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The scientific monograph presents the theoretical and practical aspects of the development of modern scientific research. General questions of economics and enterprise management, regional economics, marketing, technical sciences, technology of food and light industry, and so on are considered. The publication is intended for scientists, educators, graduate and undergraduate students, as well as a general audience.

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ORGANIZATION AND IMPROVEMENT OF INTERNAL AUDIT IN THE ENTERPRISE MANAGEMENT SYSTEM

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Abstract. The purpose of the paper are the issues related to the organization and improvement of internal audit in the enterprise management system. Methodology. The study is based on a dialectical method using a systematic approach to knowledge of economic phenomena. processes inherent in the system of public financial control and internal audit, in particular. The research used general and special methods based on the systematic study of economic phenomena. Results. It is determined that internal audit is an assessment of the enterprise in order to provide its owners and management with prompt and unbiased information about the general condition of the entity and the prospects for management decisions. The reason for the development of internal audit in Ukraine was the creation of enterprises with different forms of ownership and the inability of the traditional command-and-control system to perform its functions in the transition to market conditions. Problems of formation and development of internal audit in Ukraine are, firstly, the lack of a central independent body whose competence should be the regulation of internal audit at the macro level, i.e. the development of standards, guidelines for this type of audit, and secondly, the lack of internal documents on the activities of internal auditors. According to the results of the study, the main tasks and directions of the internal audit service are considered. It is proposed to supplement the list of the main activities of the internal audit department with the following items: meeting the needs of management in terms of providing relevant reporting information on various issues arising in the process; support of external control (appropriate control measures by regulatory authorities). Three main types of audit in the public sector are described, as well as types of internal audit in international practice. The types of internal audit in foreign countries, defined in the regulations on internal audit, are

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analyzed. Directions and spheres of internal audit activity were assessed in accordance with national standards. Ways to ensure and improve the quality of internal audit have been identified. The directions of internal audit quality assessment, register of typical violations and shortcomings in the process of drafting internal documents on internal audit quality assessment, performance indicators of the internal audit service, cost of training and certification services provided by the Institute of Internal Auditors of Ukraine are described. *Practical implications* consist in the scientific validity and applied orientation of the provisions, approaches and recommendations given in this study, the use of which will improve the organizational and methodological foundations of internal audit. *Value/originality*. Using the model of levels of professional competence of internal auditors presented in this study on the basis of Bloom's taxonomy will allow structuring the levels of thinking and skills of internal audit specialists.

1. Introduction

In modern business conditions, when the activities of enterprises are accompanied by a variety of risks, and external control does not meet the needs of owners and managers of enterprises, there is a need to establish more effective types of control.

In such circumstances, the importance is given to audit activities, thanks to which companies can assess their situation and position and receive recommendations for further action [1].

A special place belongs to internal audit. Its purpose is to ensure the effectiveness of the management staff to protect the property interests of the enterprise, strengthen its financial position and assistance in improving the efficiency of work, as well as improving the accounting system. Internal audit is an important management function, which includes checking the correctness of accounting, analysis and control, comparison and evaluation of the actual result with the goals and objectives of the enterprise. The internal audit service is designed to improve the organization and management of production, to identify and mobilize reserves for its growth in order to improve the final results.

Given the above, there is a need to study and research the problems of internal audit and in particular areas for its improvement in the enterprise management system.

A number of well-known scientists of the world have devoted their works to the study of the theoretical foundations of auditing, in particular: Western ones – R. Adams, E. Arens, K. Mautz, D. Robertson, G. Sharaf; Russian – R. Alborov, V. Andreeva, Y. Dapylovskyi, J. Sokolov, A. Sheremet; Ukrainian – M.T. Bilukha, O.S. Borodkin, F.F. Butynets, B.I. Valuev, N.I. Dorosh, M.V. Kuzhelnyi, O.A. Petryk, N.G. Zdyrko, V.S. Rudnytskyi, B.F. Usach and others. The works of such domestic and foreign scientists as V.V. Burtsev, L. Dragun, V.M. Melnyk, L.O. Sukhareva, T.V. Fomin and other were devoted to the problems of internal audit. Despite the important scientific positions of these authors, a complete concept for improving the internal audit system has not yet been developed.

The purpose of the study is to assess issues related to the organization and improvement of internal audit in the enterprise management system. In the course of the research the following tasks were solved: assessment of the main tasks and directions of the internal audit service; consideration of types of internal audit in international practice; characteristics of directions and spheres of internal audit in accordance with national standards; identifying the ways to ensure and improve the quality of internal audit.

This study is based on a dialectical method using a systematic approach to cognition of economic phenomena, processes inherent in the system of public financial control and internal audit, in particular. The research used general and special methods based on the systematic study of economic phenomena.

2. The main tasks and directions of the internal audit service

Internal audit is an independent, objective activity of providing confidence and consulting services that should benefit the organization and improve its performance.

