Directions of Reforming the Education of Professional Accountants in Order to Ensure Sustainable Development

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Abstract: The problems of forming a sustainable development economy cover all areas of activity and should be considered in a complex, starting from the development of methodology and implementation methods, to the training of specialists capable of taking an active part in this process. A fairly important role in this process is played by professional accountants, who are the main suppliers of information for business management purposes. The article discusses the importance of training accountants with integrated thinking skills, assuming not only professional, but also technological literacy, on the basis of an innovative practice-oriented approach to their training, in order to obtain the necessary competencies in the field of transition to a sustainable development economy. The emerging modern world-view of professional accountants operating in the digital age should contribute to maintaining users' trust in accounting and reporting data, which makes the issues of the need to reform accountant education relevant.

1 INTRODUCTION

Over the past decades, revolutionary changes have taken place in the world economy, such as the digitalization of economic and social life, the emergence and active introduction of new information technologies (for example, cloud technologies and blockchain), the transition to the use of quantum computers, the use of digital twins and the widespread use of calculations in virtual space using digital currencies, etc., seemed to be expected to facilitate the transfer of business to the use of resource-saving technologies, in order to transition to a green economy in the global aspect and to ensure the sustainable development of companies in particular. Much attention has been paid to these issues both abroad and in the Russian Federation.

In the economic press of recent decades, a large number of scientific studies, conferences, reports, and articles have been devoted to the issues of environmental degradation, the need to develop and adopt international and national regulations for the comprehensive solution of environmental, economic, and social problems (i.e., the formation of a sustainable development economy).

According to a number of scientists: "The need for an urgent practical solution to the problem of

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environmental protection has led to the development in most countries of state measures of a legislative, organizational and administrative nature aimed at preserving and restoring the quality of the natural environment. It is this aspect that is becoming the main direction of government activity in countries with developed economies, accompanied by the active use of economic levers and incentives, collectively ensuring the achievement of the goal of ensuring the transition from a linear to a cyclical business model" (Bordzhakov, 2019). In this regard, international and national concepts, policies, laws, regulations have emerged, which are based on the Sustainable Development Plan for the period up to 2030, adopted by all Member States of the United Nations in 2015, clearly defining 17 Sustainable Development Goals.

A professional accountant, who is a recognized leader in the field of collecting, processing and analyzing economic information about all business processes occurring to the company, should take an active part in ensuring the successful implementation of the tasks set by the business entity, for which he should have not only theoretical knowledge in the affected areas, but also practical skills to solve them. In the course of the study, the main problems of the formation of the necessary competence approach and the direction of reforming the professional education of an accountant were identified.

2 STUDY METHODS

The theoretical and methodological basis of the study was the works of scientists and leading experts on the problems of introducing innovative approaches to education in order to form new professional competencies of practicing accountants. In the article, from the standpoint of a systematic approach, the main areas of knowledge currently required from a professional accountant are identified, as well as the main directions for the development of professional accountant education based on the possibilities of using digital technologies to improve the efficiency of managerial decision-making related to the transition of business to a new business model of the sustainable development economy are identified. The research is based on the concepts of environmental accounting and reporting (ecological, integrated, sustainable development), as well as the theory of cyclic accounting and reporting, which is currently being actively developed.

3 STUDY RESULTS

During the analysis of the main problems slowing down the transition to a closed-loop economy, preventing its widespread and successful implementation, a number of experts identified:

1) problems related to financing and stimulating these processes;

2) problems related to the organization of accounting and reporting for a closed-loop business.

Under these conditions, the International Federation of Accountants (hereinafter - the IFAC), which unites more than 3 million practicing accountants from 150 countries, has called on professional accountants around the world to assist company managers in transforming the business model used by demonstrating broad professional competencies in identifying and assessing climate and environmental risks.

It is this organization that has developed standards for the education of accountants and auditors, as well as procedures for their certification, according to the results of which, the IFAC members are awarded the title of "professional accountant", which is the official brand of IFRS.

