

УДК 336.6:004.58

JEL Classification: M42, O33

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AUDIT OF INNOVATIONS IN ACCOUNTING AND MANAGEMENT TECHNOLOGIES

DOI: <https://doi.org/10.32620/cher.2024.1.03>

Formulation of the problem. Innovations introduced into accounting and management practices require adequate auditing to ensure their reliability and compliance with standards. However, existing approaches to the audit of innovations in accounting and management technologies may be insufficient or unadapted to modern requirements and realities of the market environment. *The purpose of the study* is to consider and analyze modern approaches to auditing innovations in accounting and the use of advanced management technologies to support innovation processes in enterprises. *The object of the research* is auditing methods and approaches used to assess the effectiveness and risks of innovative processes and products in accounting. *Research methods:* logical and meaningful method, methods of comparison, systematization, induction and deduction, analysis and synthesis, coefficient method. *The main research hypothesis.* The implementation of innovation audits in accounting and the use of advanced management technologies contributes to the improvement of the efficiency of management of innovation processes and ensures an increase in the competitiveness of the enterprise. *Presenting main material.* The article examines the formation and development of the market of business incubators in Kyrgyzstan. The types of services provided by business incubators were considered in detail, the structure of business incubators was characterized taking into account their types and types, the main industry markets in which they grow small innovative companies were described. An audit of articles on the dynamics of industry specialization of residents in business incubators and the main mechanism for placing residents in business incubators was conducted. *Originality and practical significance.* The study seeks to reveal the importance of the interaction between these two aspects and show how they can interact to support innovative processes and strategies in enterprises. By revealing methods and approaches to innovation audits and the use of advanced management technologies, this article provides practical recommendations for improving the efficiency of innovation project management, improving financial reporting and reducing risks. *Conclusions and prospects for further research.* The application of an integrated approach to the audit of innovations and the use of advanced management technologies can contribute to increasing the competitiveness and success of the enterprise in the conditions of constant changes in the market. The presence of proper innovation audit processes and the use of advanced management technologies is a necessary condition for achieving stable and successful development of the enterprise in the conditions of the modern economic environment.

Keywords:

audit, innovations, accounting, business incubator, technologies, innovative forms.

АУДИТ ІННОВАЦІЙ В БУХГАЛТЕРСЬКОМУ ОБЛІКУ ТА ТЕХНОЛОГІЯХ УПРАВЛІННЯ

Постановка проблеми. Інновації, впроваджені в бухгалтерський облік та управлінські практики, потребують адекватного аудиту для забезпечення їхньої надійності та відповідності стандартам. Проте, існуючі підходи до аудиту інновацій у бухгалтерському обліку та технологіях управління можуть бути недостатніми або неадаптованими до сучасних вимог та реалій ринкового середовища. *Мета дослідження* полягає у розгляді та аналізі сучасних підходів до проведення аудиту інновацій у бухгалтерському обліку та використанні передових технологій управління для підтримки інноваційних процесів у підприємствах. *Об'єктом дослідження* є аудиторські методи та підходи, що застосовуються для оцінки ефективності та ризиків інноваційних процесів та продуктів у бухгалтерському

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обліку *Методи дослідження*: логічно-змістовний метод, методи порівняння, систематизації, індукції та дедукції, аналізу та синтезу, коефіцієнтний метод. *Основна гіпотеза дослідження*. Впровадження аудиту інновацій в бухгалтерському обліку та використання передових технологій управління сприяє покращенню ефективності управління інноваційними процесами та забезпечує підвищення конкурентоспроможності підприємства. *Виклад основного матеріалу*. В статті розглянуто становлення і розвиток ринку бізнес-інкубаторів в Киргизстані. Детально розглянуто види послуг тих, що надаються бізнес-інкубаторами, охарактеризовано структуру бізнес-інкубаторів з урахуванням їх видів і типів, описали основні галузеві ринки в яких вони вирощують малі інноваційні компанії. Проведено аудит статей динаміки галузевої спеціалізації резидентів в бізнес-інкубаторах і основний механізм розміщення резидентів в бізнес-інкубаторах. *Оригінальність та практична значимість*. Дослідження прагне розкрити важливість взаємодії між цими двома аспектами і показати, як вони можуть взаємодіяти для підтримки інноваційних процесів та стратегій у підприємствах. Розкривши методи та підходи до аудиту інновацій та використання передових технологій управління, ця стаття надає практичні рекомендації для підвищення ефективності управління інноваційними проектами, покращення фінансової звітності та зниження ризиків. *Висновки та перспективи подальших досліджень*. Застосування інтегрованого підходу до аудиту інновацій та використання передових технологій управління може сприяти підвищенню конкурентоспроможності та успішності підприємства в умовах постійних змін на ринку. Наявність належних процесів аудиту інновацій та використання передових технологій управління є необхідною умовою для досягнення стабільного та успішного розвитку підприємства в умовах сучасного економічного середовища.