Internal audit helps the organization to achieve its goals by means of a systematic, ordered approach to assessing and improving the effectiveness of risk management processes, control and corporate governance. The purpose of internal audit in the modern concept, its mission is to preserve and increase the value of the enterprise by providing risk-oriented and objective audit services, consultations and professional opinion [2].

The main objects of internal audit are:

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- the state of accounting, tax, management, statistical and other types of accounting of the business entity;
 - compliance of approved policies and procedures with current standards;
 - state of the entity's assets, conditions of their storage;
 - state of settlements for taxes and fees;
- financial statements of the entity and its compliance with quality requirements;
 - the system of internal control of the business entity and its condition;
 - management system of the business entity and its structure;
 - organization and technology of production;
 - economic processes;
 - labor organization and its payment system;
 - labor discipline, use of working time, labor productivity;
 - claims work carried out by the business entity;
- financial condition and solvency of the business entity, the level of availability of resources and their use;
- compliance of the business entity's activities with the requirements of the law.
 - other normative legal acts, in particular internal ones;
 - strategic development plans of the business entity, etc. [2].

Effective internal audit activities are ensured by the implementation of a set of measures and logical sequential procedures by the relevant unit, starting with planning, organization of internal audit and ending with reporting on the results of activities to the management of the institution [3].

However, the central place in this process is occupied directly by conducting internal audits and performing audit tasks.

The main task of the Internal Audit Service is defined by the law – providing the management of the state body with objective and independent conclusions and recommendations regarding:

- 1) conducts an assessment of:
- the effectiveness of the internal control system;
- the degree of implementation and achievement of goals set in strategic and annual plans;
- efficiency of planning and implementation of budget programs and results of their implementation, management of budget funds;

- the quality of administrative services and performance of control and supervisory functions, tasks defined by legislation;
 - use and preservation of assets;
- reliability, efficiency and effectiveness of information systems and technologies;
 - management of state property;
- correctness of accounting and reliability of financial and budgetary reporting;
- -risks that negatively affect the performance of functions and tasks of the state body, its territorial bodies, enterprises, institutions and organizations belonging to the sphere of its management;
- 2) plans internal audit activities, organizes and conducts internal audits, documents their results, prepares audit reports, conclusions and recommendations, as well as monitors compliance with recommendations;
- 3) interacts with other structural subdivisions of the state body, its territorial body and budgetary institution, other state bodies, enterprises, their associations, institutions and organizations on internal audit;
- 4) submits to the head of the state body, its territorial body and budgetary institution audit reports and recommendations for making appropriate management decisions;
- 5) reports on the results of activities in accordance with internal audit standards;
 - 6) performs other functions in accordance with its competence [4].

The functions of internal audit are aimed at assisting the manager in managing the process of providing appropriate assessments, guarantees and proposals for improving the internal audit system, rather than participating in the development and implementation of internal control procedures in the institution. In turn, an important condition for the successful functioning of the internal audit service in the institution is the understanding of the management (governing body) of the main activities of the unit and the set of tasks [3].

Given this, the main activities of the internal audit service are as follows (Figure 1):

It should be noted that the detection of fraud, steeling and abuse is not consistent with the direct nature of the audit. The internal auditor, if necessary, should assess the risk of fraud and the quality of the risk management, but need not be an expert in fraud detection and investigation.



Figure 1. The main activities of the internal audit service

Source: formed by the author on the basis of [2]

When providing consulting services to the internal auditor, it is important to be objective and not to assume managerial responsibilities.

Based on the description of the main tasks and directions of the internal audit service, approved by regulations and defined by scientists in their research, we propose to supplement the list of main activities of the internal audit department with the following items [3]:

- 1) meeting the needs of management in terms of providing relevant reporting information on various issues arising in the process of activity;
- 2) support of external control (appropriate control measures by regulatory authorities).

In general, the list of tasks depends on the scope of the entity, its characteristics, as well as the understanding the purpose and functions of the internal audit body by the owners and management. In any case, the internal regulations of the entity on the organization of the internal audit unit should provide for the implementation of certain tasks [2].

Based on the tasks, internal audit is implemented through the relevant areas (types) of activities.

International standards for the professional practice of internal audit do not define specific areas of internal audit. The experience of EU countries shows that the internal audit function has a wide range of internal audits directions and its forms [3].

The actualization of a particular area of internal audit in each country is influenced by the specifics of the administrative system, features of public administration and control in the public sector.

International Standards on Auditing ISSAI provide for three main types of public sector audits (Figure 2):

The financial audit is aimed at verifying the extent to which the financial information is fully and accurately reflected in the financial reports of the audited entity and complies with current legislation. Carried out by obtaining sufficient and appropriate audit evidence to express the auditor's opinion that the financial statements do not contain material misstatements due to fraud or errors [5].

