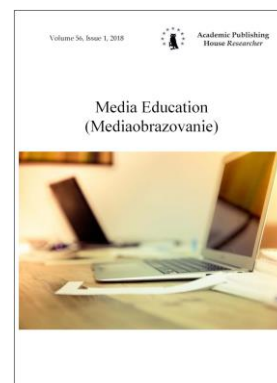


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## Media Competence as the Keystone of Electronic Culture and Contemporary Education

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### Abstract

In Russia more than 83 million people, use the Internet at least once in a month. The monthly Internet penetration of people aged 18 and over increased from 80 % of the adult population of Russia. According to TNS company, the smallest was in villages (56 %) with almost 63 million people (over 51 %) using mobile device. Convergence processes, having moved into the culture space, record the changes that have taken place both on the education and in other directions like media competence, technical equipment, education of staff, etc. This is a fundamentally different digital sphere of human socio– cultural activity that opens up previously unknown forms of changes in the roles and statuses of cultural institutions. The authors presented the criteria for assessing the social effectiveness of media competence in the field of culture and correlation of data on the dynamics of electronic culture of different regions with all–Russian indicators. Besides it, media competence methods were introduced to create the original information product in librarian space. The authors consider digital literacy as the functional skills required to operate and communicate with technology and media. The quantitative indicators of the research proved once more that the emergence of new media has qualitatively changed both the configuration of the media space and the processes occurring in it. The media competence of cultural institutions and libraries is now being characterized by educational and communication technologies. The main tasks of the research include comprehensive analysis of Russian media culture in regions and small cities. Object of the research is contemporary electronic culture. Subject of the research is media competence itself as the main characteristic of Russian cultural institutions.

**Keywords:** media competence, digital literacy, transformation of printed content, digital form, SMM–approach, librarian brand, recognizability

### 1. Introduction

A fundamental difference is the cultural environment, essentially changing under the influence of information flows, distributed with their help text and electronic resources, as well as giving birth fundamentally different cultural forms of “symbolic capital”, digital libraries, digital archives, digitized museum’s collections, etc. The increasing of the urgency of problems meet the dynamically growing complexity of cultural and information needs of modern users, development of digital strategy preservation of electronic heritage, regulation of transboundary flows information and data, responsibility for the creation, use and dissemination of information, censorship, legal and regulatory maintenance of informatization processes, information protection,

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etc. Besides it, digital literacy while sharing some similarities also refers to the reading and writing of digital texts, like websites by navigating through hyperlinks and “writing” by uploading digital photos to a social networking site. We consider digital literacy as the functional skills required to operate and communicate with technology and media. It also refers to the knowledge of how technologies and media affect the contemporary world (Park, 2017).

There is a perception that the age of the print media is ending, as they are becoming unpopular. In Russia, the main reason is the closure of kiosk networks, the main channel of sales of newspapers and magazines. According to the reports of Association of distributors of printed materials (ARPP), the offline circulations decline associated with the migration of readers to the Internet and mobile applications (Zheltukhina et al., 2017: 84). Thus, newest technologies that increase the ability of human influence on nature itself and society as a whole create certain difficulties as the preservation of identity in the global universalization of nations and cultures. They also increase the emergence of new economic barriers to access to data, especially in information-poor countries; change in the status of phenomena such as information and communication, because they become the main components cultural influence and economic power. Sociocultural processes in Russia are contradictory trends, among which the crystallization of the cultural image of ethnic groups and reproduction are recognized as positive regional national landscapes of memory.

The authors presented recommendations for the management bodies of the national culture to equip cultural institutions with education and internalization tools with a view to enhancing the social effectiveness of media competence in the field of cultural policy. The sociological survey was conducted in two waves in more than 100 major libraries (458 sites were analyzed) of cultural institutions in the period of 2009–2012 up to 2016–2018. It included 17 indicators characterizing the level of information readiness for new education goals of different Russian cities and regions as the Moscow, Pskov, the Republic of Chuvashia, regions of the North–West Federal District and others.

