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## PROBLEMS OF AUDIT PRACTICE IN THE CONDITIONS OF AUTOMATED DATA PROCESSING

**Goncharova V.G., Kravchenko S.V.**

*Zaporizhzhia National University*  
*Ukraine, 69600, Zaporizhzhia, Zhukovsky str., 66*  
sintez\_audit2016@ukr.net  
ORCID: 0000-0001-5556-7192

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The article examines the organization of the audit process and formulates a number of requirements for software for auditing. The main reasons that prevent the introduction of computer technologies in the audit process have been studied. A study of the Ukrainian computer technology market was conducted. The advantages and disadvantages of applied computer programs for auditing in the practice of domestic audit firms are summarized. It has been established that the effectiveness of audits increases significantly with the use of specialized software products by auditors. Peculiarities of information technology “IC: Audit-Control (+) for Ukraine” were studied. Mechanisms for ensuring automatic work in the program and methods that increase the quality and transparency of the audit firm’s work using the “IC: Audit-Control (+) for Ukraine” system are considered. It has been proven that the main areas of effective audit automation are the selection of optimal software.

## ПРОБЛЕМИ ПРАКТИКИ АУДИТУ В УМОВАХ АВТОМАТИЗОВАНОЇ ОБРОБКИ ДАНИХ

**Гончарова В.Г., Кравченко С.В.**

*Запорізький національний університет*  
*Україна, 69600, м. Запоріжжя, вул. Жуковського, 66*

**Ключові слова:**

підприємство, аудит,  
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процес комп’ютеризації

У статті розглянуто організацію процесу аудиту та сформовано ряд вимог до програмного забезпечення для проведення аудиту. Досліджено основні причини, що перешкоджають впровадженню комп’ютерних технологій у процес проведення аудиту. Проведено дослідження українського ринку комп’ютерних технологій. Узагальнено переваги і недоліки прикладних комп’ютерних програм з аудиту в практиці вітчизняних аудиторських фірм. Встановлено, що ефективність аудиторських перевірок помітно зростає із застосуванням аудиторами спеціалізованих програмних продуктів. Досліджені особливості інформаційної технології «IC: Аудит-Контроль (+) для України». Розглянуто механізми забезпечення автоматичної роботи в програмі та методи, які підвищують якість та прозорість роботи аудиторської фірми за допомогою системи «IC: Аудит-Контроль (+) для України». Доведено, що основними напрямками ефективної автоматизації аудиту є вибір оптимального програмного забезпечення.

### Statement of the problem

In the last few years, crisis phenomena have been observed in the economy of Ukraine, which lead to changes in the financial system of the state and are accompanied by a significant deterioration in the economic condition of business entities. In this regard, the role and importance of improving the organization of the audit of enterprises in order to ensure a more rational use of their own financial resources is growing. That is, in general, the process of improvement concerns the computerization of the audit and the processing of economic information. The most modern are automated information technologies capable of

actively influencing the quality of the audit. In this regard, the study of the automation of accounting, control and analysis processes is particularly relevant.

### Analysis of recent studies and publications

The issue of development and implementation of information systems in auditing was dealt with by such scientists as E.A. Bogdanova, A.V. Kuznetsov, L.M. Makarova, B.V. Kudrytskyi, E.V. Leushyna, Yu.N. Skvortsova, L.O. Khodakivska and others. However, not all aspects of the problematic moments of the audit computerization process have been investigated.

### Objectives of the article

The purpose of this article is to study the problems that arise during an audit using automated data processing systems.

### The main material of the research

Various computer tools can be used in auditing activities, which allow to increase the efficiency of auditors' work. Automated programs and computer technologies give a greater probability of the correctness of the check, reduce the time for its implementation.

Until now, the control and audit methodology using modern computer programs has not been sufficiently developed, which negatively affects the quality of the procedures.

International Standards on Auditing (ISA) 240 "The Auditor's Responsibilities Relating to Fraud in the Audit of Financial Statements" and ISA 315 (Revised) "Identifying and Assessing the Risks of Material Misstatement Through Understanding the Entity and Its Environment" address the entity's use of a computer of any model or size for processing financial information relevant to the audit, regardless of whether the computer is used by the entity or a third party.

ISA 315 examines the specifics of conducting an audit by an audit firm or an auditor using computers. Attention is also paid to the need for the audit organization to work on the development of new information technologies for the automation of audit activities [1].

Automation of the audit is reduced to the use of specialized software "1C: Audit-Control (+) for Ukraine", which will allow to plan the work qualitatively, taking into account the specifics of the activity of the company subject to audit, even before leaving for the inspection of the entire composition of the audit group. In the "1C: Audit-Control (+) for Ukraine" program: the "Audit Planning" and "Journal of Business Transactions" modules will provide the auditor with a solution to this task.