In Russia, the right to assign the status of a professional accountant belongs to the Institute of Professional Accountants and Auditors of Russia, which has developed training programs for professional accountants.

Even a cursory review of the topics offered in these programs for study reveals the absence of the most relevant and problematic topics related to understanding the specifics of the cyclical business model and its inherent risks, as well as the features of cyclical accounting and the formation of indicators in the reporting of sustainable development. Undoubtedly, the identification of the directions of reforming these programs is an urgent need of our time, which makes the conclusions of the study relevant.

4 RESULT DISCUSSION

Unfortunately, the environmental situation in the world still remains one of the most acute. Experts make gloomy forecasts of the near future of the whole world while maintaining existing approaches to doing business, such as:

- ✓ by 2100, the world's population may reach more than 10 billion and the vast majority (70%) live in cities;

- ✓ 200 million people will become forced migrants, because their places of residence will become uninhabitable;
- ✓ minerals (coal, oil, etc.) will last for the next 50 years;
- ✓ every year humanity emits 51 billion tons of greenhouse gases into the atmosphere;
- ✓ every year around the world, more than 68 billion tons of topsoil are eroded at a rate 100 times higher than the rate of its natural replenishment;
- ✓ 1.8 billion people are experiencing a shortage of clean water, and by 2025 this problem will affect 5 billion people;
- ✓ a third of the food intended for human consumption — about 1.3 billion tons — is thrown away or lost (this is enough to feed 3 billion people);
- ✓ worldwide, more than 820 million people are malnourished.

Research by the World Health Organization (WHO) shows that:

— from 4.2 to 7 million people die from air pollution worldwide every year;

— every hour 1,000 people die from water poisoning;

— 55 people are poisoned by pesticides and other chemicals every hour (Ibadullaev, Sanzharovskij, 2022).

For example, "the use of recyclable materials in production, rather than non-renewable resources, can reduce greenhouse gas emissions by up to 90%, depending on the industry. The restoration of fully used products will reduce the volume of waste generation by up to 80%" (Ivanovskij, 2021).

Thus, the linear business model used by economic entities, focused on production – processing – consumption, does not correspond to the changed business conditions. It will be replaced by a cyclical model focused on the maximum possible reduction of waste and their processing in order to preserve the natural environment. The cyclical model fully corresponds to the goals of the "green economy" and is designed to reduce environmental risks. But the transition to a cyclical management model is quite time-consuming and expensive, which explains the reluctance of company managers to actively engage in this process (Kak ciklicheskaya ekonomika mozhet sgladit' ushcherb prirode).

Currently, the issues of finding financial sources for business reorganization have become particularly relevant, as well as the professional "unwillingness" of practicing accountants to recognize these expenses as economically feasible.

To develop an accounting methodology that meets the needs of a closed-type economy, the Royal Netherlands Institute of Chartered Accountants and Circle Economy founded the Coalition Circular Accounting (CCA) in 2019, bringing together a group of experts and scientists in the field of finance, accounting and law, exploring the role of a professional accountant at the current stage of economic development. The main task of the CCA is to popularize the idea of cyclical accounting corresponding to the needs of a cyclical business model (Ekonomika zamknutogo cikla - Opredelenie, principy, vygody i bar'ery).

It would seem that a lot of work has been done not only to regulate this process, but also to develop a methodology and appropriate methods for collecting, grouping, summarizing, analyzing and disclosing information about economic, social, environmental processes and phenomena in the non-financial reporting of the largest companies in the world. Many countries around the world have developed national standards, policies, and recommendations on disclosure of information in non-financial reporting in general and sustainable development reporting in particular. In world practice, there are a number of international universal and specialized standards for non-financial reporting, for example, the Global Reporting Initiative (GRI), recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The draft law "On Public Non-financial Reporting" has been published in the Russian Federation, recommendations of the Bank of Russia on disclosure of non-financial information of PJSC in 2021 have been published.

