



## **ORGANIZING THE AUDIT SYSTEM IN UZBEKISTAN ON THE BASIS OF INFORMATION TECHNOLOGIES: PROBLEMS AND SOLUTIONS**

Meliev Israel Ismailovich

Professor of Tashkent State University of Economics

Email: meliyevi755@gmail.com

ORCID: 0000-0002-0976-7406

### **ABSTRACT**

This article is devoted to the problems of organizing audit activity in Uzbekistan on the basis of information technologies and directions for their elimination. Relevance and necessity of using information technologies, review of literature on the subject, analyzes conducted on the subject and its results, conclusions obtained on the basis of research results, and author's suggestions for improvement of this field are described. Also, in the article, the types of software used in international audit practice, the factors affecting the non-use of audit software in the audit process, the problems of using modern software in the audit process, the software the procedure for forming the auditor's opinion by introducing evidence, the opportunities that can be achieved as a result of the use of information technologies in the audit are described based on the author's opinions.

### **KEY WORDS**

Audit activities, information technology, audit software, audit review, audit evidence, auditor opinion, audit report, audit services, IT audit, financial reporting audit, audit automation, digitalization, auditor, audit organization, audit team, expert, international standards of audit, audit methods and practices.

### **Introduction**

Today, any audit organization feels a great need to organize its activities on the basis of information technologies. As a result of the creation of a database and the formation of audit reports of various complexity, modern audit electronic programs help to avoid errors in the audit, save work time and quickly obtain the necessary information. Practice shows that it is better to buy audit software from professional firms with extensive experience and reputation in automating audits, licenses and quality certificates of the programs sold. When choosing a program, it is necessary to take into account what audit organization and what audit objects it is intended to check, or pay attention to what field it belongs to.

In this regard, it is worth noting that in the decision of the President of the Republic of Uzbekistan dated September 19, 2018 "On measures to further develop audit activities in the Republic of Uzbekistan" No. PQ3946 the task of developing the "Audit" software complex of the Ministry of Economy and Finance of the Republic of Uzbekistan, designed for mutual electronic cooperation with auditing organizations and republican public associations of accountants and auditors, and in

accordance with itThe "Audit" software complex, which provides for the creation of the web service "Private cabinet of the auditing organization" and "Private cabinet of the public association of auditors", was developed and put into practice. This is one of the macro-level measures to ensure the transparency of the activities of audit organizations and the introduction of information and communication technologies in the sphere of their cooperation with state bodies. However, today it is one of the requirements of international standards to organize and conduct audits in a fully computerized environment. It is through software that helps to find opportunities to optimize audit processes and spend less money on information systems, evaluates the existing information resources in accordance with the current and future goals of the organization, and based on the results of this evaluation, allows organizations to use the available opportunities to the maximum and avoid unnecessary costs. recommends solutions. The implementation of new software in the audit helps to reduce the cost of financing the information department, optimize performance and eliminate the "weak" links that prevent development.

## **Review of literature on the subject**

Raising the economy to a new modern level requires the operation of the transactions and management system in chicken entities on the basis of modern information technologies. In Uzbekistan today, the legal foundations of issues such as electronic government and electronic signature have been created. Today, information technologies are widely used in accounting and auditing services. On the other hand, as a result of effective use of the automated system of economic information by the auditor, time is saved during inspections, and the quality of the conducted control increases. For this, the auditor is required to have special knowledge and skills and to have practical experience in the type of auditing software, software and mathematical support, and electronic data processing system.

Although not enough research has been conducted on the use of information technologies or the organization and implementation of audits based on software in the audit activity of Uzbekistan, theoretical and methodological aspects of the introduction of information technologies in audits have been studied by some Uzbek researchers. In particular, by the Uzbek researcher N. DalibaevThe issues of introducing the IT-audit service into the practice of Uzbekistan have been researched and the features of this service's practical application have been described.[1].

I. Meliev, one of the Uzbek economists, researched the directions of organizing and implementing audits based on the possibilities of information technologies in pandemic and remote working conditions.[2].