The main attention should be paid to the creation of a certain computer information system, which provides a "man-machine" approach to the audit. This system involves a significant division of functions: a person performs the functions of logical analysis, and the computer performs the functions of organizing and conducting quantitative calculations, the logical structure of which is implemented by software tools created taking into account the algorithms developed by the person (procedural method of solving the task).

Practicing auditors and auditing firms currently do not use specialized programs for auditing. There are factors limiting the use of specialized automated audit programs. One important factor is the use of general purpose software products by audit firms: text editors, spreadsheets, database management systems. Another factor is insufficient awareness of auditing companies about automation systems intended for auditing activities. Actuality determines the need to research the market of audit programs, determine the need and opportunities for them in audit firms.

Currently, the following fully functional audit automation programs are presented on the Ukrainian

market: "1C: Audit-Control (+) for Ukraine", SAB AXIOMA", "KIT. Audit".

In our opinion, the "1C: Audit-Control (+) for Ukraine" program is a working audit system, the purpose of which is to solve audit tasks at all stages of its implementation.

Since the program belongs to the class of ERP systems (Enterprise Resource Planning), its main purpose is to speed up the business processes of the audit organization. In particular, with the help of the program, it is possible to reduce to an acceptably low level the negative impact of the human factor, which is manifested during the processing of working documentation for the performance of the audit task and the expression of professional judgments [2].

The ERP system is based on the principle of creating a single data repository, which:

- contains relevant corporate business information;
- provides the possibility of simultaneous access of the required number of users (employees of the audit organization or third parties, for example, external controllers of OSNAD), who are granted a certain set of rights;
- provides an opportunity to create, edit and process data using system functionality, in accordance with a set of user rights.

A special feature of ERP systems is their flexibility, which means, in particular, the possibility of effective adaptation to:

- individual needs of a separate audit organization;
- new conditions (for example, a change in the ISA);
- judgment of a certain auditor during the performance of the audit task.

There are two strategies in the creation of audit systems: minimizing costs when entering initial data; minimization of the risk of omission of erroneous actions in financial documentation. The authors of this software application are aware of the complexity of the task and the imperfection of its individual elements. However, given the acute need for such a program, it is offered for practical use.

The use of computer audit programs allows the auditor to perform the following procedures efficiently and quickly:

- testing operations and account balances in the computer database;
- analytical procedures for detecting deviations from commonly accepted parameters in the computer database;
- testing of the database of the economic entity under review;
- testing of the technical, mathematical, informational, software of the economic entity under review.

Procedures performed by the audit organization when using computers for control may include:

- control of the sequence of checked data that passes through several stages of processing;
- control of previous data;
- forecasting and planning of data verification results and comparing them with control data for individual operations and in general by types of activities;
- confirmation of operability and compliance with modern requirements of the software and hardware of the auditor's work during the audit using a computer;

- confirmation of the compliance of the computer support of the audited economic entity with the current legislation;
- confirmation of the use of computers during the audit period at the audited economic entity.

The presence of automated processing of computer data has a significant impact on the audit methodology, which is why audit firms and auditors, at the stage of audit preparation, are obliged to solve the task of technical and organizational control support and the need to involve special technical specialists [3].

In many cases, poor-quality information is due to the failure of computer facilities, inattention and inexperience of users.

Forms of audit risks that arise as a result of the use of computer data processing programs:

- technical risks – risks associated with technical factors, methods of processing accounting information, which are directly used in accounting and internal control during the implementation and use of automated information systems. Such risks are caused by poor-quality operation of technical means, use of unofficial software, differences in the characteristics of technical and software means, lack of proper general technical service and control;
- risks associated with the process of processing accounting data – may be associated with errors in the development of the system, its functionality is limited, and it is not used for its intended purpose. It is the auditor's responsibility to determine whether the client's system is being used effectively;
- risks related to accounting and control – caused by insufficient organization of the client's employees to use the information processing system of accounting data, lack of clear differentiation of obligations and responsibilities of the client's employees, unsatisfactory formation of the internal control organization, lack of established information security;
- risks associated with the auditor's professionalism – associated with incorrect evaluation of the accounting and analytical data system, lack of a clear system of tests, distortion of facts.

Under different conditions, risks may increase or decrease. These factors can be divided into the level of audit risk under the conditions of automated data processing:

1. The risk of errors in accounting increases with:
  - demarcation of computer automated network;
  - large-scale remoteness of computer stability;
  - low level of acquired knowledge of accounting personnel in the field of information technologies;
  - lack of a system of internal control over the functioning of the environment for computer processing of analytical and accounting data;
2. The risk of errors in accounting is reduced by:
  - introduction of license automation programs for accounting;
  - implementation and development of timely software;
  - use of special software for automated accounting data processing;
  - application of a possible modification of some forms of control due to the use of audit activity automation software specially developed for audit firms;

- coordination of the subject's information policy with the main use of the computer data processing system;
- development of a strategic plan and strategy for the development of the automated data processing system of the economic entity. The ability to avoid possible errors allows the auditor in his practice to expose the cause of their occurrence, to pay attention to some issues, to exclude the impact on the quality and reliability of information.

