for example, a strong differentiation in society (Barsenkov, Vdovin, 2010). Therefore, Russia is characterized by not only gross digital inequality (as in the countries with an undeveloped post-industrial economy), but also by an active struggle for access to information (as in the countries with the most developed information economies), which is especially important when studying the digital generation.

A high level of technological literacy inherent in the digital generation allows not only applying the full range of Internet capabilities and its key services, regarding it as the main source of information and a platform for interaction but also setting media consumption trends and formulating new basic information needs. In 2017, Kantar Millward Brown (2017) published the results of a global study ‘AdReaction: Engaging Gen X, Y, and Z.’

The data obtained during the empirical research proved that young people behaved differently if compared to the older generation; however, real differences observed were often contrasting to the stereotypes. For instance, the active TV audience among young people is rather big (63%), and according to this indicator, they are not inferior to the middle age group. At that, the audiences of Z- and Y-generations are likely to be significantly heterogeneous. Such a conclusion is made after comparing the AdReaction research data and the findings of the Mediascope TV viewing evaluation. In Russia, media consumption about generation differences are explored by Amzin et al. (2016), Kolomiets (2010), Nazarov et al. (2014); however, their research approach is not yet widespread.

## Materials and Methods

Measuring the audience plays a special role in the industry providing media business with the necessary data (Napoli, 2003; Webster, 2006). Digitalization of media required the methods of media measurement to be revised, as well as to resolve a range of practical issues associated with the process of data collection, data sampling and searching for representative approaches to assessing current trends. Traditional techniques of measuring the audience of mass media are based on a classical sociological methodology of empirical research. These are extensive surveys which involve large samples. The most criticized feature of such studies is their selective nature. As Napoli (2003) finds, the measured audience is only a form of an "audience product" that is produced by mass media in concert with the measuring company. The measured audience can be viewed only as a certain estimate of the real audience's volume. The current problem is not only due to the measurement procedure based on a sampling, the plausibility of which can vary. The question is that in the process of assessing/analyzing the audience, an advertiser deals with three different types of it: predicted, measured and real. One can only assume the differences between them; however, it is rather difficult to evaluate the degree and depth of these differences (Vartanova, 2011).

In the context of the digital environment, one of the prospects for media measurements is to take advantage of the opportunity to use digital statistics in industrial measurement systems. In contrast to sample surveys, the new tools, such as web analytics and PRD, allow collecting complete and detailed data. Kolomiets (2014) believes that it is necessary to move from measuring the audience to measuring the content regardless of its distribution environment.

To detect the main trends in media consumption in Russia, we analyzed the volumes and special characteristics of information consumption through the main media sources (the Internet, television, radio and print media). To do this, we developed a system of indicators that are divided into three types presented in Figure 1.

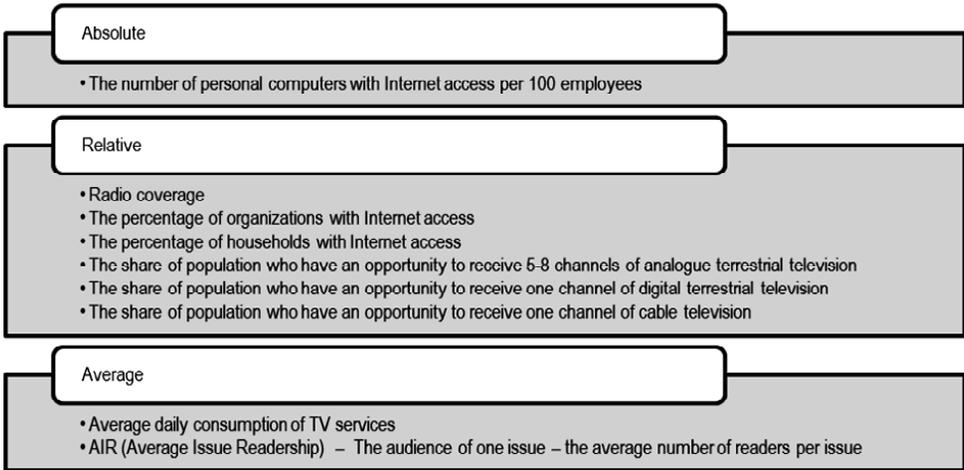


Figure 1. Indicators of media consumption evaluation

The information-empirical base of the study includes the data of the Mediascope analytical agency, the statistical data of Federal State Statistics Service (Rosstat) and the results of research studies performed by consulting companies.