The performance audit focuses on whether intermediaries, programs and organizations operate in accordance with the principles of economy and efficiency and whether there is possibility for improvement. Activities are evaluated using appropriate criteria and other issues are analyzed. The aim is to obtain answers to key audit questions and provide (provide) recommendations for their improvement [5].

The compliance audit aims to verify the extent to which a particular subject meets the powers defined as a criterion. Compliance audits are performed by assessing the adequacy of activities, financial transactions and information the authority of those who manage the audited organization [5].

Financial audit

 focuses on confirming the financial statements, obtaining sufficient evidence by the auditor to conclude that the financial information is free from material misstatement due to errors or fraud

Performance audit

 attention is focused on compliance of actions, processes, programs with the principles of economy, efficiency and effectiveness in accordance with the defined criteria and finding opportunities to improve them

Compliance audit

• the purpose of which is to determine whether the object of study meets the current authorities selected as criteria

Figure 2. Types of audit in the public sector

Source: formed by the author on the basis of [6]

It is important to note that financial audit and compliance audit since 2013, according to changes in ISSAI 100, began to be considered separately, while in practice they can be applied comprehensively, because the objects of these types of audit include a study of financial and economic activities [5].

However, financial audit, performance audit and compliance audit are defined in the standards as types of public audit.

3. Types of internal audit in international practice

In international practice, the list of types of domestic is much wider (Figure 3).

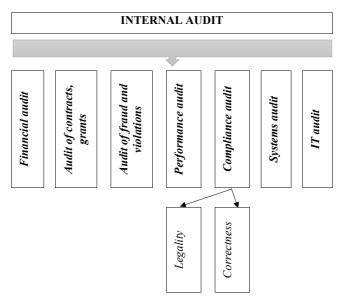


Figure 3. Types of internal audit in international practice

Source: formed by the author based on [7]

These varieties in each country can be detailed or supplemented with new ones. In particular, in some European countries the audit of IT systems is regulated as a separate area, and within the performance audit the operational audit is determined separately, the task of which is to assess the quality of internal control mechanisms within operational processes, and the

audit of systems, focusing on the effectiveness of management decisions, achieving the goals of the institution and risks that hinder the performance of functions and tasks of the institution (Table 1).

According to international practice, the areas of internal audit are not clearly distinguished and may include features of several of them.

Compliance audit is not considered as a separate area at all, but is considered a component of financial audit of legality and regularity. This type of audit is mainly popular in countries that are in the early stages of developing public sector VA activities. With the development of internal audit activities, the range of areas of internal audit and its forms is gradually expanding. In practice, financial audits can be integrated into other areas of internal audit (compliance audits or performance audits), or it is possible to apply all areas of audit at once comprehensively (comprehensive audit) [8].

Table 1

Types of internal audit in foreign countries,
defined in the regulations on internal audit

Country	Financial audit	Compliance audit	Performance audit	IT audit	Systems audit		
Ukraine	not legally defined						
Albania	+	+	+	+			
Bulgaria	+	+	+	+	+		
United Kingdom	+	+	+	+			
Armenia	+	+	+	+	+		
Georgia	+	+	+	+	+		
Estonia	+	+	+	+	+		
Kazakhstan	+	+	+				
Kyrgyzstan	not legally defined						
Cyprus	+	+					
Moldova	not legally defined						
Netherlands	+	+	+				
Poland	+	+	+				
Portugal	+	+	+	+			
Russian Federation	not legally defined						
Slovakia	+	+	+	+	+		

Source: formed by the author based on [3]

The final decision on the appointment and application of a particular area of internal audit with the definition of its evaluation criteria is made individually in each case during the planning of internal audit activities.

4. Directions and spheres of internal audit activities in accordance with national standards

In recent years, Ukraine has identified new types of internal audit.

Examining internal audit in corporate governance, N.O. Filevska singles out strategic audit as a set of audit procedures for the collection and independent and objective assessment of the reliability of strategic information to achieve in perspective the overall strategic goal [9].

Considering that in modern conditions one of the reasons for committing economic crimes and fraud is the corruption component in the use of budget funds and property, scientists also single out anti-corruption audit [10].

Taking into account Ukraine's ranking in the world according to the Transparency International Corruption Perceptions Index (122nd out of 180 countries in 2021) [11], this area of internal audit may be relevant for the public sector (for example, internal audit of anti-corruption programs). However, this type of internal audit requires highly qualified, objective and independent human resources.

Building an effective internal audit system in the institution can be a significant obstacle to the emergence of corruption schemes.

Until recently, domestic standards for internal audit highlighted the areas of activity illustrated in Figure 4.

In accordance with the amendments to the Standards in August 2019, the areas of internal audit are no longer defined, but only the scope of internal audit is outlined, similar to ISIA 2100 "The essence of internal audit" [12] (Figure 5).