Economist Sh.K.Umarova in her research zthe features of conducting an audit using modern information technologies have been studied [3].

Belarusian scientists NVHomolko and LAPopkova researched the methodology of organization and implementation of automated audit [4].

Also, another economist Russian scientist KATrukhan researched the possibilities of auditing on the basis of information technology [5].

The features of conducting an audit in the information technology environment were studied by the Russian scientist BASharifov[6].

A group of Uzbek scientists DAMirzaev, IJBozorova andFXMamasidikova studied the prospects of development of IT audit in the practice of the world and Uzbekistan and the directions of its introduction into audit practice, and gave scientific and practical recommendations in this field [7].

### Analysis and results

In the current global auditing practice, special types of auditing software are widely used together with office programs, regulatory and legal information systems, accounting software, and financial analysis software. In our opinion, due to the complexity of the tasks to be solved in the automation of audit activities, the effectiveness of the software application is directly dependent on its introduction and training of users. As a result of the research, it was found that in the audit practice of Russia and developed European countries, quality audits are carried out in a short period of time and procedures using the most professional software tools, such as AuditNET, ITAUDIT:Auditor, AUDIT XP "Kompleks Audit" and "Express audit:PROF" (1 -table).

**Table 1 Used in international auditing practice types of software<sup>1</sup>**

No	Program	Purpose of the program	Manufacturer	Publication year
1	AuditNET	Automation of audit activities	"New effective technology"	2009
2	IT AUDIT: Auditor	Audit automation in a complex volume	"Master-soft" LLC www.audit-soft.ru	2005
3	AUDIT XP "Complex Audit"	Automation of audit activities	"Goldberg-Soft" company www.auditxp.ru	2005
4	"Express audit: PROF"	A complex system of auditing automation	"Termika" NP Baryshnikov consulting group. www.termika.ru	2004
<b>Created in Uzbekistantypes of software</b>				
5	AUDITSOFT	Commercial banks and business entities are designed to automate internal audit services and audit companies.	Chamber of Auditors of Uzbekistan (Karimov NF)	2007
6	Audit Sampling	It is intended for the audit of credit activities of commercial banks and activities of Central Bank branches	Sakhabov OU, AABubnov	2008
7	First-Audit	It is designed for conducting internal audits in commercial banks and large manufacturing enterprises	Karimov JF, Karimov XX	2010

The use of audit software in the course of audits allows the auditor to perform the following tasks with quality and in a short period of time:

- checking the balances of transactions and bank account numbers carried out at the client-enterprise through a computer database;
- the ability to perform analytical operations in the computer database to determine the differences between documents and actual assets and funds;
- checking the database of the audited economic entity;
- the possibility of testing technical, mathematical and informational software used in the

<sup>1</sup>Prepared by the author

activities of the audited economic entity.

However, in our opinion, the above-mentioned programs are not being used effectively and purposefully in the audit practice of Uzbekistan due to the following factors (Table 2).