Within the framework of the present study, the methods of dynamics and structure analysis (Polyakova and Shabrova, 2015) were applied. To establish the differences in structures, the integral coefficients of structural proposed by Salai, Gatev, and Ryabtsev are applied. In the current paper, we use the Ryabtsev index, since it is the most preferable in terms of economic interpretation. It does not inflate structural changes and does not depend on the number of gradations. The index is calculated by the formula:

$$I_p = \sqrt{\frac{\sum (d_2i - d_1i)^2}{\sum (d_2i + d_1i)^2}} \quad (1)$$

To interpret the results, the scale for assessing the significance of differences in structures proposed by V.M. Ryabtsev is used (Table 1).

Table 1. Interpretation of the values of the Ryabtsev index

Criterion	Interpretation
0.0000 – 0.003	Structure identity
0.0031 – 0.007	Very low level of difference
0.0071 – 0.150	Low level of difference
0.151 – 0.300	Moderate level of difference
0.301 – 0.500	A significant level of difference
0.501 – 0.700	A very significant level of difference
0.701 – 0.900	Opposite structures
0.901 and above	Absolutely opposite structures

To determine the indicators characterizing the measure of central distribution, it is necessary to use formulas for calculating the modal and median values in the interval:

$$M_0 = x_0 + n \frac{f_m - f_{m-1}}{(f_m - f_{m-1}) + (f_m - f_{m+1})} \quad (2)$$

$$M_e = x_0 + h \frac{\frac{\sum f_i}{2} - S_{m-1}}{f_m} \quad (3)$$

To determine the strength of the relationship, we apply paired Pearson correlation coefficient (4):

$$r_1 = \frac{xy - \underline{x} * \underline{y}}{\sigma_x * \sigma_y} \quad (4)$$

## Results

The evaluation of media consumption was carried out by the developed system of indicators. Table 2 presents the radio coverage of the Russian population by federal districts (FD).

Table 2. Radio coverage of the Russian population in 2013-2017, %

Region	2013	2014	2015	2016	2017
The Russian Federation, including:	92.2	87.9	85.8	82.6	82.5
Central FD	95.2	92.4	90.5	89.5	88.6
Northwest FD	95.9	95.0	93.4	91.9	90.7
Southern FD	83.2	86.9	79.0	67.7	65.9
North Caucasus FD	88.9	84.9	79.8	80.2	80.1
Ural FD	90.2	84.4	86.9	83.9	81.8
Siberian FD	93.2	86.4	84.0	81.5	82.2
Far Eastern FD	94.9	81.1	77.9	73.9	75.6

Source: the data of Rosstat

The data presented above show that radio coverage of the Russian population is gradually decreasing. The most significant decline in 2017 compared to 2013 was characteristic of the Southern Federal District (-21%) and the Far Eastern Federal District (-20%). According to the data of Mediascope, 72% of the broadcasting time was dedicated to music and musical programs, 6% – social programs, 5% – news, 4% – infotainment, 3% – art programs, 11% – other. Thus, we can assert that musical and infotainment programs are the most popular among radio listeners, which can be due to the age composition of the radio audience. The biggest group of radio listeners is people aged 30-39 with higher education.

Table 3 presents the changes in the number of personal computers with internet access by federal districts (FD).

Table 3. The number of personal computers with internet access (per 100 employees)

Region	2013	2014	2015	2016	2017
Central FD	31	36	38	39	40
Northwest FD	28	32	32	34	36
Southern FD	26	25	27	28	30
North Caucasus FD	21	23	25	26	28
Volga FD	23	26	26	29	30
Ural FD	22	25	26	28	29
Siberian FD	25	28	30	31	32
Far Eastern FD	24	27	30	31	32
Crimean FD	-	15	23	-	-

Source: the data of Rosstat

Table 3 demonstrates that the largest number of personal computers is concentrated in the Central Federal District, and the smallest number – in the North Caucasus Federal District, which is attributed to a traditional form of households.

The share of organizations using the Internet in their work is gradually increasing. This trend is typical of the Central Federal District (an increase from 87.9% in 2013 to 92.4% in 2017), the Northwest Federal District (93.3%) and the Far Eastern Federal District (93.3%). At the same time, internet usage decreased in organizations located in the Siberian Federal District (from 85% in 2013 to 84.2 in 2017), the Ural Federal District (88.6%), the Volga Federal District (88.7%) and the North Caucasus Federal District (85.9%).