Lack of regulations and a perfect internal methodological base, in cases of lack of practical skills and relevant knowledge of internal auditors, can lead to shallow research of audit issues, without a clear qualification of the facts and the formulation of sound audit conclusions. As a result, the law does not exclude the risk that the provided conclusions and recommendations will not meet the defined main tasks of the internal audit departments.

On the other hand, bringing national standards to generally accepted international norms allows internal auditors to apply various advanced

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Evaluation of the institution's activities on the effectiveness of the internal control system, the degree of implementation and achievement of goals, the effectiveness of planning and implementation of budget programs and their EFFICIENCY results, the quality of administrative services and AUDIT supervisory functions, tasks defined by law and risks that negatively affect performing the functions and tasks of the institution Assessment of the institution's activities on the FINANCIAL legality and reliability of financial and budgetary AUDIT reporting, the correctness of accounting Evaluation of the institution's activities on COMPLIANCE compliance with legislation, plans, procedures, contracts on the state of preservation of assets, AUDIT information and management of state property

Figure 4. Areas of internal audit activities in accordance with national standards

Source: formed by the author based on [13]

Assessment of the managemen effectiveness, the degree of MANAGEMENT implementation and achievement of certain goals, the quality SYSTEM of tasks and functions and provide appropriate guidance to the head of the institution Assessment of the IC system effectiveness, including issues of achieving certain goals, objectives, assessing the INTERNAL adequacy and effectiveness of control measures available in CONTROL SYSTEM the processes being studied during the IA, as well as providing appropriate guidance to the head of the institution Assessment of the risk management activities effectiveness (their identification, evaluation, response measures, etc.) RISK and provide appropriate recommendations to the head of MANAGEMENT the institution. IA should focus its available resources on the most risky areas, taking into account the overall PROCESS strategy of the organization, its goals, risks, operations and processes

Figure 5. Areas of internal audit according to domestic standards

Source: formed by the author on the basis of [12; 13]

areas of internal audit and, taking into account world best practices, focus in the context of formation of internal audit space (universe) on research and evaluation of management systems, in particular risk management and internal control.

5. Ways to ensure and improve the quality of internal audit

The quality of internal audit is an important indicator of ensuring the effective functioning of the institution (in particular, public authorities) [3]. Low internal audit quality reduces the trust of management to the unit of internal audit and its functions in general and also makes it impossible to complete the tasks in full and, accordingly, to achieve the goal.

In this perspective, significantly increases the importance of ensuring and improving the quality of internal audit function, its efficiency, effectiveness and efficiency.

In accordance with international and domestic standards, internal audit is carried out through continuous and periodic assessments of the quality of internal audit. In addition, the functions of assessing the state of internal control and internal audit of budget managers are carried out (Figure 6).

Domestic standards allow the head of the internal audit service to determine independently the order, procedures, frequency and forms of internal audit quality assessments and requirements for the formation of a program to ensure and improve the quality of internal audit and reflect this in internal documents related to internal audit [3].

In particular, the head of the internal audit department, ensuring the standardization of general provisions and methods of conducting internal assessment of the quality of internal audit, determines:

– procedures for preparation, organization, conducting internal quality assessment of internal audit, timing and frequency of its implementation, procedure and sequence of actions, their documentation, directions of resolving controversial issues, areas of dispute resolution, the procedure for implementing the results of internal quality assessment of internal audit, reporting on evaluation results to management, others organizational aspects – forms of documents for periodic internal evaluation of the quality of internal audit, the list of issues on which such evaluation is carried out, evaluation criteria and approaches to evaluation of results;

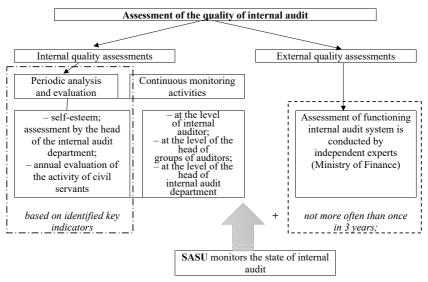


Figure 6. Directions for assessing the quality of internal audit

Source: compiled by the author on the basis of [12; 13; 14]

- requirements, procedures and forms of organization and implementation of continuous monitoring and support for the implementation of the internal audit function (powers and responsibilities for monitoring, tools for its implementation, forms for documenting the monitoring process);
- templates for drawing up a program to ensure and improve the quality of internal audit, justifying the need to determine the expected results or indicators of implementation of program activities, clear deadlines and responsible performers [15].

In the process of analysis by the Ministry of Finance of Ukraine of the regulation of aspects of internal audit quality assessment, the content of certain measures to improve the quality of internal audit and the state of consideration of regulatory requirements in the field of internal audit, the facts of non-compliance of the provisions of internal documents with the requirements to the legislation on issues of internal audit and shortcomings in the preparation of programs were revealed [3].