Ключові слова:

аудит, інновації, бухгалтерський облік, бізнес-інкубатор, технології, інноваційні форми.

Formulation of the problem. In modern conditions of dynamic development of technologies and constant changes in the business environment, there is a need for effective use of innovations in enterprise management. However, innovations in accounting and management practices require adequate auditing to ensure their reliability and compliance with standards. However, existing approaches to the audit of innovations in accounting and management technologies may be insufficient or unadapted to modern requirements and realities of the market environment.

Therefore, the key problem that arises is the need to improve the methodology and practice of auditing innovations in accounting and management technologies in order to ensure their effectiveness, reliability and compliance with market requirements and standards. Solving this problem requires the development of new audit approaches, methods and tools that would take into account the specifics of innovative management processes and technologies, as well as meet the modern requirements of accounting and auditing standards.

Analysis of recent research and publications. Business incubators can be created within existing technology parks. If in large cities business incubators are often part of other organizations, then in small towns business incubators themselves become the basis for the formation of an infrastructure to support small businesses, and

often the center for the development of the territory. The most common practice in many regions is the creation of business incubators at universities [1].

In large cities, a chain of innovative enterprises is being created: a business incubator - a technology park - a municipal industrial zone. The roles of these structures in the organization of innovative business are distributed as follows. Business incubators host start-up innovative firms on their premises, provide office support, and provide utilities and additional services on preferential terms. Technoparks, having office, industrial premises, engineering communications and equipment, offer premises for rent to the most promising enterprises that have left the incubator for organizing production. Enterprises that are going to expand production are moving from a technopark to a municipal industrial zone. Here, at the expense of budgetary funds, engineering communications are created, and production facilities are built by the innovative enterprises themselves [2].

The purpose of the article consists in the consideration and analysis of modern approaches to the audit of innovations in accounting and the use of advanced management technologies to support innovation processes in enterprises. The main objectives of the article include:

Review and analysis of the current state of innovation audit in accounting.





Study of audit methods and procedures used to evaluate innovative processes and products.

Exploring the use of advanced management technologies such as artificial intelligence, data analytics and blockchain to support innovation audits.

Identification of challenges and opportunities related to the implementation of the audit of innovations and modern management technologies in organizations.

Providing recommendations on the optimization of innovation audits and the implementation of advanced management technologies to ensure the success of innovative projects and support the strategic development of enterprises.

Presentation of the main research results. The object of research for a scientific article on the topic is the process of auditing and management of innovative processes and products in the context of their reflection in accounting and the use of advanced management technologies, namely:

Innovation audit methods and procedures: Consideration of audit methods and approaches used to assess the effectiveness and risks of innovation processes and products in accounting.

Innovation Management Technologies: Study of advanced management technologies such as artificial intelligence, data analytics, blockchain, etc. and their application to support innovation processes in enterprises.

Innovation accounting systems: Analysis and assessment of accounting systems used to reflect innovation assets, costs, and revenues, as well as their impact on the company's financial performance.

Innovation management strategies: Study of innovation management strategies, including development and implementation of innovation projects, organization of innovation management processes and evaluation of results.

Beginning entrepreneurs in Kyrgyzstan do not have sufficient training and experience in the field of innovation management and business planning. Business incubators solve the problem of improving the skills of innovators, teaching the basics of entrepreneurial activity. In addition to legal, economic support on the basis of business incubators, it is possible to organize seminars, forums, and training centers for entrepreneurs. Startups that have gone through the incubation process are more resilient and prepared to work in market conditions.