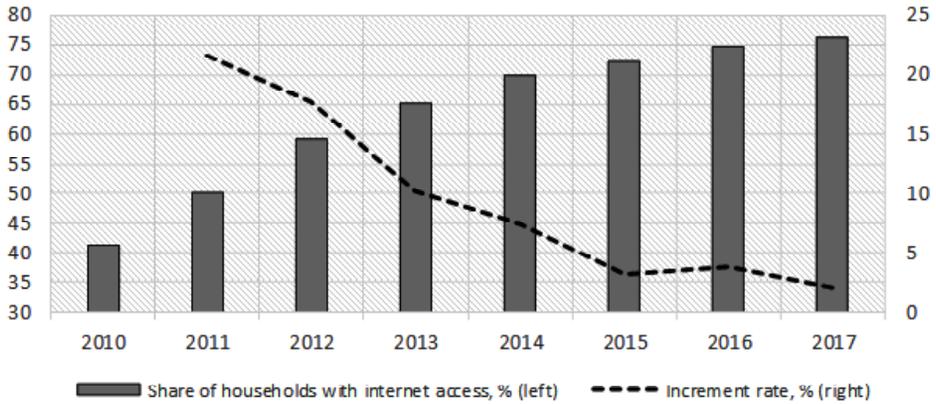


Figure 2. The share of Russian households with Internet access, %

In 2010-2017, the share of households with internet access (Fig. 2) increased by 35 percentage points. On average, the share of the population using the Internet accounted for 76.4%. According to the Russian News Agency TASS, 76% of internet users visit social networks, 51% download movies and music, 44% search for information about products and services and only 16% use the Internet to read news and online magazines.

Figure 3 illustrates the age structure of internet users in Russia. The largest share of internet users (97%) was observed in the youngest group aged 15-24; the smallest share (38%) – among the elderly people aged 65-72.

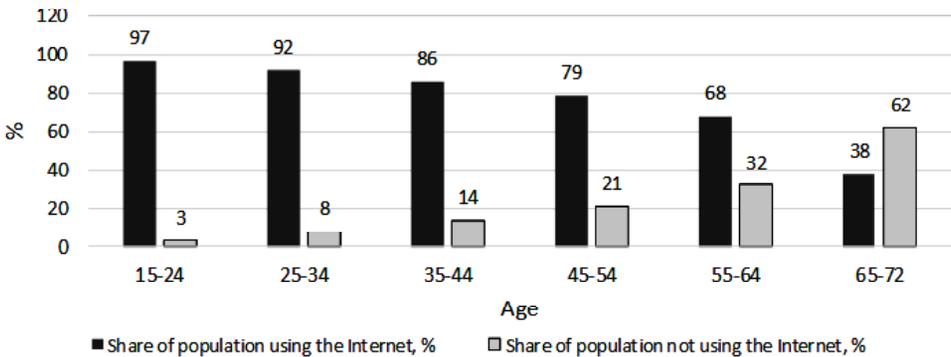


Figure 3. Age structure of internet users in Russia in 2016 (%)

Source: the data of Rosstat

The statistics on Internet penetration demonstrate that today the Web is used by not only the population who are the most adaptive to innovations, but also by those displaying conservative behavior and wary of all new and unusual. The same applies to people aged 60 and above. Such age groups need Internet usage to be considered common practice and be as simple as possible to start using it.

Table 4 presents the data for calculating the modal and median values of the number of Internet users in Russia. As seen from the Table, the modal interval matches the age group of 25-34; the median interval corresponds to the group of 35-44 years. Our calculations indicate that the most common age of internet users is 31 years. At that, based on the median value we can see that half of the population using the Internet is under 39 years.

Table 4. The number of internet users in the Russian Federation in 2016

Age group	The share of the population using the Internet, %	Population, thousands of people	The share of the population in physical terms, thousands of people
15-24	97	15176	14721
25-34	92	24631	22661
35-44	86	21318	18333
45-54	79	19549	15444
55-64	68	20538	13966
65-72	38	20349	7733
Total	-	121561	92857

Source: the data of Rosstat

It is of particular interest to explore the influence of various factors on the share of internet users. We believe that there is a significant correlation with the volume of online advertising (Fig. 4). The graph shows that the dynamics of the development of the two phenomena have a similar upward trend. During the entire period under review, the percentage of the population using the Internet was gradually rising. The absolute increase in the period from 2003 to 2017 amounted to 66.5%. In physical terms, the absolute increase of the Internet audience was equal to 97.8 million people; the largest absolute increase happened in 2011 and equaled 12 million people; the smallest one was in 2017 and amounted to 3.8 million people with an average absolute increase of 7 million people a year.

Based on Rosstat data, we calculated that the absolute increase in the share of internet users with a fixed Internet connection in the period of 2011-2016 was 6.5% and the average absolute increase was equal to 1.3% a year. As for the number of users with a mobile internet connection, the situation is following. The absolute increase in the share of subscribers for the period under study was 24.6%; the average absolute increase – 4.9% a year. The dynamics of both indicators looks similar, but the proportions in the total population with fixed and mobile access are very different. In 2016, the proportion of the latter was almost four times the proportion of the fixed connection. It is worth noting that some users have both types of connection, which impedes data comparison.