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The list of typical violations and shortcomings regarding the assessment of the quality of internal audit, which are allowed in the development of internal documents on internal audit, and in the preparation of the program to improve the quality of internal audit are summarized in Table 2.

These problems and shortcomings indicate that the heads of internal audit departments ignore the requirements of paragraph 4 of Standard 1 "Tasks, Rights and Responsibilities" and Standard 4 "Quality Assurance and Improvement".

Table 2

Register of typical violations and shortcomings in the process of drafting internal documents on the quality assessment of internal audit [3]

No	The essence of shortcomings and non-compliance with legal requirements						
1	2						
	I. On the issues of standardization of the procedure for conducting internal assessments of the quality of internal audit in the internal documents of the institution						
1	There are no provisions on the need for internal assessments of the quality of internal audit and the drafting of programs to ensure and improve the quality of internal audit, approaches and methodology for conducting such assessments are not defined						
2	The internal documents define only general aspects of the need for internal audit quality assessments without specifying the procedure, methodology, criteria, forms, deadlines for conducting internal audit quality assessments, procedures for documenting and evaluating results						
3	The internal documents, which regulate the issue of conducting internal evaluations of the quality of internal audit, do not define specific criteria for the relevant evaluation, do not regulate the issues of evaluation of the results obtained.						
4	The internal documents do not provide research on internal quality audits of the internal audit of the staffing of the unit, its organizational and functional independence, compliance with staff qualification requirements (criteria for evaluation are only internal regulations, planning and implementation of plans, organizational and functional aspects of audits)						
5	Internal documents regulating internal quality assessments of internal audit do not provide for continuous monitoring of internal audit activities, there is no documentary evidence of its conduct.						
6	The updating of internal documents regulating the issues of conducting internal assessments of the quality of internal audit in accordance with changes in the legislation on internal audit has not been provided.						

(End of Table 2)

1	2					
	II. Regarding the preparation of software and improving the quality of internal audit					
1	Annual programming is not provided at all					
2	The program does not identify measures to improve the quality of internal audit, but includes mainly rules on the activities to be carried out by the internal audit department in accordance with the law, does not take into account current problems in the internal audit function, in particular, identified during internal audit.					
3	In some cases, the program does not include requirements for periodic internal evaluations					
4	The measures identified in the programs do not reveal the essence of the problems and shortcomings in the implementation of the internal audit function, for the solution of which they are designed					
5	The programs indicate the same identical list of measures and tasks from year to year, which may indicate, in particular, the ineffectiveness of certain measures (lack of impact of the results of such measures on improving the quality of internal audit)					
6	Measures in the programs are not defined in a clear time frame for their implementation, there is no mechanism for their implementation					
7	The program does not contain the expected results from the implementation of the planned measures, these indicators of the implementation of measures do not allow to assess the condition and results of the implementation of the measure					
8	In fact, the drafted programs do not correspond to the form approved by internal documents					
9	The program is not approved by the head of the institution					

As practice shows, the effectiveness of internal audit is difficult to assess, because the result is not always quantitatively, the effectiveness depends not only directly on internal audit professionals, but also largely on the further actions of management in the implementation of auditors' conclusions. The evaluation of the obtained results directly depends on the subjective attitude to this management of the institution [3].

At the same time, standardization of relevant issues in internal documents will allow unifying approaches to conducting internal assessments of the quality of internal audit and avoiding different interpretations of evaluation results.

Each enterprise institution independently determines the key indicators and criteria for the effectiveness of the internal audit service. These

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indicators are mainly typical for both internal and external evaluation, and cover such a range of internal audit issues as:

- organizational and legal principles of formation and operation of the unit;
 - internal audit personnel management policy;
- the quality of standards and rules governing the activities of internal audit, which are developed by the institution;
- the process of drawing up and forming operational and strategic action plans;
- direct conduct of internal audits, the process of documenting their results;
- further implementation of conclusions and recommendations, their monitoring;
- peculiarities of interaction of the internal audit service with other units of the institution in the performance of its direct responsibilities, in particular regarding the construction of an effective system of risk management and internal control;
 - issues of ensuring and improving internal audit quality assessments;
- other aspects of the process of implementation of internal audit in the institution [16].

The main indicators of the effectiveness of the internal audit service should include the following:

- 1) the level of implementation of the internal audit activity plan (in percent) the ratio of actual audits to planned ones;
 - 2) the number of audits performed per 1 auditor;
- 3) the percentage of coverage by audits of the total number of objects in the network (with an accent on high-risk objects);
- 4) the percentage of audit recommendations adopted by the management of the institution for implementation;
- 5) the level of implementation of recommendations provided based on the results of audits;
- 6) additional cost ("measured effect") for the organization according to the results of the implementation of the recommendations provided;
 - 7) the number of complaints about the actions of internal auditors;
 - 8) the level of understaffing of the internal audit unit;
 - 9) the share of internal auditors who have undergone advanced training.