**Table 2 Factors influencing the non-use of audit software during an audit<sup>2</sup>**

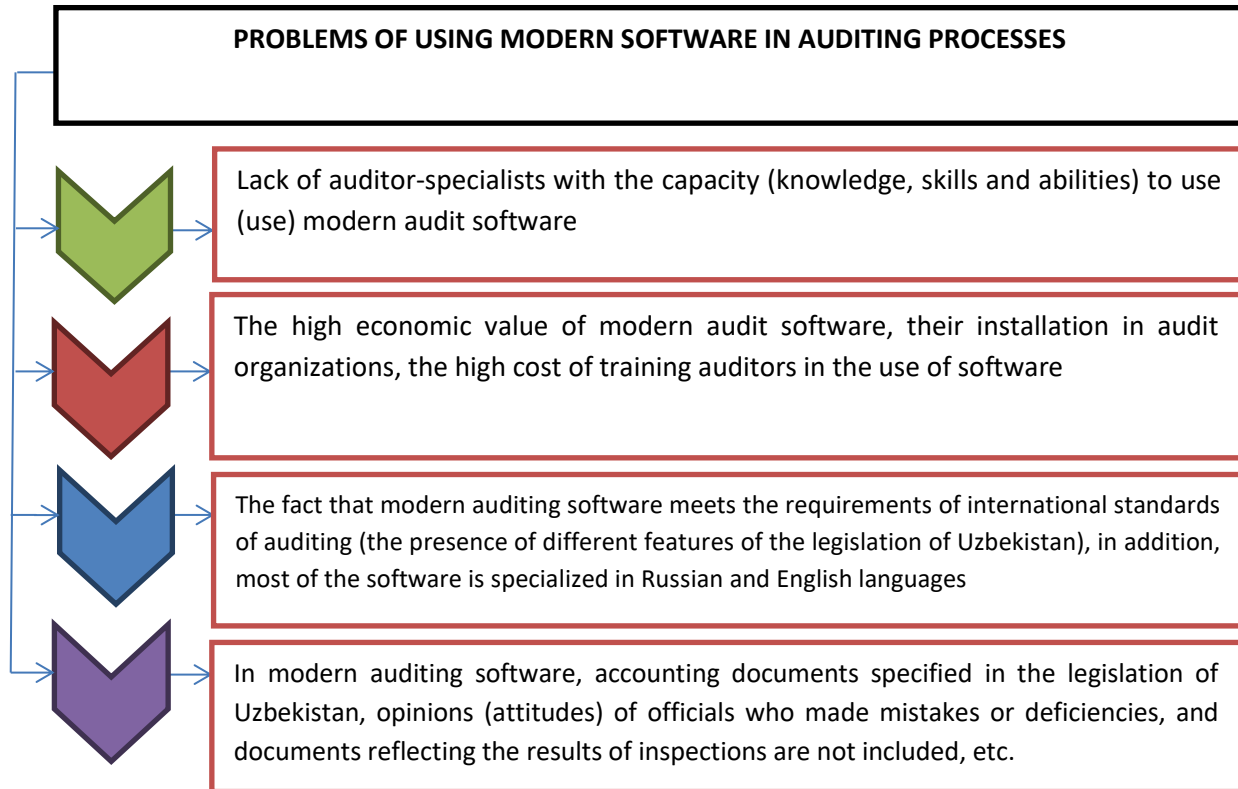
A factor type of (reasons).	Content of factors
To generalize	<ul style="list-style-type: none"> <li>- Low level of development of this market at the initial stage of auditor activity development;</li> <li>- The limited possibility of complete documentation of the audit process and the need to form a professional opinion, as well as the specificity of the required audit activity;</li> <li>- Auditors' computer literacy is not at the required level;</li> <li>- Complex formation of the audit process;</li> <li>- The fact that the normative legal basis of auditor activity is very complex and large in size;</li> <li>- Absence of a unified approach to auditing in practice; obtaining different results during the inspection period;</li> <li>- The presence of various complexities in their systematization when preparing an audit report;</li> <li>- As a result of the transition to conducting audits at the level of international standards, the volume of auditing services related to the field will increase;</li> <li>- Strengthening of internal and external control over the quality of provided audit services;</li> </ul>
Technological	<ul style="list-style-type: none"> <li>- Application of various accounting software by the audited enterprise;</li> <li>- The (portable) nature of the audit service being carried out on the way to the client-enterprise facilities;</li> <li>- Specialization of clients of audit firms in various sectors.</li> </ul> <p>This means that it does not allow to adapt the automated audit programs to the operational characteristics of various audit objects in the context of changes in legal requirements.</p> <ul style="list-style-type: none"> <li>- The need for auditors to learn different software in order to master the software bases used by clients;</li> <li>- Compliance with confidentiality and protection requirements of audit results;</li> <li>- limitation of the possibility of electronic archiving of the final documents of the work and inspection by using an electronic digital signature.</li> </ul>

All the above-mentioned factors, on the one hand, are necessary for the development of the quality level of services provided in the field of auditing on the basis of information technologies, and on the other hand, they serve as a subject of controversy between auditors and software developers. It should be noted that no software can replace the auditor in auditing. However, it is advisable to use the capabilities of specialized audit software in the audit process.

