Urgent Ussues of Organization of Remote Working and Distance Teaching in Archiving

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Abstract. Theoretical, methodological and practical application issues of regional archive informatization are disclosed and analyzed in this work. The article also addresses the issues that archival industry informatization is a socio-economic and scientific and technological process of creating optimal conditions to meet information needs of citizens, enterprises, organizations, institutions, all structures of the state and society on the basis of the formation of information resources of state archives using new information archival technologies.

Keywords: archive industry, modeling method, system level method, functional analysis method, information analysis method, distance learning

The spread of the coronavirus COVID-19 in all countries of the world and the pandemic announced in this regard, as well as quarantine measures, applied also in the Republic of Uzbekistan, including in the field of archive management, led to significant, and sometimes to cardinal changes in the functioning of organizations and institutions.

The forecasts of WHO experts show that preventive measures can last for a long period of time, months, or even years.

The situation in the world that emerged due to the COVID-19 coronavirus pandemic forced to revise the traditional approach of organizing the activities of many organizations and institutions, which served as an impetus for the widespread introduction of modern technologies of communication and transmission of information, using the new achievements of development of information and communication technologies (ICT). Mobile phone and Internet have become an integral companion of every owner of smartphones and tablets; various applications and chats have received a great impetus in widespread use, new terms have appeared ("delivery service", "social contact", "lockdown", "remote work", etc.). Many employees of organizations switched to remote work, secondary schools switched to distance learning.

Since the country's economy and its industries cannot stop working for many months, years, the correct and efficient organization of the work of organizations and institutions, including archival ones, becomes relevant, taking into account the new requirements dictated by the pandemic. This applies to all areas of the archives' activities, starting from examination up to the transfer of documents for state storage. In this chain, there are a number of types of work, where it is difficult or impossible to apply remote (distance) work. In such areas of work, it will be necessary to apply traditionally emerging methods and techniques strictly within the framework of established quarantine and preventive measures.

In this article, the main issues of organizing work on setting up some types of work and activities on a remote (distance) scheme will be reviewed.

Preparation for remote work should be organized in two directions:

I. Preparation of archival documents (archival information resources) for the provision of archives to users in remote mode.

First of all, archival information resources provided to users should be prepared in the following forms:

1st group – in electronic form (electronic images) as part of publicly available electronic databases;

2nd group – copies of archival documents on paper (or on film) sent to users via postal services or via special government services;[1]

3rd group – a group of archival documents transferred to the reading rooms.

At the same time, unlike the traditional one, it is necessary to transfer archival documents to the reading room, which, for one reason or another, cannot be digitized and added to the general electronic database of archival documents.

Structural flowchart of the preparation of documents for submission in remote mode is shown in Figure 1.

II. Preparation of archivists for remote work.

Archive workers need to be trained for remote work with the following specialization of labor:

- employees for remote work at home (preferably employees over the age of 50);
- employees for the digitization and development of electronic databases of documents (mainly young specialists);
- employees for servicing the reading rooms (experienced employees – in distribution blocks, and young employees – to serve readers).