External assessment of the quality of internal audit carried out by the Ministry of Finance is regulated by law (order of 03.05.2017 № 480) [16].

Issues of continuous professional development and certification training are important to ensure the success of internal audit activities.

In order to improve the quality of internal audit, researchers propose a 7-step model of levels of professional competence of internal auditors based on Bloom's taxonomy [17; 18; 19] (based on the goals of learning in the cognitive sphere, expressed through the elements of learning) (Figure 7).

As can be seen, at the first initial level, the internal auditor must have the appropriate knowledge of internal audit, know the rights and responsibilities, the peculiarities of the organization and conducting internal audits.

The second stage provides that the employee understands the material, is able to summarize it, understands differences in concepts (for example, the difference between internal audit and internal control, between the risk management process in the institution and risk-oriented planning for selecting objects to the internal audit activity plan) [3].

The third stage is aimed at developing the skills of the internal auditor to apply the acquired knowledge and understand them in practice. As a result, the specialist must independently determine the methods, techniques and procedures for collecting data required for audit evidence, in accordance with the requirements of the legal framework and internal documents on internal audit [3].

Given above three levels are basic for a novice internal auditor. However, without mastering the following, he will not be able to perform the functions and responsibilities of internal audit in full.

The level of analysis requires the internal audit specialist to have the skills to understand the causal relationship when making recommendations on the results of the audit, to analyze the impact of the implementation of the recommendation for eliminating the cause of the problem. Analysis of the information collected by the internal auditor, comparison of the obtained results with the selected evaluation criteria allows to make appropriate conclusions during the audits [3].

Synthesis in this model means the possibility of generalizing the elements of knowledge on internal audit in such a way as to form a holistic and complex system, for example, when developing internal documents on internal audit, drawing up an internal audit action program, writing an audit report.

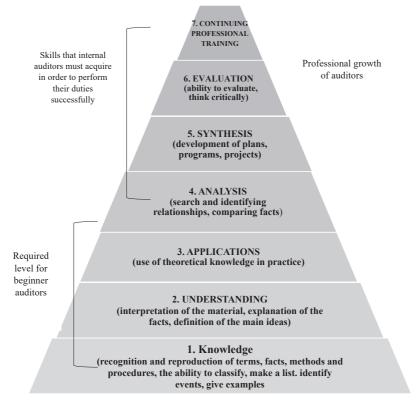


Figure 7. Model of levels of professional competence of internal auditors, built on B. Bloom's taxonomy

Source: based on [3]

The evaluation stage involves the ability to assess the sufficiency and reliability of the evidence collected during the audit, to assess the impact of a risk on the activities of the institution, to argue its confirmation or refutation, to assess the management and internal control system [3].

The final level – continuous professional training, is a key element of the model, because the availability of qualified staff is one of the prerequisites for the success of any organization, and the head of the institution together

with the head of internal audit are particularly interested in professional growth of internal auditors.

The advantages of such a model are the structuring of thinking levels and skills of internal audit specialists, the understanding of the need for critical thinking by the head of the internal audit service and directly by employees.

It is important for the formation of high-level thinking skills in internal auditors:

- provide an understanding of the necessary thinking skills;
- learn to identify causes and causal, logical connections;
- be able to critically evaluate the results of their activities [19].

The implementation of the above will contribute to the growth of professional development of employees and, accordingly, improve the quality of internal audit.

Among the factors improving the quality of internal audit is maintaining the appropriate level of qualification of internal auditors. The lack of qualified specialists in internal audit is one of the significant factors that hinders the full implementation of the internal audit function in government agencies [3].

Properly selected staff, development of their interest in the success of the enterprise will minimize the number of crimes and reduce the loss of intellectual potential of the enterprise, will provide obstacles to the disclosure of trade secrets [20].

The National Standard on Internal Audit 3 "Professional Competence and Diligence" provides for the necessary acquisition of the relevant qualification capacity by the employees of the internal audit, relevant knowledge and experience in identifying and assessing risks, especially fraud risks, in the process of application IT technologies and systems. Continuous improvement of knowledge and professional development is the direct responsibility of internal auditors [13].

If the previous version of the Internal Audit Standards provided for the improvement of skills and knowledge independently through self-education and advanced training based on the results of training activities on the necessary topics in relevant institutions, initiating mandatory training, then the new edition indicates only the general need for skills development, including self-education [3].

In contrast to domestic standards, ISIA 1210 "Professional Competence" for certification still recommends that internal auditors indicate their professional competence by passing the appropriate certification and training organized by the Institute of Internal Auditors and other professional institutions.

The cost of thematic seminars and courses held by domestic.

Institute of Internal Auditors, quite high (Table 3).

In view of this, the internal audit services of executive bodies in the conditions of limited funding, as a rule, do not have sufficient budgetary resources under CECE 2282 "Separate measures for the implementation of state (regional) programs not classified as development measures" for employees to pass certification and advanced training [3].