Today, one of the main requirements of the customers of audit services is to ensure that the audit services are performed with high quality, in a short period of time or without disrupting (impacting) the activities of the enterprise, and at low prices. In turn, in order to ensure the fulfillment of the above requirements by auditing organizations, it is necessary to have specialists with knowledge and experience in the fields of accounting, economic analysis and auditing, to provide auditing services with modern software tools (AuditNET, ITAUDIT:Auditor , AUDITXP "Complex Audit", Express

<sup>2</sup>Prepared by the author

audit: PROF, Auditsoft, Audit sampling, [Teams](#), [LEAP](#) and First-audit), it is required to perform strategic tasks such as the use of low-cost methods and tools in the provision of audit services. It should be noted that there are the following problems in the use of software in audits in today's auditing practice of Uzbekistan (Figure 1)



**Figure 1. Problems of using modern software in auditing processes<sup>3</sup>**

In our opinion, in order to eliminate the above problematic aspects and ensure the provision of audit services based on software, software in Uzbek language that complies with the requirements of the national legislation of Uzbekistan, features of modern audit software It is desirable to develop the supply. The development of software allows auditors to conduct inspections remotely, that is, without affecting the work of the company's managers, and of course on a short-term and low-cost basis. In our opinion, it is appropriate to incorporate the following capabilities that ensure the effectiveness of evidence collection in the audit software:

1. Creating the possibility to run the software on the basis of the Internet network. In this case, all members of the audit can receive information about the activities of the audited entity remotely based on their electronic keys, analyze them, and send analytical data to the relevant responsible auditors for the purpose of summarizing. We believe that it is necessary;
2. In the software, it is desirable to create an opportunity to set a fixed period (time) for the members of the audit working group to complete the relevant audit tasks. This allows the auditor and the audit organization to complete the audit process within the time limit (defined in the audit contract);
3. The software contains not only audit information on the subject for which the audit service is

<sup>3</sup> Prepared by the author

provided, but also information on the internal structural structure of the audit organization (internal regulatory documents), exchange of information on the execution of internal structural tasks, and It is necessary to create an opportunity to exchange information. This provides an opportunity to ensure executive discipline in the activity of the audit organization and to control the state of execution of internal regulatory documents (orders, orders and instructions) by the management of the organization and to provide them with information on these documents in a timely manner. provides;

4. Creation of new assignment documents in the software, incoming and sent documents (assignments) on audit assignments, sending audit assignments to the members of the audit working group, performing the duties of monitoring the status of the audit assignments on time and quality it is necessary to have opportunities;

5. Regulatory documents regulating accounting and auditing activities in the software, international auditing standards, national accounting standards and international standards of financial reporting, internal standards of the auditing organization, sample forms of auditor work documents drawn up and formalized in the audit process, and other audits used in audits it is desirable to have a methodological and practical database. These information (documents) are used by members of the audit working group and other auditor-specialists of the organization as a methodical and practical instruction in the processes of organization and implementation of audit services. Because, in the audit system of Uzbekistan, audit organizations can simultaneously provide audit services in different entities (insurance organizations, banks, joint-stock companies, various commercial organizations, entities with mixed ownership) and software the organization of this database in minot serves as a necessary resource for use as a normative and methodological basis for the inspection process;

6. Also, in the software, it should be possible for the head of the audit group or the head of the audit organization to evaluate and control whether the assignments assigned to the members of the audit work group are performed in a high-quality, correct and timely manner. This opportunity allows the members of the audit working group to effectively monitor the timely and quality performance of assigned audit tasks. For this purpose, it is advisable to check the electronic information about the timely and quality completion of the task given in the system by the head of the audit group (organization) in the program, and after checking the status of the fulfillment of this requirement, it is appropriate to create an opportunity to remove the task from control in the software. In this case, it is necessary to create "monitoring of tasks" in order for the head of the audit group (organization) to check that the tasks are completed on time and correctly;