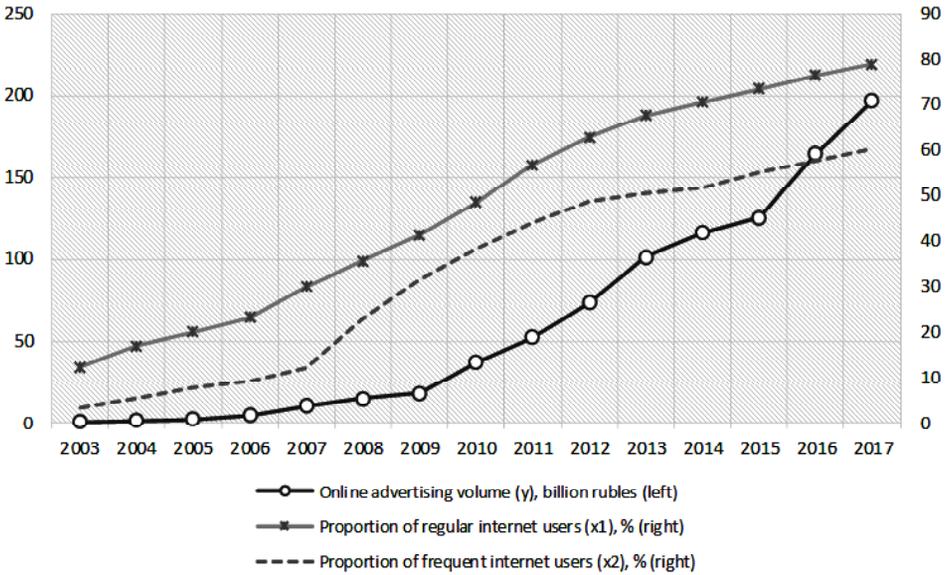


Figure 4. Dynamics of the Internet audience and online advertising in 2003-2017  
 Source: the data of Rosstat.

To determine the strength of the relationship between the indicators, we calculate linear correlation coefficients to identify whether the proportion of regular internet users (x1) and frequent internet users (x2) affects the volume of online advertising (y). The source data are processed in a statistics package; the calculated values are presented in Table 5.

Table 5. Regression statistics

<i>Regression statistics</i>	
Multiple R	0,9352
R square	0,8745
Adjusted R square	0,8536
Standard error	24,8560
Observations	15
<i>Coefficients</i>	
Y-crossing	-99,13
Proportion of regular internet users (x1), %	6,33
Proportion of frequent internet users (x2), %	-4,24

Below we calculate the paired linear correlation coefficient to assess the strength of the relationship between the resulting attribute and the proportion of regular internet users.

$$r_1 = 0.921$$

We also present the calculations using a similar formula for assessing the strength of the relationship between the resulting attribute and the proportion of frequent internet users.

$$r_2 = 0.895$$

Next, we test the hypothesis about the significance of the correlation coefficient at the confidence level  $\alpha=0.05$ . If  $|t| \geq t_{crit}$ , hypothesis  $H_0$  is rejected. Calculations of  $t_{crit}$  are performed using Student's t-distribution. The mathematical formula for checking the hypotheses is the following:

$$H_0 : r_{1,2} = 0 - \text{no correlation};$$

$$H_1 : r_{1,2} \neq 0 - \text{significant correlation.}$$

Calculating to:

$$t_1 = \frac{r_1 * \sqrt{n-2}}{\sqrt{1-r_1^2}} = \frac{0.921 * \sqrt{15-2}}{\sqrt{1-0.921^2}} = 8.507;$$

$$t_2 = \frac{r_2 * \sqrt{n-2}}{\sqrt{1-r_2^2}} = \frac{0.895 * \sqrt{15-2}}{\sqrt{1-0.895^2}} = 7.222.$$

$$t_{crit(0,05,13)} = 2,164 < t_1, t_2$$

Since in both cases  $t_{crit} < t$ , then hypothesis  $H_1$  is accepted, which assumes that there is a correlation between the factor and resulting attributes. The hypothesis that the volume of online advertising depends on the proportion of the population using the Internet has been confirmed.

In the first case, the linear correlation coefficient is equal to 0.921, which indicates a very strong relationship between the attributes ( $0.9 < r_1 < 1$ ). In the second case, the correlation coefficient is 0.895, which also indicates a strong relationship between the attributes ( $0.7 < r_2 < 0.9$ ).