In the first wave of survey, the media competence being analyzed through Web mastering as well as technical accessibility of Internet. Indicator “Information saturation of Internet resources” has been designed to assess the degree of the fullness of sites with meaningful information. In the cause of the survey we found out, how fully information on the activity of the institution is presented; whether it represents a resource—business card or a multifunctional portal, etc. For each category of evaluated objects, a set of items included in the indicator “Information saturation of Internet resources”, taking into account the specifics of the institution (museum, archive, etc.), whose site is estimated, was developed. The indicator “Degree of interactive” and the possibility of receiving services in electronic form» makes it possible to assess the degree of interactivity of the resource. It opens way for discussion the activities of the institution and the quality of the work of the resource, order and pay for services electronically. Indicator “View Level” was assessing the extent to which a particular resource is paying attention to the culture of the region, i. e. the availability of announcements and reports on cultural events in the region. The indicators “Web mastering” and “Technical total score accessibility” allows evaluating the resource in terms of functionality and convenient use from a technical point of view. Each indicator used in the rating has been evaluated on a five-point scale in 0.25 increments, rating of the regions of the North–West Federal District in terms of development (Agaponov et al., 2009).

After the analysis of all indicators, an assessment of the level of development for each category of web-offices in the regional context was provided. The survey included 458 sites of cultural institutions of all regions in the North–West Federal District: Arkhangelsk Region, Kaliningrad Region, Murmansk Region, Novgorod Region, Vologda Region, Pskov Region, Komi Republic, Republic of Karelia, Leningrad Region and St. Petersburg (Table 1). Based on the estimates received by the indicators, each web representation received a general average score. Points were scored on the base of the resource estimates for each region, and then the ranking of sites were done.

For adequate analysis both sites and individual pages, and further subsequent optimization of information resources we used the citation indexes (IC) as some generalized numerical indicators of link popularity (reference citation) of pages. ICs calculation was provided by the search engines for further use in the ranking algorithms of the results. Simplex-indicators, taken into account during the research, is a thematic index of citing the search system, calculated in relation to thematically close resources. Google PageRank (PR) is the algorithm for calculating the authority of the page with the varied scale from 0 to 10 (Kholod, 2007). Webalta Rank (WR) is page

rank and Webalta Site Trust Level (WTL) is the level of confidence in the site. Alexa Traffic Rank (ATR) is the place of the domain in the list ordered by the frequency of visits to the domain, etc. Among the Set–Rank complex indicators (SR) were used a complex analog offered by XAP and TNX advertising systems, which is influenced not only by backlinks, but also by the presence of indexed pages.

**Table 1.** A general estimate of the web resource is obtained by calculating the arithmetic mean of indicators (North–West Federal District)

Region Assessment	Total score
Republic of Karelia	0.62
Republic of Komi	0.53
St. Petersburg	0.49
Kaliningrad Region	0.48
Arkhangelsk region	0.47
Murmansk Region	0.45
Novgorod Region	0.43
Leningrad Region	0.39
Vologda Region	0.34
District estimates	0.46

## 2. Materials and methods

Methodological basis of work is the complex approach including systemic–structural and systemic–functional approaches. To assess the level of informatization of a cultural institution and its impact on the quality of services provided the expert evaluation of rating sites of selected cultural institutions and included the presentation of estimates corresponding to the level of development of the site. In this work such research procedures as a hypothetical–deductive method, an inductive method, a descriptive and comparative method, a stylistic analysis, functional and semantic analysis, a content analysis method are used. Questionnaires as a part of survey, have been developed, and then distributed to a random sample, in which the emphasis was not only on technical equipment of libraries, but also on effective use of technology opportunities to provide the population with quality education services, including media literacy training, especially social networking issues. Theoretical research base includes works of domestic and foreign scientists in the field of media education (Fedorov, 2004; 2014), linguistics, cross–cultural communication, stylistics (Gere, 2006; Lanier, 2012; Muzykant, 2017; Zheltukhina, 2017; Rayport, 1996; Shlykova, 2017; Schwarz, 2006, Veltman, 2002, etc.) Quantitative measurements of the libraries' sites based on counting citations and site attendance (Borisov et al., 2009).