In practice, the main way to ensure continuous professional development of internal auditors is self-education and participation in trainings, seminars, teaching aimed at advanced training, conducted by the Department of Harmonization of Public Internal Financial Control of the Ministry of Finance of Ukraine [3].

A positive aspect is the participation of Dutch experts in these events based on bilateral cooperation between the Ministry of Finance of Ukraine and the Ministry of Finance of the Kingdom of the Netherlands.

However, a comparison of the actual number of internal auditors in the executive branch (more than 1,700 positions) with the average number of specialists for which training events organized by the Ministry of Finance (approximately 130 per year) indicate that such seminars and trainings cannot fully satisfy the need of internal audit specialists' advanced training [3].

In the Netherlands, in order to continuously improve internal audit, relevant Internal Auditor Development Programs have been developed and are in place for various categories of positions, based on the relevant IIA programs for CIA certification [21].

To implement such a program in Ukraine, we offer a program of mandatory training for internal audit services in terms of basic levels of professional development, namely: for professionals with less than 3 years of experience; specialists with more than 3 years of experience; management of the service and heads of audit groups.

In general, the profession of internal auditor requires a wide range of different knowledge and skills.

Table 3

The cost of advanced training and certification provided by the Institute of Internal Auditors of Ukraine

No	Certification training					
1/10	Topics of seminars and courses	years	Cost, UAH.			
1	Key success factors of the internal audit service	3	3 000 UAH			
2	Best practices for conducting internal audits and registration of working papers	6	5 000 UAH			
3	Basics of drawing up the Program for ensuring and improving the quality of internal audit	3	3 5 000 UAH			
4	Basics of writing recommendations based on the results of the internal audit	3	3 000 UAH			
5	Evaluation of internal audit activities. How to prepare for an external evaluation of IA function: a program to ensure the quality and improvement of IA function	12	10 000 UAH			
6	The main topics of IT audit – what and how to check?	6	5 000 UAH			
7	The evaluation of the effectiveness of the internal control system	6	5 000 UAH			
8	Business processes: classification, regulation description, use in internal audit	6	5 000 UAH			
9	Specialized course on issues internal audit, internal control and risk management	24	20 000 UAH			
	CIA Certification (Certified In	iternal Auditor)				
1	Certificate registration fee	\$230 without discount \$115 for members of IIA				
2	Registration fee for the 1st exam	\$395 without discount \$280 for members of IIA				
3	- for the 2nd and 3rd exams	\$345 without discount \$230 for members of IIA				
4	Membership fee	equivalent \$60 for a year				
5	One-time membership fee	equivalent \$25				

Source: [3]

In order to perform the duties successfully, an internal audit specialist must, in addition to knowledge in the field of audit (organization, principles of operation, methods and approaches), have sufficient communication and organizational skills, have conceptual tools for management processes and be knowledgeable in the field of accounting, finance, IT, law, procurement, etc. [3].

Financial support for any sector of the economy provides part of the funding from budget allocations. The components of the salary (salary, surcharge for the rank of civil servant, for years of service) are determined by the relevant resolutions of the Cabinet of Ministers of Ukraine on wages. However, as practice shows, in the absence of vacancies in a separate structural unit of internal audit of the regional state administration, due to which additional budget savings are possible, the salary of an internal audit specialist may be even lower than a specialist of another structural unit or apparatus of regional state administration. This is certainly a significant risk for attracting and retaining specialists of the appropriate level of qualification and as a consequence of ensuring the appropriate quality of internal audit.

Given the relatively high requirements for the qualifications of internal audit specialists, the wage level and material incentives, the staff of this service should promote the recruitment of highly qualified employees.

6. Conclusions

Thus, internal audit is an assessment of the activities of the enterprise in order to provide its owners and management with prompt and unbiased information about the general condition of the entity and the prospects for management decisions. We believe that internal audit should be subordinated to the owners of the company, but the information the internal auditors will provide them, in parallel, should also be provided to management. The reason for the development of internal audit in Ukraine was the creation of enterprises with different forms of ownership and the inability of the traditional command-and-administrative system to perform its functions in the transition to market conditions.

Problems of formation and development of internal audit in Ukraine are, firstly, the lack of a central independent body whose competence should be the regulation of internal audit at the macro level, ie the development of

standards, guidelines for this type of audit, and secondly, the lack of internal documents on activities of internal auditors.

It is determined that improving the quality of internal audit is provided in the process of continuous professional development and training of employees. Using the presented 7-level model of levels of internal auditors' professional competence, based on Bloom's taxonomy will allow to structure the thinking levels and skills of internal audit specialists, understand the need for critical thinking by the head of the internal audit department and directly by employees. In the process of research to facilitate the recruitment of highly qualified employees, the need to ensure an appropriate wage level and material incentives for employees of internal audit services was proved, which is justified by rather high requirements for qualification of internal audit specialists and the level of tasks assigned to the unit.