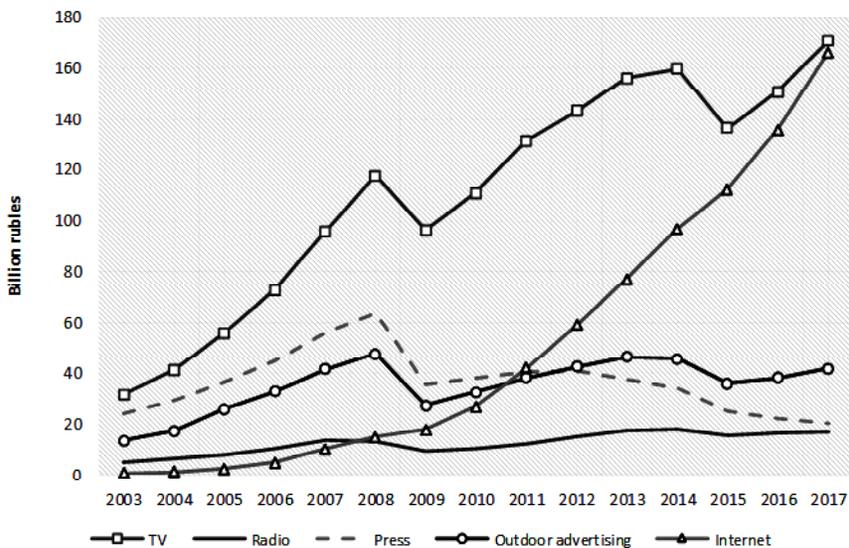


Figure 5. Dynamics of the volume of particular segments in the Russian advertising market in 2003–2017, billion rubles

Source: the data of Rosstat

Currently, there are two leading segments in the Russian advertising market, i.e., TV and the Internet (Figure 5). The absolute increase in the first segment for 14 years accounted to 139.1 billion rubles (from 31.8 to 170.9 billion rubles); the average annual increase in the indicator is 12.0%. The absolute increase in the second segment for 14 years amounted to 196.0 billion rubles (from 0.6 to 196.6 billion rubles); the average annual increase in the indicator is 47.1%. Press and radio are the “second-tier” segments. The former demonstrates the worst dynamics since only this segment exhibits a fall in the volume of advertising (a decrease of 14.6% as compared to the level in 2003).

The overall improvement in the volume of advertising is accompanied by the growing use of ad blockers: 37% of internet users in Russia block online ads (Deloitte, 2018). Therefore, the business faces a question about how to return the target audience and motivate them to stop using ad blockers. Users demonstrate disloyalty to all digital advertising formats. The more acceptable formats are commercials in the news feed in social networks, static banners on websites and contextual advertising. Users display a relatively neutral attitude to native advertising, silent video banners, advertising in the text of the article and pre-rolls. According to surveys conducted by Deloitte, TV advertising is most effective for such categories as food products, drugs, household appliances; the Internet is especially effective for the categories of clothing, electronics and cosmetics/perfumes.

The Russian audience, if compared to the foreign one, demonstrate a more negative attitude towards traditional advertising. For example, in Russia, 37% of respondents of Generation Z are positive about TV advertising, whereas the average world rate is 48%. The difference in opinions of Generation Y in Russia and abroad is even more dramatic – 34% and 53% respectively. Representatives of Generation X express the largest gap – 26% and 55%, respectively (Kantar Millward Brown, 2017).

To evaluate media consumption through the consumption of TV services, we analyzed the number and the formats of available TV programs (Figure 6). We can see a substantial decline in the proportion of people using analog terrestrial television in favor of the digital TV format. Radio is gradually becoming digital as well. The number of online radio listeners is growing.

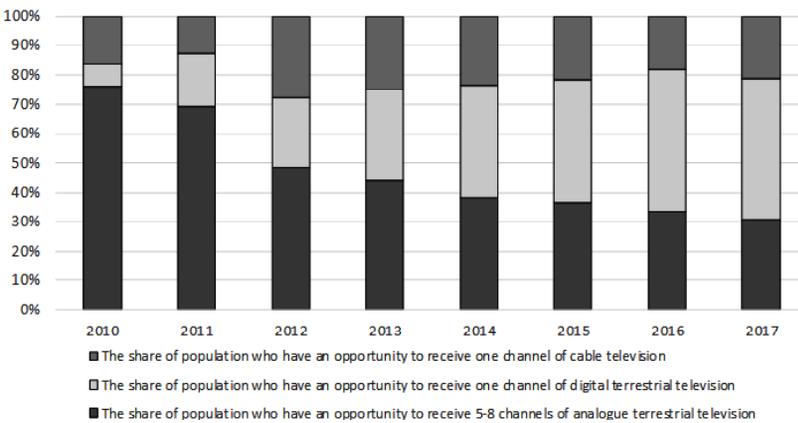


Figure 6. Availability of various TV formats in Russia in 2010-2017, %  
 Source: the data of Rosstat

The factors affecting the audience can be analyzed by various grounds (Sharikov, 2002). These factors are covered in numerous publications by such Russian sociologists as Kolomiets (2010), Poluekhtova (2009), Kovalev (2007), et al. At the same time, there is a scarce number of research on the external physical factors influencing the TV audience, which, among other things, embrace weather conditions.