According to the Internet, the largest companies in the world publish more than 13,000 non-financial reports annually. In the Russian Federation, according to the website of the Russian Union of Industrialists and Entrepreneurs, as of 17.05.2023: "non-financial statements are issued by 239 companies that have published 1,395 reports. Including reports on sustainable development – 534 and environmental reports – 110 (Nacional'nyj Registr korporativnyh nefinansovyh otchetov).

Among the Russian companies that publish reports on sustainable development are MMC Norilsk Nickel PJSC, Severstal PJSC, Sakhalin Energy, Rostelecom, and a number of others.

It should be recognized that a lot of work has been done in this direction, but the UN Report 2022 "On Achieving the Sustainable Development Goals" determined that a series of global crises (primarily the COVID-19 epidemic) hit each of the 17 Sustainable Development Goals and reversed all the progress of recent years.

In March 2020, the IFAC Advisory Group of Professional Accountants in Business initiated a discussion among business and finance executives from IFAC member countries (more than 135 countries and jurisdictions) in order to identify key global trends affecting the accounting profession and presented the report "Global Priorities for Professional Accountants in Business and the Public Sector", in which the findings were summarized (Global'nye prioritety dlya professional'nyh buhgalterov v biznese i gosudarstvennom sektore).

In the same study, the following words are quoted by the IFAC's CEO Fayezul Choudhury: "This study highlights the importance of the global accounting profession in both good times and bad. In difficult conditions, trustworthy accounting specialists help to understand the rapidly changing rules of regulation and give strategic advice to help strengthen organizations and advance the economy"(Global'nye prioritety dlya professional'nyh buhgalterov v biznese i gosudarstvennom sektore).

In the conditions of the coming environmental crisis, in the activities of commercial companies that cause irreparable harm to the environment by their production activities, it is professional accountants, due to the specifics of their professional activities, who are able not only to disclose information about environmental risks to business owners and management, but also to offer possible solutions to eliminate or minimize (Hahonova, 2023).

It should be noted that a number of economic scientists (I.N. Bogataya, N.A. Lazareva, V.N. Orobinskaya, Y.N. Kirkach, N.A. Ayubov) considers it necessary to reflect these approaches in the corporate accounting policy of an economic entity in order to form accounting and analytical support for the management of an economic entity in the conditions of digitalization of accounting (Khakhonova, Bogataya, Lazareva, Orobinskaya, 2020; Khakhonova, Kirkach, Ayubov, 2020; Khakhonova, Kirkach, Yemelyanova, 2021). The works of these authors reveal the currently unrealizable possibilities of artificial intelligence, the creation of digital twins, blockchain technology, etc. to expand the composition of the collected information, its grouping, analysis and disclosure in integrated reporting.

Cyclical accounting is to make the "intangible" consequences of a cyclical economy tangible and measurable in order to disclose them.

The development of cyclical accounting involves rethinking approaches to risk assessment, which should take into account, on the one hand, the strategic development of the company, and on the other hand, its relationship with humans and the natural environment, and not just profit. To achieve this goal, it is necessary to direct capital to the transformation of business models, and to transfer production to a cyclical business model that is able to ensure not only the production of products, but also to minimize the harm caused to the environment.

The Advisory Group of Professional Accountants believes that the transition to a closed-loop economy significantly affects the application of accounting principles. For example, depreciation of assets until they lose value, existing approaches to accounting for impairment of assets, as well as the procedure for recognizing revenue in the case of using the "product as a service" income model do not create incentives for switching to cyclical business models.

A professional accountant, due to the specifics of his activity, should take an active part in stimulating the process of transition of commercial organizations to the introduction of resource-saving closed-loop technologies, replacing the linear model of resource consumption with cyclical business models that minimize waste and reduce environmental risks. Today, accountants should be able to evaluate solutions that previously went beyond professional knowledge in the field of accounting and taxation, but correspond to the chosen strategy of sustainable development. To solve these tasks, a professional accountant must possess the necessary competencies (knowledge, skills and abilities), the acquisition of which must be provided by appropriate systems of additional professional training.