The aim of the study was to analyze the equipment of cultural institutions of Russian regional cities with information resources capable of ensuring an appropriate level of media competence in the library space. In the course of the analysis, a number of resources were identified. Among them libraries, museums, archives; management institutions in the field of culture; other cultural institutions that do not belong to the above–mentioned groups (theaters, clubs, etc.) Cultural management institutions include cultural committees, regional ministries of culture and culture and leisure management. Other cultural institutions include theaters, palaces and cultural centers, concert organizations, cultural and educational clubs, circuses, and zoos. The concept of work was based on the understanding of culture as a specialized industry, an administratively managed segment of culture; general social form of the state of society and public consciousness, determined by many factors, as a spontaneously developing segment of electronic.

## 3. Discussion

The terms Multimedia culture, Electronic culture, Digital culture actively broke into our vocabulary in the late 1990's. One of the pioneers of the definition of the concept of Electronic culture is the K. Veltman, who links this phenomenon with traditional objects of culture and art by means of information and communication technologies (Veltman, 2002). In the scope of the concept, they include electronic libraries, virtual museums, multimedia reconstructions, a semantic network in the Internet environment, systematizing cataloging factual material of cultural studies,

archeology, ethnography, art history, historiography, etc. At present, the European network of expert centers for Research and Education in the field of electronic culture is E–Culture Net3, which is a qualitatively new socio–anthropological reality. Note that the digitization of information and its representation in audio, video, etc. formats means more than instrumental use of technical capabilities. This is a fundamentally different digital sphere of human socio– cultural activity, which specific direction of media education, designed to help schoolchildren and students to better adapt in the world of media culture, master the language of the media, be able to analyze media texts, etc. (Fedorov, 2004; Petranová et al., 2017). Electronic technologies and Internet opens up previously unknown forms of changes in the roles and statuses of cultural institutions.

The researchers claimed that such an institution's electronic culture, like virtual, not just a collection of graphic images reproduced on a computer. It has become a new reality. Therefore, the education approach developed by a number of researchers allows us to consider the multimedia culture as a set of social institutions organized on the basis of modern media competence tools to promote the logic of a digital society: education, culture, e–commerce, economics, politics, science, etc. (Schwarz, 2006). Understanding of electronic culture emphasizes the formation of the information society, the digital sphere of media education and its new opportunities for the expression and functioning of all spheres of society's life, the changing of a number of social relations, values, norms, and behavior stereotypes. At the same time, technological knowledge constitutes an essential part of the culture, which is built into its new stereotypes, rituals, norms. Presented sites assume change of outlook of the target audience/TA, formation of new vital installations as well as valuable reference points, motives and behavior model. Media texts contain information on urgent problems, which are of burning interest to addressee and affect all spheres of life, and seek to influence on his point of view concerning certain problems of society (Zheltukhina et al., 2017: 86).

The modern media market is trying to adapt both material and spiritual needs of people, aestheticizing the act of buying–sale. Viral marketing videos may not be only a way to promote the goods, but also a properly directed project with the involvement of first–class actors, diverse shades of the game, etc. In the information society, different options of interpretation of values are important for the study of values and value attitude to the emergence of new social media environments. In fact, it is a virtual way to transform “pictures of the world”, which infinitely expand the communicative space. In this case, network services are facing more challenges and threats as well as new opportunities. The functioning of the traditional (conditionally call it “Book”) culture in a digitized form can proceed in two ways. In first, in the form of an adequate copy of the actual realities: for example, the above–mentioned electronic library, which contains scanned book. Secondly, as a result of the reception and interpretation of such a copy by the Internet community as quoting e–books, like a blog dedicated to describing impressions from visits to a virtual museum, etc. (Emelin et al., 2013).