Such factors are of profound importance for some countries, including Russia. Buzin, Korole, and Ostertag (2011) empirically revealed that weather conditions exert an influence on media consumption. At the same time, this impact may vary depending on the age group of the media audience. This influence is less significant than such factors as the attractiveness of the content, the number of TV channels received, etc.

The final indicator of the system developed to characterize media consumption is the AIR index, i.e., the average number of readers per issue. According to the data of 2017, among all the registered media, magazines accounted for 37%, newspapers – 28%, bulletins, and others – 5%. Thus, print media amounts to about 70% (Figure 7).

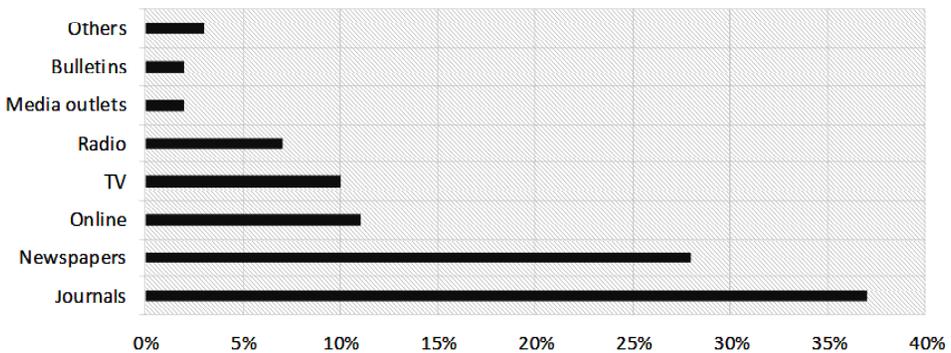


Figure 7. The share of mass media types registered in Russia  
(Source: the data of Rosstat)

Many experts note the decline in sales of periodicals (Lincényi and Fabuš, 2017) and their gradual transformation into the digital format. In 2018, the total number of press consumers in Russia amounted to about 51.4 million people (84.4%) (Web-Index, 2018). According to the survey, the main reasons behind choosing print media are the following: lack of information noise; safety and harmlessness to eyesight; the opportunity to fight against Internet addiction; better concentration on information.

## Discussion

Nowadays, media consumption is an integral part of the modern lifestyle. Even though the quantity and diversity of media products grow every year, this sphere displays some sustainable trends that need to be studied more thoroughly. This situation is under the influence of a huge number of factors, the most important of which are the high rate of change and the ever-increasing flow of information. The fundamental shifts in the market of media consumption in Russia are:

- A growing volume of information;
- Instant news feed;
- Diverse topics of incoming and outgoing information;
- Simultaneous execution of several operations;
- A growing number of participants in information processing.

The structure of media consumption is undergoing an extensive and rapid change, which requires an adequate reaction from both consumers and business. For example, personal devices have become widespread in the last decade; people receive information not from official sources anymore, but various applications such as Telegram, WhatsApp, Viber, VK, Instagram, etc. These programs allow not only getting information but also sharing it. Communication trends, which stimulate interaction through chats and social networks on mobile devices, are of particular importance since it affects the redistribution of media consumption. Thus, the rate of information exchange increases and media representatives should produce a faster response.

Not only mass media but also retail producers respond to the changes in the distribution of information, the structure of media consumption and communication. Since print ads do not reach consumers anymore, online contextual advertising, targeted advertising in news feeds, etc. are becoming increasingly popular. The market of online advertising is growing faster and faster, and with the increasing number of Internet users, the volume of online ads is enhancing as well, which is also confirmed in the present study. A peculiar feature is that the personalization method is applied by almost all business representatives, regardless of the type of their activity (Limba et al., 2018; Taneja et al., 2012).

## Conclusion

The primary purpose of the present study is to discuss the main trends in media consumption and media business strategies in the digital environment. The results show that over the last decade the structure of media consumption has undergone serious changes. To reveal the central trends in media consumption in Russia, we analyzed the peculiarities of consumption of information through various media sources. We also hypothesize that the volume of online advertising is dependent on the percentage of the population using the Internet regularly or frequently. The hypothesis was confirmed using the correlation-regression approach. The linear correlation coefficient is 0.921, which means that the relationship between the volume of online advertising and the percentage of internet users is direct and strong. In comparison with the foreign audience, the Russian population demonstrates a more negative attitude towards traditional advertising.