Such clarification of approaches to risk assessment requires the accountant, when preparing non-financial statements, to pay special attention to getting answers to the following aspects:

— how effective are the processes of identification, assessment and management of environmental risks prescribed in the internal regulations;

— does the organization have the ability to respond promptly to environmental disruptions (terrorist attacks, natural disasters);

— are loads and vulnerabilities in the supply chain and associated risks, including environmental risks, assessed and managed;

— is the risk monitoring of third parties, major suppliers and buyers organized;

— how is the timely acceptance of emerging risks in an unstable environment ensured;

— what is the order of classification of climate risks (financial, climatic);

— does the company's risk management plan correspond to the new emerging risks;

— what is the procedure for identifying ESG risks and what is their potential impact on financial statements, etc.

To get answers to these questions, the accountant must prescribe in advance the methodology for accounting for environmental risks carried out in three main areas: corporate governance, risk assessment, disclosure of information in reporting.

When forming an effective accounting system, it should be taken into account that environmental risks, along with climate risks, are components of risks associated with the environment and should not be considered in isolation from them. When forming indicators of non-financial reporting, the company should develop uniform methodological approaches to the assessment and disclosure of information.

The importance of this problem cannot be underestimated.

Defining the role of an accountant in the development of a closed-loop economy, one should also remember the potential of accounting solutions that have not yet been used, which should act not only as means to facilitate the transition to a cyclical process, but also as its driving forces. In this connection, it is proposed to revise the accounting understanding of the categories "values", "impact" and "risks". I would like to draw attention to the fact that this report raises the problem of developing a methodology for a new type of accounting – cyclic (circular) accounting, and environmental accounting is considered only as an integral part of it.

The transition of commercial organizations to a cyclical economy model opens up a unique opportunity for accountants to work out in-house regulations on accounting for all types of environmental risks and their disclosure as part of cyclical reporting indicators in a timely manner.

Thus, a professional accountant, due to the specifics of his activity, should take an active part in this process, without waiting for the release of any international or national regulations. However, it is not easy to change outdated thinking and abandon linear business models on which the economy has become dependent.

5 CONCLUSIONS

Professional accountants, based on available data and with the support of artificial intelligence, should explore new ways to increase the value of their organizations. First of all, we are talking about the need to organize accounting not only of financial, industrial, intellectual and intangible capital, but also of human, social and natural capital. Reporting on all these types of capital should become an integral part of the annual report and reporting of ESG. This will provide investors with a number of key advantages, such as:

— improving the efficiency of investments in the cyclical economy;

— improving the efficiency of manufactured processes, products and technologies while ensuring their minimal harmful impact on the environment;

— improving the reputation and branding of a company that supports the idea of creating a "green economy";

— informing about business solutions that form the necessary business rationale for investing in cyclical production in order to ensure minimal environmental impact.

— attracting investors' capital based on risk assessment for sustainable business development;

— building an effective dialogue with key stakeholders in order to ensure long-term cooperation to jointly overcome environmental and social problems.

Undoubtedly, new professional competencies and existing skills of professional accountants in the context of a change in the business development paradigm, the transition to a cyclical economy will allow them to act as leaders focusing on the most important issues of the company's development. In this regard, the training programs for a modern accountant should be redesigned and updated, they should include a wide range of additional courses that will provide not only technological literacy necessary in the conditions of digitalization, but also professional skills in the field of formation of the economy of sustainable development and risk management. This is what will allow professional accountants to provide business owners and company managers with reliable financial and non-financial information that will contribute to timely and effective management in a cyclical economy. Thus, professional accountants can make an exceptionally large contribution to solving the problems of transition to a closed-loop economy.

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