According to research by the head of the business incubator, Olga Khotyashева, the most popular services provided by business incubators [3]: Development of a business concept - 63.8%; Internet access - 44.8%; Assistance in technology commercialization - 41.4%; Attracting business angels - 39.7%; Office services - 37.9%; Trainings - 36.2%; Attracting venture funds - 36.1%; Assistance in creating presentations - 32.8%.

Business incubators are those structures that can create conditions for communication and transfer of experience of a business organization. Both a registered company and an author or a group of authors of an original idea can become a resident of a business incubator. In order to become a resident of a business incubator, you must submit an application on the website of this incubator. The following documents are usually required for the examination conducted by a business incubator [4]:

- personal profile of the applicant (actually a resume or a short autobiography with a description of professional experience);

- copies of constituent documents, available certificates, licenses, permits, etc., if the organization has already been established at the time of applying to the incubator;

- a description of the entrepreneurial concept that characterizes the product planned for production, its market prospects, competitiveness, sales and space requirements;

- business plan (product description, analysis of its competitiveness, marketing plan, sales, production and financing plan, forecast balances and other forecasts for achieving target performance indicators). The ability of the business to make a profit in the submitted documents can play a decisive role. Innovative activity is a priority in the selection of small enterprises for placement in business incubators.

In percentage terms, the industry specialization of residents in business incubators, according to the same research results, looks like this [5]: Information technology (33%); Energy (18%); New materials (15%); Internet (13%); Medical equipment (12%); Microelectronics (10%); Nanotechnology (8%); Professional services (8%); Tourism (5%).

The reasons for applying to a business incubator may be the need for affordable rent, consulting and examination of a business project, in the search for investments, establishing business contacts, accounting and legal support.

Recent years have been marked by significant changes in the field of accounting technology, which affect the way financial information is collected, processed and analyzed in Kyrgyzstan. Here are some of the main development trends:

Cloud technologies: The use of cloud computing in accounting is growing in popularity. This allows businesses to store and process large amounts of financial data online, providing access to it from any device and location.

Automation of processes: The use of various software tools to automate accounting processes is becoming more and more common. This includes automating accounting, reporting, and analyzing financial information.

Use of data analytics: The use of data analytics tools allows accountants to obtain more detailed and accurate information from financial data, which helps to make better management decisions.

Data Protection: Due to the growing number of cyber-attacks and security breaches, attention is being paid to the protection of financial data. The development of encryption technologies and other data protection methods is becoming a priority for accountants and financial managers.

Mobile Apps: There are more and more mobile apps aimed at making accounting and financial management easier. This enables accountants and businesses to be more mobile and efficient in their work.

These trends indicate the constant development of the accounting field in Kyrgyzstan and the need for enterprises to adapt to new technological changes in order to increase efficiency and competitiveness.

The audit methodology of innovative forms of management is a comprehensive approach to evaluating the effectiveness and management of innovative processes in the organization. It includes a number of steps and procedures aimed at analyzing and evaluating key aspects of innovative development. The main stages of the audit methodology of innovative forms of management may include: Determining the objectives and scope of the audit. At this stage, the purpose of the audit, the specific goals to be achieved and the area of the organization to be audited are determined; Data collection and analysis. A detailed collection of information on innovative projects, processes and strategies, as well as financial and organizational aspects of innovative forms of management is carried out. This includes a review of financial statements,

interviews with management and employees, analysis of documentation, etc; Risk assessment. Potential risks associated with innovative forms of business are determined and their assessment is carried out. This may include identifying technology risks, change risks, financial risks and governance risks; Performance analysis. The effectiveness of innovative forms of management is evaluated from the point of view of achieving the planned goals, use of resources, profitability and stability. Performance and financial performance indicators are used; Identification of problems and development of recommendations. On the basis of data analysis and evaluation results, problematic aspects of innovative forms of management are determined and recommendations for their solution are developed. This may include recommendations on risk management, process optimization, financial strategy improvement and organizational development; Monitoring and control. After the implementation of the recommendations, it is important to monitor and control their implementation, as well as the results of innovative forms of management. If necessary, corrections and refined strategies can be made.

The audit methodology of innovative forms of management aims to provide a systematic and targeted analysis and control of the organization's innovative activities in order to achieve high efficiency and improve results.