Media consumption was evaluated by the developed system of indicators, such as the percentage of organizations and households using the Internet, radio and television coverage, the number of personal computers with Internet access, etc. We found that the percentage of organizations and households using the Internet was gradually increasing, but unevenly and heterogeneously. On average, the share of the population using the Internet was 76.4%. The largest share of internet users (97%) was observed in the youngest group aged 15-24; the smallest share (38%) – among the elderly people aged 65-72. The statistics on Internet penetration demonstrate that today the Web is utilized by not only the population adoptive to innovations but also by those displaying conservative behavior.

Thus, we observe age (generation) peculiarities of using traditional and new media, the frequency of accessing information resources is changing, the volumes and scale of their use are growing, and media preferences are transforming. The increasing time of using personal devices, such as smartphones, tablets, laptops, etc., exerts a marked effect on trends in media consumption. As a result, the proliferation of mobile devices and the growing internet speed enhance the time spent by users on searching or consuming new information.

## References

- Allabouche, K., Diouri, O., Gaga, A., El Amrani El Idrissi, N. (2016). Mobile phones' social impacts on sustainable human development: case studies, Morocco and Italy. *Entrepreneurship and Sustainability Issues*, 4(1), 64-73. DOI: [https://doi.org/10.9770/jesi.2016.4.1\(6\)](https://doi.org/10.9770/jesi.2016.4.1(6)).
- Amzin, A., Galustyan, A., Gatov, V., Kastels, M., Kulchitskaya, D., Loceva, N., ...Silantjeva, O. (2016). *How new media changed journalism*. 2012–2016. Ekaterinburg: Gumanitarny universitet.
- Baker, D. A., Algorta, G. P. (2016). The relationship between online social networking and depression: a systematic review of quantitative studies. *Cyberpsychology, Behavior, and Social Networking*, 19, 638-648. <https://doi.org/10.1089/cyber.2016.0206>.
- Bakulev, G. P. (2008). *New media: theory and practice*. Moscow: KLM.
- Barsenkov, A. S., Vdovin, A. I. (2010). *History of Russia*. 1917–2009 (3rd ed.). Moscow: Aspect Press.
- Buzin, V. N., Korolev, A. P., Ostertag, V. V. (2011). The influence of weather conditions on media consumption in Russia. *Sociology of Power*, 7, 80-86.
- Deloitte (2017). Media consumption in Russia. The key trends. Retrieved from: [http://ru.investinrussia.com/data/files/media\\_consumption\\_in\\_russia\\_2017\\_ru.pdf](http://ru.investinrussia.com/data/files/media_consumption_in_russia_2017_ru.pdf).
- Deloitte (2018). Media consumption in Russia – 2018. Retrieved from: <https://www2.deloitte.com/ru/ru/pages/technology-media-and-telecommunications/articles/media-consumption-in-russia.html>.
- Hunt, M. G., Marx, R., Lipson, C., Young, J. (2018). No More FOMO: Limiting Social Media Decreases Loneliness and Depression. *Journal of Social and Clinical Psychology*, 37(10), 751-768. <https://doi.org/10.1521/jscp.2018.37.10.751>.
- Kantar Millward Brown. (2017). Retrieved from: <https://www.millwardbrown.digital.com/research-insights/>.
- Klein, J. D., Brown, J. D., Dykers, C., Walsh Childers, K., Oliveri, J., Porter, C. (1993). Adolescents' risky behavior and mass media use. *Pediatrics*, 1, 24-31.
- Kolomiets, V. P. (2010). Media environment and media consumption in the modern Russian society. *Sociological Studies*, 1, 58-66.
- Kovalev, P. A. (2007). *The Russian TV audience*. Moscow: National Business Institute.
- Krivosheev, M. I., Fedunin, V. G. (2000). *Interactive television*. Moscow: Radio i sviaz.
- Limba, T., Kiökis, M., Guleviëiütë, G., Stasiukynas, A., Plëta, T., Juozapaviëiütë, I. (2018). Model based on qualitative criteria for internet marketing development. *Entrepreneurship and Sustainability Issues*, 5(3): 618-633. DOI: [https://doi.org/10.9770/jesi.2018.5.3\(15\)](https://doi.org/10.9770/jesi.2018.5.3(15)).
- Lincényi, M., Fabuš, M. (2017). Economic trends of business actors on daily newspaper market: case of the Slovak Republic. *Entrepreneurship and Sustainability Issues*, 5(1), 91-104. DOI: [https://doi.org/10.9770/jesi.2017.5.1\(7\)](https://doi.org/10.9770/jesi.2017.5.1(7)).
- Malyuchenko, G. N. (2008). Social and psychological analysis of the development of production culture and media information consumption. *Izvestiya of Saratov University. New Series. Series: Philosophy. Psychology. Pedagogy*, 8(2), 96-100.
- Müller-Lietzkow, J. (2014). Medienwirtschaft " Medienökonomie und Medienmanagement als Geschwister eines integrativen Feldes. *Enzyklopädie Erziehungswissenschaft Online: Weinheim und Basel*. 1–42.
- Muzykant, V. L. (2014). The social measurement of media space and its content. *RUDN Journal of Sociology*, 1, 114-123.
- Napoli, Ph. M. (2003). *Audience Economics: Media Institutions and the Audience Marketplace*. New York: Columbia University Press.
- Nazarov, M. (2014). Television and the Internet: a typology of consumption in Russia. *Sociological Studies*, 6, 116-126.
- Poluekhtova, I. A. (2009). *Socio-cultural dynamics of the Russian TV audience*. Moscow: ATsVI.
- Poluekhtova, I. A. (2016). Studying the audience and media consumption in the digital environment: methodological and practical problems. *Mediascope*, 4. Retrieved from: <http://www.mediascope.ru/2199>.
- Polyakova, V. V., Shabrova, N. V. (2015). *The fundamentals of the theory of statistics*. Ekaterinburg: Ural State University Publ.
- Przywara, P. (2012). News a fakt – wokó<sup>3</sup> relacji między medialnym obrazem ówiata a rzeczywistoóci<sup>1</sup>. *Komunikacja Spo<sup>3</sup>eczna*, 1, 14-23.