To implement the aforementioned tasks, the auditor must have additional knowledge and skills in the field of computer processing systems for audit data. The minimum requirements for auditors should be knowledge of computer terminology and the ability to understand the sequence of performed computer operations [4].

Some auditors believe that computer literacy is not necessary in many cases, especially when technical professionals and specialists are involved. The lack of such experience can lead to incorrect formation of requirements for technical specialists and incorrect interpretation of the obtained results.

The negative factors of the market of computer programs include the lack of the possibility of optimizing final operations. Automated programs that provide accounting must undergo independent examination and licensing. After that, the computer program can be used in practical activities. Such a procedure can contribute to the legalization of the Ukrainian market of accounting programs, determine the potential of using audit operations within the limits of a specific program, and reduce the likelihood of errors by program authors and programmers. In addition, this approach will create a real opportunity for the auditor to avoid distortions when forming an opinion in the conditions of automated processing of accounting data, since it will be possible to build a consistent verification methodology in advance.

We have considered the main methods of automating the audit process, however, despite their variety, this problem is quite relevant and not solved, software authors today face the task of automating and standardizing the activities of auditors at all stages of the audit: from the preparation and planning of the audit to the collection, systematization and registration of relevant final documents.

For the most high-quality, accurate audit of enterprises in modern conditions, we suggest using the "1C: Audit-Control (+) for Ukraine" program, which works under the management of the BAF or 1C technological platforms, which allows you to create a really working audit system aimed at solving tasks audit Using the software product "1C: Audit-Control (+) for Ukraine" from our point of view has a number of advantages compared to others:

- automation of audit activity not only of large, but also medium and small audit organizations, as well as individual auditors in accordance with current International Auditing Standards;
- increases the efficiency of quality control of working documentation;
- ensures compliance of activities with audit standards and internal company standards;
- application of the standards proposed by this program allows to increase the professional level and quality of work of auditors due to proper organization;

- the possibility of importing and exporting procedures at all stages of the audit has been introduced, which allows auditors to divide the responsibilities for conducting audits of different departments, to work remotely using laptop computers;

- contains more than 500 procedures, forms, reference tables, reports from all stages of the audit;

- suggests using the original audit methodology, which contains built-in algorithms for calculations, planning, sample formation and analysis, selection of types of detected violations, and automatic drawing of conclusions regarding the sections of the audit and the final conclusion;

- includes the methodology of quality control of audit verification, a block of analytical procedures and financial analysis;

- the built-in form editor makes it possible to create new, modified existing forms of audit procedures, as well as completely change the audit program according to the internal standards of the audit firm.

We assume the possibility of adding the following materials in the following versions of this program:

- a list of errors that often occur during an audit;
- reference information for the most difficult sections of the audit;
- section “Analytical part of the conclusion”.

### Conclusions

Based on the results of the conducted research, it can be concluded that the main areas of effective audit automation are the selection of the optimal software, taking into account the specifics of the methods and features of conducting the audit; economic analysis and evaluation of the effectiveness of the use of the information system; overcoming the risks associated with the problems of organizing the auditor’s automated workplace and overcoming the auditors’ psychological and professional barriers.

The introduction of automated systems into the activities of audit firms requires the use of specialized licensed software, which in turn will contribute to increasing the efficiency and quality of the services provided by the audit firm.

### References

1. International standards for quality control, auditing, review, other assurance and related services. 2016–2017 edition. Decision of the APU dated 08.05.2018 No. 361. URL: <http://apu.com.ua/1151-miznarodni-standarti-kontroluyakosti-2016-2017>. (date of application: 11.09.2023).
2. Generalized information on the state of audit activity in Ukraine for 2022: according to the data of the Audit Chamber of Ukraine. *Official website of the Audit Chamber of Ukraine*. URL: <http://apu.com.ua/informatsiya-pro-stan-auditorskoji-diyalnosti-vukrajini> (date of application: 11.09.2023).
3. About Methodical recommendations for the development of work programs for continuous improvement of auditors’ professional knowledge (update date 09/29/2016). Decision of the Audit Chamber of Ukraine dated 02/28/2013 No. 265/8. URL: [https://zakon.rada.gov.ua/rada/show/vr5\\_8230-13](https://zakon.rada.gov.ua/rada/show/vr5_8230-13) (date of application: 11.09.2023).
4. Khorunzhak Nadiya, Belova Iryna, Zavytii Olha, Tomchuk Viktor, Fabiianska Viktoriia. Quality control of auditing: Ukrainian prospects. *IJM&P journal*. May 1, 2020. P. 120–124. URL: <http://www.ijmp.jor.br/index.php/ijmp/article/view/1229>