This duality can be explained by dividing the Internet into two quite autonomous sectors: information space and communication space. Hypothetical electronic library pursues as a completely exclusively informative cultural function, respectively belongs to the field of information space. However, a chat room or forum in electronic library is transferred to the communication space and functions otherwise. The largest number of falsifications (incorrect citation, error in attribution of authorship, etc.) are generated and distributed in area of communication.

Newest technologies that increase the ability of human influence on nature and itself and society as a whole, create certain difficulties as the preservation of identity in the global universalization of nations and cultures. They also increase the emergence of new economic barriers to access to data, especially in information–poor countries; change in the «status» of phenomena such as information and education, because they become the main components of cultural influence and economic power. Sociocultural processes in Russia are contradictory trends, among which the crystallization of the cultural image of ethnic groups and reproduction are recognized as positive regional national landscapes of memory. A vital element in the structure of the modern picture of the world is the main research problem of developing strategies for the digital development of international and state levels. This approach is ensuring sustainable cultural mechanism of reconciliation among the world of things, people, the world of information and knowledge, and guarantees of long–term conservation of the essential nature of the cultural heritage, and its identity.

Media competence firmly and organically enters libraries as a part of the cultural institution. The program for creating sustainable relationships with the TA required more than advertising and promotion the books. No education or information carrier in the modern world can do without its own website, an electronic copy or an entire Internet portal. The active process of transformation of printed content and its transition to digital form is called digitalization. This transformation facilitates access to materials, reduces the speed of propagation and leads to the formation of convergence. At the technological level, convergence is a fusion of technologies that allows different technical carriers as cable or telephone networks, wireless satellite communication to deliver information to its user. The technologically based convergence of media integrates printed texts, video, music, diagrams and other previously incompatible with the text formats in the content. Technological convergence also assumes that interactivity is becoming one of the most important components of modern education.

During the creation of modern education approaches, audio and video information integrates with video, photos, infographics and many other innovations. Convergence in education process, the emergence of common content for different channels leads to the birth of new integrated genres like infotainment, edutainment and others. It is necessary to say that convergence has its own negative sides as well. Because of the large flow of information, it becomes more difficult to become oriented in the media space. Also, one of the key issues is the reliability of the information published, which, if instantaneously distributed, can lead to many negative consequences in the form of disinformation, speculation, fake news, etc.

The contemporary media competence involves influencing the perception of different TA like library staff and external recipients, in order to promote library brand. In our case, this means constant concern for a clear identification of the ideas and meanings that surround the librarian brand, its positioning, the individuality that will distinguish it from competitors and even surpass them. The most Moscow and region libraries are open for foreigners as well. It is a new reality that users of the catalogue could click on a link and go straight to a digital resource that could be anywhere in the world (Hopkinson, 2009). The process of online and offline integration is traditionally accompanied by duplication of librarian content. Such practice is common for the Rudomino All-Russia State Library for Foreign Literature opened to foreigners free of charge. An ID is required to check in, and books can be taken out if you have a residence permit. The Russian State Public Library's services are also available free of charge, and it has a fine unique archive of periodic press and other historical materials. There is also a digital catalog and you can look for a book or issue in advance. According to the librarian, foreigners often visit the website in Russian.

The media competence objects are both the library's own personnel and external audiences provided in below (Table 2).

**Table 2.** Object of strategic communication and expected reaction of TA

Object	Expected reaction
Staff of the cultural institution	Raising the level of librarian/museum culture
Users	Preference for our books
Intermediaries	Mutually beneficial cooperation
Suppliers	Mutually beneficial cooperation
Competitors	Compliance with the rules of the game
Contact audiences (Media, Administration, Local residents, Public organizations)	Assistance, no opposition