- Roberts, D. F., Foehr, U. G. (2008). Trends in media use. *Future Child*, 18(1), 11-37. <https://doi.org/10.1353/foc.0.0000>.
- Rosstat (Federal State Statistics Service). Retrieved from: <http://www.gks.ru>.
- Semenova, V. V. (2001). Differentiation and consolidation of generations. In: Yadov, V. A. (ed.). *Russia: a transforming society*. Moscow: Kanon-Press-Ts. Pp. 256-271.
- Seufert, W., Wilhelm, C. (2009). *Mediennutzung und Lebensstil: Alltagsstruktur, soziales Milieu und Mediengebrauch*. Retrieved from: [http://www2.uni-jena.de/oeko/Lehrangebot/Lehrangebot\\_SS\\_09/HpS%20Zeitallokation/HpS09\\_Zeit\\_Ref6.pdf](http://www2.uni-jena.de/oeko/Lehrangebot/Lehrangebot_SS_09/HpS%20Zeitallokation/HpS09_Zeit_Ref6.pdf).
- Sharikov, A. V. (2002). On the influence of physical factors on TV audience. Paper presented at the 35<sup>th</sup> Conference of the Group of European audience researchers. Maribor, Slovenia. Retrieved from: <http://www.mediakomitet.ru/>.
- Sundar, S. S. (2015). *Handbook of the Psychology of Communication Technology*. Hoboken, NJ: Wiley-Blackwell. <https://doi.org/10.1002/9781118426456>.
- Taneja, H., Webster, J. G., Malthouse, E. C., Ksiazek, T. (2012). Media consumption across platforms: Identifying user-defined repertoires. *New Media & Society*, 14(6), 951-968. <https://doi.org/10.1177/1461444811436146>.
- Urban, C. D. (1981). *Program on Information Resources Policy*. Center for Information Policy Research, Harvard University.
- Vartanova, E. L. (2009). *The theory of mass media. Relevant issues*. Moscow: MediaMir.
- Vartanova, E. L. (2011). Digital TV and transformation of media systems. On the need for interdisciplinary approaches to the study of modern TV. *Bulletin of Lomonosov Moscow State University. Series: Journalism*, 4, 6-26.
- Web-Index 2018. Mediascope. Retrieved from: <https://mediascope.net/data/>.
- Webster, J. B. (2006). *Rating Analysis. Theory and practice of Audience Research*. New Jersey: Lawrence Erlbaum.
- Wilmer, H. H., Chein, J. M. (2016). Mobile technology habits: patterns of association among device usage, intertemporal preference, impulse control, and reward sensitivity. *Psychonomic Bulletin and Review*, 23(5), 1607-1614. <https://doi.org/10.3758/s13423-016-1011-z>.
- Yessenbekova, U. M. (2015). Role of media culture in national historical preservation. *Social Sciences (Pakistan)*, 10(8), 2199-2205. <http://doi.org/10.3923/sscience.2015.2199.2205>.
- Yessenbekova, U. M. (2018a). Television in the development of information society culture in Kazakhstan. *Media Watch*, 9(3), 411-417. <http://doi.org/10.15655/mw/2018/v9i3/49498>.
- Yessenbekova, U. M. (2018b). Transformation of the functions of Kazakhstan television in the information society. *Media Watch*, 9(2), 203-208. <http://doi.org/10.15655/mw/2018/v9i2/49387>.

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