Conclusions and prospects for further research. Conclusions to scientific research include the following aspects:

The importance of the audit of innovative forms of management: The conclusions can emphasize the importance of conducting an audit for organizations engaged in innovative activities. The audit helps identify problematic aspects, ensures effective risk management and improves the effectiveness of innovative projects; Audit methodology: Conclusions can summarize the audit methodology of innovative business forms, indicating the critical steps, procedures and tools used during the audit. They emphasize the need for a systematic approach and comprehensive analysis. Identification of problems and recommendations: Conclusions may include a description of identified problems and weak points of innovative forms of management. They can argue that audit is an effective tool for improving innovation processes and achieving competitive advantage.



Thus, in recent years, some key trends in the development of accounting technologies have been observed in Kyrgyzstan:

Adoption of cloud technologies: Companies are increasingly moving to use cloud computing resources and software that allow storing and processing financial data online, providing access to it from any location and device.

Automate accounting processes: Using software to automate accounting processes helps reduce manual work, avoid errors, and provide more accurate and faster financial reporting.

Use of data analytics: The use of data analytics tools allows accountants to obtain more detailed and accurate information from financial data, which helps to make better management decisions and develop enterprise development strategies.

The rise of cyber security: As more digital data is introduced, so does the importance of cyber security. Businesses in Kyrgyzstan are increasingly paying attention to measures to protect financial information and personal data of their customers.

Electronic reporting: In recent years, an electronic reporting system has been actively implemented in Kyrgyzstan, which simplifies the process of submitting financial reports, reduces bureaucracy and increases the accuracy of reporting.

These trends indicate the continuous improvement of technological approaches in accounting in Kyrgyzstan, which allows businesses to manage their finances and data more effectively.

The conclusions of the article are an essential element that emphasizes the importance of the audit of innovative forms of management and emphasizes the practical aspects of its implementation and use. They summarize the main conclusions and recommendations aimed at improving the innovative activities of organizations.

References

1. Mamatova, N. A. (2019). Diagnostics of financial resources of agricultural enterprises of the Kyrgyz Republic. *Bulletin of the Tadzhik National University*, 8, 23-27.

Стаття надійшла

до редакції : 25.12.2023 р.

2. Mamatova, N. A. (2018). Financial, tax, management accounting: differences and relationships. *Bulletin of the M. Ryskulbekova Kyrgyz Economic University*, 3(45), 34-44.

3. Berdybaeva, K. T. (2020). Documentary registration of movement of fixed assets. *Quarterly scientific and information magazine "Economic Bulletin"*, 3-4, 12-19.

4. Berdybaeva, K. T. (2021). Internal audit as an element of the internal control system of the enterprise. *Information of the Issyk-Kul forum of accountants and auditors of the countries of Central Asia*, 1, 17-25.

5. Choibekova, D. R., Elemanova, N. M. (2022). Analysis of the inflow of foreign direct investments to the Kyrgyz Republic under the conditions of the COVID-19 pandemic. *Information of the Issyk-Kul forum of accountants and auditors of the countries of Central Asia*, 2 (37), 22-34.

Література

1. Маматова Н. А. Діагностика фінансових ресурсів сільськогосподарських підприємств Киргизької Республіки. *Вісник Таджицького національного університету*. 2019. № 8. С. 23-27.

2. Маматова Н. А. Фінансовий, податковий, управлінський облік: відмінності та взаємозв'язок. *Вісник Киргизського економічного університету ім. М. Рискулбекова*. 2018. № 3(45). С. 34-44.

3. Бердибаєва К. Т. Документальне оформлення руху основних засобів. *Щоквартальний науково-інформаційний журнал "Економічний вісник"*. 2020. № 3-4. С. 12-19.

4. Бердибаєва К. Т. Внутрішній аудит як елемент системи внутрішнього контролю підприємства. *Відомості Іссик-Кульського форуму бухгалтерів та аудиторів країн Центральної Азії*. 2021. № 1. С. 17-25.

5. Чойбекова Д.Р., Елеманова Н.М. Аналіз надходження прямих іноземних інвестицій у Киргизьку Республіку за умов пандемії COVID-19. *Відомості Іссик-Кульського форуму бухгалтерів та аудиторів країн Центральної Азії*. 2022. №2 (37). С. 22-34.

Стаття прийнята

до друку: 29.03.2024 р.

Бібліографічний опис для цитування :

Kologonov M. Audit of innovations in accounting and management technologies. *Часопис економічних реформ*. 2024. № 1(53). С. 24-28.