According to the results of the first wave of the survey, in the three regions examined (Moscow and Pskov regions and the Chuvash Republic), the level of equipping libraries with computers at the end of 2010 was 52 % (according to statistics in 2009 – 46.7 percentage, according to 2007 – 36.5 percentage). Significantly different indicators for the categories of libraries: if all 100 % of regional libraries have PCs, then in the category “City and regional (central) libraries and library networks” only 72.7 % of institutions are equipped with PCs, and in the category “Urban, village and rural libraries and branches” of such only 44 %. Therefore, on one library in a category “Regional libraries” it is necessary almost 34 personal computers. In institutions from the category “City-wide and district (central) libraries and library networks”,

this indicator is 4 times lower, or 7 computers, and in the category “Lower Urban, Village and Rural Libraries and Branches”, the library has only one PC each. Currently, the level of equipping a cultural institution is determined not only by the PC, but by the infrastructure as a whole, the level of information and communication security, and media competence of employees of cultural institutions. The analysis showed that only 31.8 % of libraries have access to the Internet from the number of all libraries that have PCs, LAN (Local Area Networks servers) have 12 % of libraries, 6.3 % have web servers, 17 % have access to e-mail Internet, or only 5 % of libraries, which indicates a low level of equipment.

In a second wave of the survey conducted in 2017–2018 by the Laboratory for monitoring the cultural space, one of the areas of analysis was the web representation of the institution of culture. Based on the existing domestic methods for assessing the web representation of cultural institutions, the second wave of the survey evaluated sites in two categories of indicators: web representation of the culture of the region and technological development of the Internet resources (Shlykova, 2017). The first category included three indicators: “Information saturation of Internet resources”; “Degree of interactivity and the possibility of receiving services electronically”; “The level of representation of the culture of the region”. The second category indicate “Web mastering” and “Technical accessibility”. Indicator “Information saturation of Internet resources” is designed to assess the degree of the fullness of sites with meaningful information. Activity of the cultural institution being presented as a resource–business card or a multifunctional portal. For each category of evaluated objects, there is a set of items includes in the indicator “Information saturation of Internet resources”. Besides it, the specifics sites of cultural institutions like museums, archives, etc., were evaluated as well. The indicator “Degree of interactivity and the possibility of receiving services in electronic form” makes it possible to assess the degree of interactivity of the resource.

The conducted analysis showed that almost all cultural institutions in the cities in the scope of this study have been fully integrated into the process of forming the Internet cultural space of the region. They have their own web offices that meet the existing evaluation criteria and standards. While analyzing sites, particular attention was paid to the following indicators of web activity like the presence of a site/page, the availability of a mobile version of the site, navigation, completeness and relevance of information. Besides the design, the presence of feedback from visitors to the site and visitors to cultural centers was analyzed. News tape and posters, as well as site attendance to the total population of the region, the provision of electronic services were taken into consideration as well. A year earlier, in 2016 of 13 cities surveyed out of representing 78 cultural institutions, almost all have their own sites or pages on social networks (Table 3). Undoubtedly, social networks have opportunities to promote on the Internet the cultural services of institutions, as well as to create its brand recognizability on the Internet. The survey showed that representation of cultural institutions in social networks in most cases contain information duplicated by the site, though the goal is to expand the audience.

City–leaders of site building are the Library and Museum in Novouralsk, the site of the Theater of Drama and Comedy in Ozersk, the Central Children's Library of Seversk, the Museum and Exhibition complex in Lesnoy, etc. Conducted sites audits are aimed to analyze the ways of its promotion, preventing the fall of qualitative indicators and strengthening the stability of the users' attraction. Most sites are targeted to their users. Therefore, the site of the Central State Children's Library was created for kids with many quest games, play–performances, which organically lead to the book and the world of reading. In a number of sites, there appeared actual posters, which are organically associated with the ticket order for performances. In the Seversk Music Theater, tickets are available via e-mail, and the Municipal Cultural Institution of the Operetta Theater in Zheleznogorsk has an elegant poster built into online ticket booking.