References:

- 1. Mulyk Ya. I. (2020) Auditing in Ukraine: current status, reform and development. *Agrosvit*, 7: 37–47.
- 2. Slobodianyk Y. B. (2018) Internal audit: a textbook. Sumy: LLC PPE "Factory of Printing", 248 p.
- 3. Pushkarova O. Y. (2020) Organizational and methodological support of internal audit in the system of state financial control: dissertation for the degree of Cand. of Economic Sciences; specialty 08.00.09 accounting, analysis and audit. Kyiv, 368 p.
- 4. Procedure for conducting internal audit and formation of internal audit units: Resolution of the Cabinet of Ministers of Ukraine of September 28, 2011 № 1001. Available at: https://zakon.rada.gov.ua/laws/show/1001-2011-%D0%BF# Text
- 5. Romaniv E. M., & Trush I. E. (2017) State audit: textbook. Lviv: Liga-Press, 235 p.
- 6. Fundamental principles of public sector audit. INTOSAI. International Standards on Auditing (ISSAI 100), 31 p. Available at: https://www.intosai.org/fileadmin/downloads/documents/open_access/ISSAI_100_to_400/issai_100/issai_100_ru.pdf
- 7. Course Material of Certificate Program on Internal Audit. 403 p. Available at: https://rural.nic.in/sites/default/files/Course_Material_of_Certificate_Programme_on_Internal_Audit.pdf
- 8. Methodological guidelines for internal audit in the public sector of Ukraine. Kyiv: European Institute of Public Administration and Audit, 2016. 146 p.
- 9. Filevskaia N. A. (2017) The main directions of internal audit of corporate governance / under. ed. N. P. Abayeva. Ulyanovsk: UlSTU, 163 p.
- 10. Salikhov Z. A. (2015) Anti-corruption audit: basics of organization, planning and implementation. *Journal of Economics, Law and Sociology*, 4: 104–110.

- 11. Corruption Perceptions Index-2021 (2021). Available at: https://ti-ukraine.org/research/indeks-spryjnyattya-koruptsiyi-2021/
- 12.International Standards for the Professional Practice of Internal Auditing (Standards) (2017). Available at: https://global.theiia.org/translations/PublicDocuments/IPPF-Standards-2017-Ukrainian.pdf
- 13.Internal audit standards: Order of the Ministry of Finance of Ukraine dated 04.10.2011 № 1247. Available at: https://zakon.rada.gov.ua/laws/show/z1219-11#Text
- 14.On the basic principles of state financial control in Ukraine: Law of Ukraine of 26.01.1993 № 2939-XII. Available at: https://zakon.rada.gov.ua/laws/show/2939-12
- 15.Regarding ensuring and improving the quality of internal audit: Ministry of Finance of Ukraine dated 14.11.2018 № 33030-07-5/29494. Available at: https://mof.gov.ua/storage/files/rozyasnenya4.pdf
- 16. Procedure for the Ministry of Finance of Ukraine to assess the functioning of the internal audit system: Order of the Ministry of Finance of Ukraine dated 03.05.2017 № 480. Available at: https://zakon.rada.gov.ua/laws/show/z0663-17
- 17. Lazarenko K. P., Zavhorodnii I. V., & Bilera N. V. (2016) The use of Bloom's taxonomy in assessing the educational competence in hygienic knowledge. Current issues of linguistics, professional linguodidactics, psychology and pedagogy of higher education: materials of the first All-Ukrainian scientific-practical conf with the international participation (Poltava, May 11-12, 2016). Poltava, 70–76.
- 18. On approval the "Terms of phased application of the Law of the Republic of Azerbaijan" On Internal Audit "on economic objects that are objects of mandatory audit": Resolution of the Cabinet of Ministers of the Republic of Azerbaijan dated 05.10.2007 № 155. Available at: http://audit.gov.az
- 19. Chernykh O. B. & Chernykh Y. O. (2013) Application of Bloom's taxonomy in the formation of high-level students' thinking skills. *Military Education*, 2: 189–195.
- 20. Mulik Ya. I., & Hrygorash M. V. (2018) The role of internal control in maintaining trade secrets. *Agrosvit*, 8: 17–22.
- 21. Verbylo E. F., Lewandowskyi O. O., & Sulikovska N. M. (2001) State Control and Audit Service of Ukraine: pages of history. Kyiv: ACTION, 219 p.
- 22. Mulik Ya. I. (2020) Methodological and organizational approaches to the system of internal control in the enterprise. *Agrosvit*, 17–18: 28–38.
- 23. Mulyk Ya. (2021) Audit services market: the experience of Ukraine. *Green, Blue and Digital Economy Journal*, 2(3): 35–42. DOI: https://doi.org/10.30525/2661-5169/2021-3-6