7. In the software, the results of the work performed by the members of the audit organization (auditor, assistant auditor, expert-specialist) (total audit tasks performed, work documents prepared by them, tasks completed on time, not completed on time, and tasks in the work process we believe that there should be an analysis (statistics) of data on We believe that this information allows to evaluate the activity of the members of the audit organization or their attitude to their work, to motivate auditors according to the results of their work, to change their position, and to objectively assess their potential;

8. In order to speed up the possibility of information exchange by the members of the audit organization, to ensure the safety of their information, it is desirable to create the possibility of information exchange through "telegram" or other social networks through this software. This makes it possible to establish a reliable and secure information exchange system through software. In order to create this opportunity, it is necessary to create an opportunity to enter (join) the "Telegram" messenger or other social networks in the software;



9. Naming the audit tasks included in the software, who sent the included audit evidence (documents) by whom and when, sending documents, entering input and output numbers, assigning the responsible persons for the audit tasks (collection of evidence), responsible persons it is expedient for them to get acquainted with the content of the task (evidence) sent to them, to have the opportunity to receive information about the acceptance or rejection of tasks by them;

10. We believe that it is necessary to install the software (electronic system) not only on computers, but also on modern telephones, tablets and other similar information devices (tools), and create opportunities for information exchange through them. Through these opportunities, the members of the audit working group can share audit data remotely through the Internet, manage and summarize the audit process.

In our opinion, the software with the above capabilities should be available for individual and special use by the members of each audit team through the Internet, and the audit work documents (intermediate and general audit reports, inspection results) it is desirable to place in the software the possibilities of using sample document forms related to the results of the independent analysis (research) and the results of the auditor's independent analysis (research). AuditNET, ITAUDIT:Auditor, AUDITXP "Complex Audit", Express audit:PROF, Auditsoft, Audit sampling, [Teams](#), [LEAP](#) and software such as First-audit were found to be used on a short-term and low-cost basis.

In our opinion, the importance and necessity of using software capabilities in the processes of audit evidence collection, the problems of software application, requirements, and the following to create an automated algorithm of evidence collection (Table 3).

**Table 3 By entering evidence into the software procedure for forming the auditor's opinion<sup>4</sup>**

No	Recommendations for tasks to be included
1	Initially, the software includes the name of the auditing organization, the names of the auditor, assistant auditors and involved experts, personal information, their position and tasks in the job description, the relevant calendar period (year, month) , day), system language, technical support contact numbers must be entered before the software is made available to everyone
2	After the conclusion of the contract on the provision of audit services, information on the activity of the audited entity (enterprise charter, job instructions, founding documents, approved forms of financial and statistical reports of the enterprise, enterprise information about partners (suppliers and contractors, buyers and customers, etc., order on accounting policy, audit contract, general audit plan and program, request for documents, etc.) audit group It is necessary to be included in the software base by the head of the (organization) and brought to the attention of all audit working group members in the system.
3	Evidence (documentary information) necessary for the performance of audit tasks (collection of evidence) (violation (error or deficiency) in the activity of the audited entity, documents justifying the reliability of financial reporting indicators, including conducted questionnaire, results of testing or questionnaires, presentation letter, audit risk and significance level calculation table) to the software (system) within the period specified in the audit program by the member of the audit working group to which the relevant audit assignment was sent should be included
4	The reliability of the information (documents) entered into the software (system) by the head of the audit team (organization) is assessed using appropriate audit methods (procedures), and the results of the analysis are reflected in interim and general audit reports. will be delivered
5	Based on the auditor's opinion, a written reference and an auditor's conclusion should be reflected on the results of the inspection.