The use of SMM's (Social Media Marketing) where objects belong to both the cultural institution's own personnel and external audiences seems to be of high importance for librarian media space (Table 4). To our opinion, this is one more underestimated powerful channel of information perception, which initiates interpretation of communicated images at high level. No doubt, media culture exists behind understanding of those images, though the media image is not sufficient (Fedorov, 2014). However, irreversible metamorphosis in the system “Sender–Text–Receiver” allowed us to highlight the incredible educational effect of the new source of knowledge (Muzykant, 2017).

**Table 3.** Presence of sites by categories of libraries by three researched regions

Regions	Chuvash republic		Pskov region		Moscow region		Cheliabinsk region		Totally 3 regions		Russian Federation	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Regional libraries total	3	0,5%	3	0,4%	2	0,2%	4	0,4%	8	0,3%	271	0,6%
including ranked sites	3	1,1%	3	1,4%	2	2,3%	3	30%	8	1,4%	н.д.	No data
Central library and library net, total	63	11,4%	66	14,4%	533	40,1%	279	30,6%	662	28,2%	9481	20,7%
including ranked sites	59	21,1%	26	12,4%	36	41,4%	7	70%	121	21,0%	No data	No data
Urban village and village libraries and branches, total	488	88,1%	388	84,9%	795	59,7%	629	68,9%	1671	71,4%	36030	78,7%
including ranked sites	217	77,8%	181	86,2%	49	56,3%	н.д.	н.д.	447	77,6%	No data	н.д.
<b>Total number of libraries</b>	<b>554</b>	<b>100%</b>	<b>457</b>	<b>100%</b>	<b>1330</b>	<b>100%</b>	<b>912</b>	<b>100%</b>	<b>2341</b>	<b>100%</b>	<b>45782</b>	<b>100%</b>
<b>including ranked sites</b>	<b>279</b>	<b>100%</b>	<b>210</b>	<b>100%</b>	<b>87</b>	<b>100%</b>	<b>10</b>	<b>100%</b>	<b>576</b>	<b>100%</b>	<b>No data</b>	<b>No data</b>

The digitalization era and the growing influence of communication technologies have led to reorganization of the methods of production and exchange of symbolic content, to a sharp increase in its volume and an essential decrease of “social significance” (Gorky, 1953). Leading Russian *Yandex Research Company* describes the situation in Russia as effected by structural changes in the audience. In small towns and villages, 22 % of Internet users are young people aged 18 to 24, whereas in Moscow this segment accounts for only 15% of the online audience. In this age segment, small communities account for 42.9 % of the entire Internet audience in Russia. Eventually the growth of the Runet (Russian segment of Internet) even surpassed the crisis scenario forecast of 69 %, and demonstrated over 72 % (Nikushin, 2016).

**Table 4.** Comparative characteristics of traditional and SMM– communication (Kabani, 2012)

Traditional communication	SMM– communication
Market domination	Create a community within the market
Loud scream	Listen and then whisper
I am, I am, I am	We, We, We
Push a product or service	Attract people with your message / history
Advertising	Rumors
Controlling	Resolution
Race for the leader	Natural relationship

In our opinion, the given data related to the age–specific characteristics of the audience, may indicate one of the reasons for its peculiar “compliance” with the new methods of using the language in the Internet space, which have not yet reach the proper level. It turned out that SMM best results are to attract traffic and attention; as a result, its effectiveness can turn non–users into content consumers of education services.

In its modern sense, the term «viral marketing» seems to be very useful for solving librarian problems. Since December 1996, the term viral marketing has been directly relating to the strategy of promoting education products and services. J. Rayport (Rayport, 1996) rightly stated that nothing could be compared to a virus when the message should reach the audience in a short time,

with minimal costs and maximum effect. Thus, language metamorphoses quickly become the property of the Internet. The SMM–approach may be helpful for district libraries, usually being placed with lack of possibilities for library automation in comparison with all nation libraries. Hardware used to be expensive, and relatively speaking still is expensive for many countries. One more issue is the need for collaboration both within and between institutions to get library automation project off the ground and then maintain it. No wonder, this is a much more complex activity than a pre–automation situation where there is a library card catalogue maintained by cataloguers and used manually by staff and library patrons.