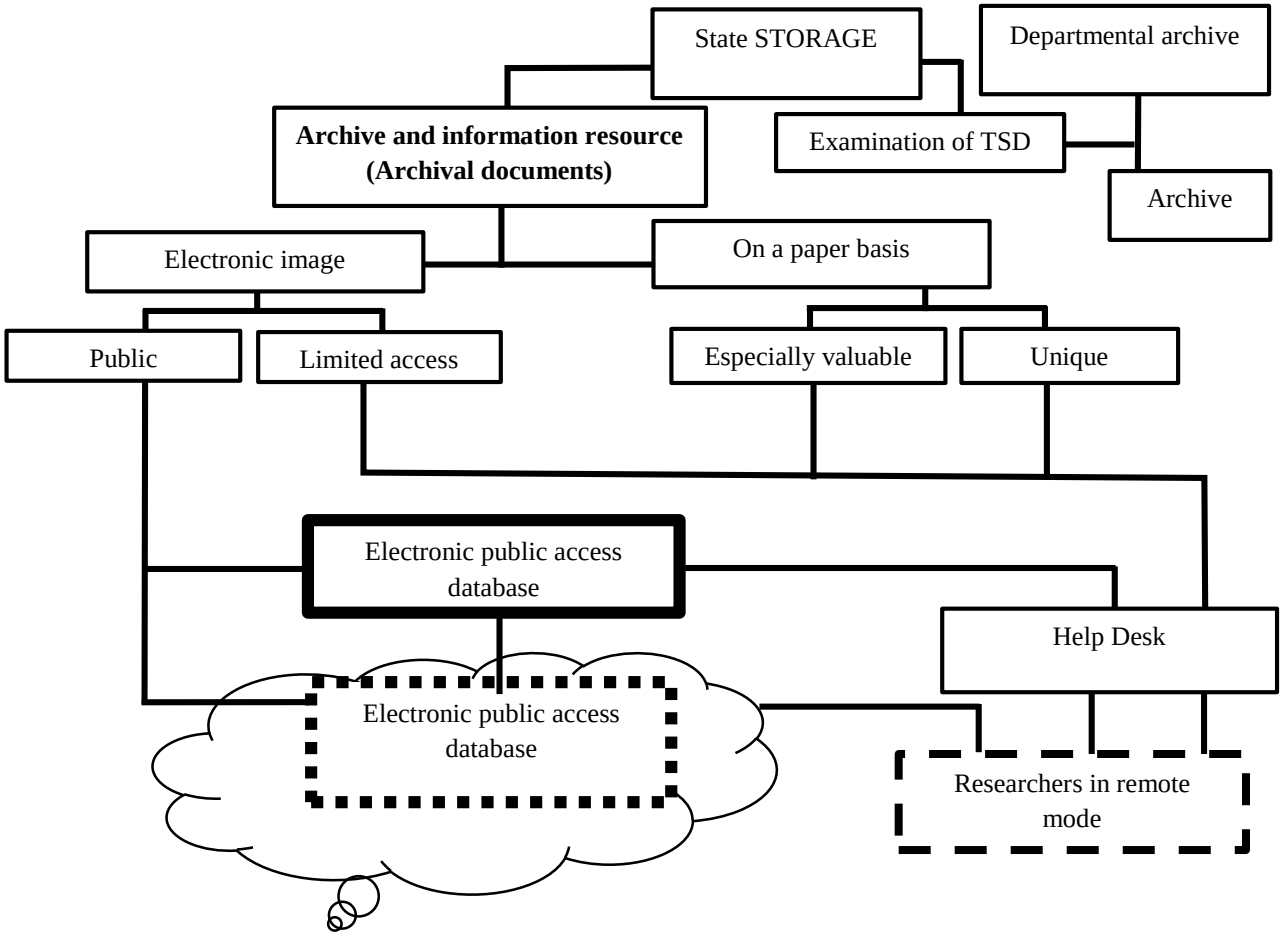

Figure 1. Block diagram of the preparation of documents for remote submission

[1]In Uzbekistan, since 2018, special centers for the provision of public services were established in all regions.

The following work is to transfer certain types of archival activity into a distance work environment. The stages that can be distinguished out of the documents life-cycle chain[2] of archival storage, are as follows:

- examination of the value of electronic documents;
- conducting video and audio meetings, conferences (debates, discussions, collegiate sessions, etc.);
- provision of archival certificates with delivery to the applicant's address;
- online access of researchers to electronic inventories, followed by digitization and transmission of requested documents electronic images through communication channels;
- organization of distance courses for advanced training, both for registrars (employees of departmental archives) and archivists (employees of archival institutions).

From listed above, the most important and integral, simultaneously time-consuming and complex is the organization of remote training courses (distance learning).

Advanced training, especially continuous professional development of personnel, is an urgent issue for the prompt renewal and constant maintenance of employees' knowledge in harmony with scientific and technological progress. Today, not only for organizations, but also for employees of organizations, it is more acceptable to improve the qualifications of their employees continuously from production. In developed countries, this experience is actively used for the benefit of business development.

Distance learning has evolved from the very first stage – the technology of correspondence to virtual "on-line" learning. It allows people of any age, regardless of their location, mode of work (lifestyle), to acquire the necessary knowledge and skills, while receiving a basic, secondary, additional education or simply take a refresher course. Scientific and technological progress provided all the new opportunities, more modern technologies for teaching.

If at the dawn of the inception of distance learning, students, being at a considerable distance from the teacher, the educational institution received the necessary materials by mail, and for consultations and exams they came to the educational institution, now they can study at a virtual university even abroad and pass exams without leaving a computer connected to the Internet. Many traditional educational institutions around the world, introducing distance learning technologies, issue a diploma, certificate or certificate equivalent to the document provided at the end of full-time education.

There are also consortia that unite virtual educational institutions of the world. Those wishing to get a master's degree in information technology declare that one of the educational institutions of Great Britain, can be located in Syria, and teachers in certain disciplines will conduct their lectures from America, Germany, etc. Training programs, materials are provided by third countries.