<sup>4</sup>Prepared by the author

In conclusion, it is worth noting that the creation of software based on the above criterion (requirement) and information, except for independent research (verifications) of the auditor, all tasks related to the formation of audit information in a short period of time, understandable content for everyone and allows remote execution of the language. In this case, the management of the audited entity is responsible for the reliability of the information provided to the auditor, and the audit organization is responsible for the reliability of the auditor's opinion.

Also in the process of researchThe current situation of the use of the IT audit service in the practice of Uzbekistan, the existing problems and the results of the research on the use of the IT audit service, which is widely used in the world audit practice, were described. In our opinion, the software (system) with the capabilities mentioned above is able to collect audit evidence at the location of the audit organization or in remote form without affecting the activities of the audited entity, and electronic data of audit evidence with understandable content for all. allows to analyze and store these data in reliable sources. This creates opportunities for the audit organization to reduce the fee paid for the audit service, involve less auditors in the performance of audit services, conduct inspections based on the terms and procedures specified in the contract.

## Conclusions and Suggestions

In our opinion, it is desirable that the information technologies used in the audit of financial statements should have the following capabilities:

The ability to run the audit software on the basis of the Internet, to set a fixed deadline for the members of the audit work group to complete the audit tasks;

Possibilities of exchanging information on the execution of information on the internal structural structure of the audit organization or on the execution of assignments of internal structural importance;

Ability to create new assignment documents, send audit assignments to the members of the audit working group, perform tasks of monitoring the status of the audit assignments on time and quality;

Regulatory documents regulating accounting and auditing activities, international standards of auditing, national standards of accounting and international standards of financial reporting, internal standards of the auditing organization, model forms of audit work documents used, and other methodological and practical databases used in audits. to be;

The possibility of assessment and control by the head of the audit group or the head of the audit organization that the tasks assigned to the members of the audit group are performed in a high-quality, correct and timely manner;

Analysis of data on the results of the work performed by the members of the auditing organization (auditor, assistant auditor, expert-specialist) (audit assignments, work documents, assignments completed on time, not completed and in progress) to be;

To speed up information exchange by the members of the audit organization, to ensure the security of their information, the possibility of information exchange through "telegram" or other social networks through this software;

Naming the included audit tasks, who sent the included audit evidence and when, sending documents, entering input and output numbers, assigning the responsible persons for the audit tasks, getting acquainted with the contents of the task sent to them by the responsible persons, accepting the tasks by them or opt-out options;



Installation of auditing software not only on computers, but also on modern phones, tablets and other similar information technology devices, the possibilities of providing information exchange through them, etc.

## References:

1. N. Dalibaev "IT-audit. What is this?", <https://ictnews.uz/30/03/2022/it-audit>
2. I.I.Meliev "Pandemic and audit: how to solve the problem?" <https://khabar.uz/tekhnologiya/pandemiya-va-audit-muammoni-kanday>.
3. Sh.K. Umarova. "Features of auditing using modern information technologies", "Economics and society" magazine, issue 6, 2022, [www.iupr.ru](http://www.iupr.ru)
4. N.V.Homolko, L.A.Popkova. "Automation audit", 1999. [www.edoc/bseu.by](http://www.edoc/bseu.by)
5. KA Trukhan. Audit automation with auxiliary software IT Audit // Corporate information systems. – 2019. – No. 4 – P. 19-25. – URL:<https://corpinfosys.ru/archive/issue-8/73-2019-8-itaudit>.
6. B.A.Sharifov. Methodology of audit implementation with information technology and personal computers // Molodoy uchenyy. 2021. #3. - S. 332-335. - URL: <https://moluch.ru/archive/345/77632>.
7. D.A.Mirzaev, I.J.Bozorova,F.X.Mamasidikova. Perspektive razvitiya IT-audita sistemy bukhgalterskogo uchyota za schot vnedreniya IKT. Ninth international scientific and practical conference "BIG DATA and advanced analytics. BIG DATA and high-level analysis», Minsk, Republic of Belarus, May 17-18, 2023