As it is been seen, the quantitative indicators show that the emergence of new media has qualitatively changed both the configuration of the media space and the processes occurring in it. The media competence of library staff is now being characterized by information and communication technologies. In 2010, the first comprehensive study by the Ministry of Culture of the Russian Federation named “The impact of the informatization of cultural institutions on the quality of services provided (on the example of the three constituent entities of the Russian Federation)” was held. In the monitoring of the level of electronic culture in the Moscow and Pskov regions and the Chuvash Republic the main tasks of the research included comprehensive analysis and identification of the interrelationships in the level of equipping with information resources. It also comprehends technical means and software of cultural institutions with indicators of the quality of education services provided by these institutions in the context of the implementation of the Information Society Development Strategy, and development of criteria for assessing the social effectiveness of electronic services in the field of culture. We consider correlation of data on the dynamics of electronic culture of the above–mentioned regions with all–Russian indicators, and presented recommendations for the management bodies of the national culture to equip cultural institutions with information and internalization tools for enhancing the social effectiveness of cultural policy.

To access the level of informatization of cultural institutions and its impact on the quality of the education services provided, the following methods were used: questioning, in which the focus was not only on the technical equipment of libraries, but also on the effective use of information and communication technologies to provide the population with quality services. To evaluate and rank the sites of selected cultural institutions, the method of expert evaluations was used. It included the presentation of estimates corresponding to the level of the site's development. Quantitative measurements of the ranking of library sites based on counting citations and attendance of sites were conducted as well.

The survey characterizing the level of information readiness of such regions as Moscow, Pskov regions and the Republic of Chuvashia ([Antopolsky et al., 2011](#)), showed that the availability of libraries in the three regions under consideration for 2007– 2010 has grown significantly. Thus, the level of penetration of personal computers (PCs) into libraries has grown by almost 16 %, and the number of PCs has grown by 1.4 times.

#### 4. Results

In the survey of 2016 totally 12 municipality palaces of culture in Moscow region had been selected. There is the only one palace of culture in cities like Elektrogorsk, Zhukovskiy, Reutov, and there are about 20 palaces in some districts like Voskresenskiy and Stupino. We analyzed 87 out of 118 combined sites of the culture palaces in 12 municipalities like Balashikhinskiy district, Voskresenskiy Korolev, Taldomskiy, Khimki. They also have their own pages in social networks. Undoubtedly, social networks have opportunities to promote on the Internet the cultural services of institutions, as well as to create its brand recognizability. Since *Facebook* was originally conceived as an alternative to photo albums, the use of this kind of site allows users of the network to share photo information and in parallel with this, to promote the image of the organization.

The cultural centers in Moscow region usually provide reference services as well. Representation of the palace of culture in social networks shows that often the information is been duplicated by the site with the aim to expand the audience. However not all culture palaces timely update their social network pages. For example, there is outdated information about the events on the Facebook “Podmoskovye” palace of culture in Krasnogorsk district was noticed. On the other side is the updated information for more than 1500 subscribers of the Youth Cultural and Recreational Center (Reutov) in social networks. In order to update online access, the



administrator of the site takes responsibility for filling out the relevant headings with submission of information in post and press releases, video materials, etc.

Otherwise, outdated information is the only evidence that the institution and its services are not in high demand, and the network's representation does not improve the organization's image. The following conclusions were made as the results of cultural institutions' network activity monitoring. Institutions that direct the cultural sphere and coordinate their activities determine the organization of the virtual space of culture. Some good examples as *afisha.mosreg.ru* were found among regional cultural institutions.

At the same time, several sites demonstrate some kind of insufficiency especially in capabilities of the Internet-based industry sites. There are Savvinus Palace in Balashikha (Moscow region), Metallurg Palace of Culture (Stupino district). The interdepartmental and intersectional links of the above-mentioned sites were poorly traced. For example, there was no link with tourism sites of some districts, though they are largely oriented towards promoting the image of the region, etc. Evaluation of the quantitative indicators of the web activity of the sites of several cultural palaces shows that twenty six out of the 118 organization do not present their own website or their page. More than a quarter of all reviewed sites provided users with minimal content or are simply limited to visiting sites.