The Internet has opened up wide opportunities for gaining access not only to information, but also educational resources. In recent years, the demand for educational resources has been growing, and this trend is observed around the world.

Internet technologies make it possible not only to communicate with people, but also to improve the quality of business conditions. Business, in turn, requires constant professional development, which is feasible through continuing education. Continuous in all meanings of this word, i.e. throughout life, without interruption from the main activity, at anytime, anywhere. The totality of these characteristics determines "on-line" training. Undoubtedly, education and ICT are subject to convergence. Distance learning is developing thanks to new ICTs.

In the history of the implementation and development of distance learning in Uzbekistan, the following stages can be distinguished:

[2]Document life-cycle is a set of stages of a document, from drafting to its physical destruction.

Stage 1 (2000-2004) – the stage of formation of technology implementation distance learning.

At this stage, the introduction of various technologies and elements of distance learning was mainly carried out by the country's higher educational institutions. The most initial norms and methods of introducing distance learning in Uzbekistan were formed.

Stage 2 (2004-2016) – the stage of quiet development distance learning.

During this period, due to the abolition of the extramural-evening form of education, the demand for the introduction of distance learning fell sharply. Basically only a few large corporations (foreign) and companies were engaged in distance learning.

Stage 3 (2016-2020) – the stage of restoring broad interest in the implementation of distance learning.

New reforms launched at the end of 2016 in all spheres of the country's economy, including in the field of education, especially, a sharp increase in the number of foreign and domestic educational institutions, approval of part-time forms of education, as well as a noticeable increase in the established quotas for admission to universities, contributed to the revival of the implementation of distance learning technologies in the activities of educational and industry organizations. This period is characterized by intensified both in the area of advanced training and in the training of specialists with higher education.

Stage 4 (from April 2020) – the stage of rapid implementation of distance learning in the activities of organizations and institutions.

Among the rich variety of technologies distance learning, only the direction related to ICT would be pointed out.

Application of mobile technologies in the organization of distance learning in the archival field creates a number of new opportunities and advantages in relation to traditional education, in particular:

1. The training material can be delivered to the addressee almost any time of the day and anywhere. Now a student in a matter of seconds can receive educational material directly to his mobile phone or through it to his computer, to complete the task while outside the archive or at home. Considering the ever-expanding functionality of smartphones and tablets, and the fact that they are becoming an integral attribute of the modern business person, it is not difficult to guess about the wide scope and spread of distance learning in the near future;
2. Conducting online meetings, conferences, meetings and webinars. The mode of conferencing and video conferencing can be successfully used for operational consideration and discussion of some tasks, discussions, including for collective testing;
3. Wide possibilities of interactive interaction. The possibility of simultaneous transmission and exchange of text, sound and video materials, as well as support with your own comments, creates a number of advantages over previous distance learning technologies.
4. Significant reduction in the period of study for the training course. One of the important advantages of distance learning over traditional education is learning at a convenient time for the learner. So, with distance learning using the mobile Internet, the variation of this "convenient time" is significantly expanded, thereby making it possible to effectively use the gaps between tasks defined for the main work (on public transport, during business trips, etc.).

A significant drawback of the traditional system of advanced training is training of a periodic nature with a large gap in time (in archival institutions there is no generally established norm for the frequency of advanced training).

All well-known and large companies have long switched to distance learning (advanced training) of employees using Web-technologies. The use of distance learning through mobile technologies in combination with Web-technologies or separately from them undoubtedly

contributes to the support of high potential, modern knowledge and high information culture of archive workers, and therefore the quality of archive services.

The emergence of new applications based on Web-technology (Web based) - Telegram, Viber, Wechat, Imo, WhatsApp, etc., using their new technical capabilities (chat support, transfer of large (in volume) text and audio-video files) were able to create functionality that allows a significant increase in the quality of distance learning.

During the I and II stages of development of distance learning, one of the topical issues was the presence of a corporate network (Intranet) with the ability to transfer information in communication channels in the limit of 528 kb / s. This requirement was not always met or was limited due to the high cost of financial costs.

However, with the rapid development of ICT, the Internet and mobile technologies, the bandwidth of communication channels has grown significantly and kilobit measures are a thing of the past.

At the present stage, the possibilities of mobile Internet in the 3G and 4G standard allow:

- prompt transfer of large (with information volume more than 1 GB) audio-video files;
- organization of video conferences in real time with the simultaneous participation of a large number of participants (more than 100);
- a significant increase and improvement in access to educational materials through the use of cloud technologies;
- the ability to use training materials and lectures in the "TimeShift" mode.

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