Besides it, the indicator of actualization of educational information suggests that work with web resources was conducted irregularly and, apparently, did not belong to the priority activities for the establishment of culture activities. The above-mentioned sites were "frozen" in their content. Such results demonstrated the limitation of organizational and financial resources, as well as lack of media competence, which caused a low level of interactivity. However, the main element of the content is the provision of information about the events (posters, announcements, etc.). It was found out that moderated discussion platforms with users involved in media discussions were needed. At the same time, the survey showed that a number of cultural institutions failed to attract new visitors through the provision of various services using mailings or social networking mechanisms through the site. Such a case is that information of the Youth Cultural and Recreational Centers in social networks happened to be more dynamic than on the site.

There is a relationship and a direct link between such indicators as the level of library equipment and the quality of the services provided. In the first wave of the survey in 2009–2012, The Pskov Regional Universal Scientific Library demonstrated the best results in five of the examined indicators, including, criteria of the number of remote references to the library electronic service. There are 420 thousand appeals, which is 6 times higher than the average for the regional libraries. Total number of the unique users of the website exceeds 141 thousand users, which is 4 times higher than the average for the regional libraries.

The second wave of the survey provided in 2016–2018 evaluated sites in two categories of indicators: web representation of the culture of the region and technological development of the Internet resources. The first category included such indicators as information saturation of Internet resources, degree of interactivity and the possibility of receiving educational services electronically. This kind of topics are mostly of qualitative character like to promote on the Internet the cultural services of the institutions, as well as to create its brand recognizability on the Internet which is strongly connected with media competence. Nevertheless, the dependence of the number of computers connected to the Internet, and the number of users of the website remain of primarily importance. Nevertheless, the presence of a page in social networks makes it possible to provide access to education services for users. Eighty seven out of 118 surveyed sites of culture palaces in 12 municipality districts, successfully promote various cultural services of institutions, and create recognizability on the Internet via their own pages in social networks.

## 5. Conclusion

There is a significant shift in the priorities between the first and the second wave of the survey. Since 2016, social networks have opportunities to promote on the Internet the cultural services of institutions, and concentrate their efforts on site recognizability. Based on the estimates of network activity of cultural institutions obtained during the web monitoring, the following conclusions are made:

1. The use of the latest achievements in media competence contributed to fundamental changes in the sphere of culture, partly transformed the professional activities of cultural institutions as well as to raise awareness of the importance of information and media literacy.

Although they did not determine their success, but became a factor in the appearance of fundamentally new types of education resources and services.

2. The quality of electronic resources and services completely depends on media competence of employees of cultural institutions. The research provided an opportunity to discuss existing media education and media literacy policies in order to reflect on what challenges are emerging from the new media environment, their effect on youth, education, etc. There are contradictions between users–visitors who easily managed new technologies and professional staff, who do not completely manage computer technologies.

3. There is confidence in a gradual demand for electronic services in most of the interviewed cultural institutions.

4. The social groups that primarily using electronic services represent different social strata as students, schoolchildren, citizens and groups of tourists admitted as media competent enough in comparison with some employees of cultural institutions.

5. The organization of the virtual space and librarians' level of media competence is largely determined by the cultural institutions that direct and coordinate their activities. Those institutions are of great help for creating a single virtual environment.

6. The further development of the culture of a modern society brings innovative impact on the «code» of culture as a whole. At the same time, new information technologies, aimed at creating cultural diversity, have not replaced the traditional social institutions.

7. Further development of electronic culture will make it possible to realize the idea of preserving the socio–cultural experience in electronic form. However, it affects the renovation of cultural institutions as libraries, archives etc., as well as the transfer of cultural experience in the field of multimedia. Eventually the «genes» of cultural and historical entities will in turn rearrange their «code» with the aim to humanize the world.

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