

# DEVELOPMENT OF AN ADAPTIVE ACCOUNTING SYSTEM ON THE BASIS OF QUALITY IMPROVEMENT OF INFORMATION RESOURCES

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## ABSTRACT

*In order to ensure an effective system of information publication through sustainable development reporting, a structure and content of the system of internal regulation of the procedure of formation, information support and verification of the reports were developed. The model of formation and publication of information on business activity of entities through the mechanism of sustainable development reporting has been developed, which envisages a set of measures for transformation of information subsystems of management and the system of making management decisions. The proposed model is complex and thus allows formation of a new better-quality information resource, which enables a multidisciplinary assessment of the economic activity of an entity. In any case, introduction of new types of reporting to inform a wide range of users requires an internal transformation of the accounting system in particular and management in general. Thus, we substantiate the directions of improving elements of the accounting method in ensuring quality of information resources. These proposals envisage changes in the current accounting legislation, as well as directions for improvement of the internal system of accounting regulation at a business entity.*

**Keywords:** Quality, Sustainable Development Reporting, Information Resources, Management Decisions, Internal Regulations.

**JEL Classifications:** M5, Q2

## INTRODUCTION

The XX century is characterized by new approaches to the development of socio-economic relations and transformation of requirements for formation of information space in the context of its management. In such conditions, the role and importance of qualitative information on economic activity of business entities is increasing and, accordingly, new challenges are emerging regarding information management subsystems, accounting in particular.

Accounting in modern conditions is a system of information resource generation that provides relevant needs and requests of interested parties.

Accounting is probably the only functional economic science and field of practical management activity, the results of which can lead not only to economic, but also social and environmental consequences. Moreover, the economic impact may affect not only an

individual business, but also countries and groups of countries; social consequences can predict not only the field of micro-level labor management but also unemployment of millions of citizens; environmental impacts have long gone beyond industrial wastes and are changing the planet's climate today.

The purpose of the article is to substantiate theoretical grounds and to improve organizational and methodological provisions of accounting in ensuring quality of information resources.

## REVIEW OF PREVIOUS STUDIES

Quality is a multidimensional notion, especially when it comes to the quality of information, here it is worth focusing on its characteristics, the range of which is sufficiently broad, specifically: relevance, accuracy, accessibility, truthfulness, significance, uniqueness, completeness, comparability, consistency, ability to verify, timeliness, reliability and understandability of information, etc.

Quality of accounting and analytical information will depend on the effectiveness of analytical procedures in the management decision-making system and reliability of the operation results of economic entities, recommendations for improving efficiency of a business (Wisna, 2018).

Among all sorts of information today, it is the financial statement information that is most commonly used by potential users in the business decision-making process (Susanto, 2017). In turn, availability of reliable information reduces uncertainty and allows adequate assessment of other risks of business entities.

Today information for users is the main decision-making platform, and effectiveness of such decisions depends primarily on quality of such information, so it is important to clarify the basic quality parameters of information resources generated by accounting (Agustia, 2020; Muneer, 2020).

For potential users of financial statements, it is particularly important today that the information contained in the company's reports will be consistent, comparable, the reporting will be mutually reinforcing and the information in it will not be duplicated. (Cornell et al., 2017).

Therefore, attempts to comply with the information needs of potential users of financial statements should be not only consistent and connected with other disciplines, but also comply with current, constantly changing legislation (Nikmatuniayah & Marliyati, 2017).

Thus, provision of useful information generated by accounting is not an easy task and needs to align the interests of many user groups with the legal regulation of accounting and financial reporting not only at national but also at international levels (Pedroso & Gomes, 2020; Klymenko et al., 2019; Tkachenko et al., 2019).

However, it should be noted that some features of information generated by accounting are to some extent either complementary or contradictory. Thus, usefulness of information or its orientation to a particular consumer or group of consumers can affect the level of trust and, therefore, the true presentation of the real financial position of a business entity.

## METHODOLOGY

The methodological basis of the study is general philosophical and general scientific methods of cognition of phenomena and processes in accounting. Methods of abstraction, grouping, comparison were used to substantiate directions of modification of accounting

tasks as a system of generating qualitative information resources and systematizing qualitative properties. Grouping, generalization, induction, and deduction methods have been used to justify directions for extending properties of an accounting entity to ensure that it is consistent with the qualitative properties of the accounting entity's information model. Development of a new mechanism for publishing information on the economic activity of a business entity through sustainable development reporting and development of an adaptive accounting system for formation of its indicators is carried out on the basis of modeling, analogy, grouping and generalization, analysis and synthesis.

The information base of the research is scientific sources (monographs, scientific articles on accounting, economics, management, quality management; conference materials); official documents; financial and sustainable development reporting data; analytical reports from international consulting and auditing companies; reference and information publications and published factual materials of international organizations on the issues of securities market.

## RESULTS AND DISCUSSIONS

One of the important sources of information required for managing any economic entity is the accounting system.

It is accounting that enables to generate, measure, process, and present data about a business, and maintain the process of managing a business at the appropriate level. Therefore, quality of information that is generated by accounting and provided to managers or stakeholders to make important strategic decisions about the activity of a business is an undeniable fact.

The most specific is organization of an accounting system, which is most variable. Thus, the accounting regulatory framework provides for a different set of accounting displays of management objects, including consideration of their properties (physical, information and technological, economic, legal and accounting). In the future, when forming analytical indicators, there is a need to take into account the chosen accounting methodology to evaluate all these properties.

All of these information subsystems are involved in formation of sustainable development reporting indicators. In particular, a planning subsystem determines the future performance parameters of, both economic, environmental and social. Subsequently, the accounting system forms an information model of the actual state of economic activity, and taking into account all properties of management objects allows to determine economic, social and environmental performance of a business entity.

Thus, for formation of a qualitative information resource on economic activity through the reporting of sustainable development, there is a need to take into account a set of factors that determine the specifics of economic activity of a business.

Based on evaluation of all these factors, directions of transformation of organizational and methodological provisions of accounting as the main information source for formation of indicators of sustainable development reporting are formed, which will ensure quality of the information space for managing economic activity.

For an efficient and high-quality accounting system for generation and verification of sustainable development reporting as a new and higher-quality mechanism for information disclosure, there is a need to develop at a business entity an integrated approach to implementation of new methodological approaches that entail transformation of the use of certain elements of the accounting method, transformation of business processes and management accounting, implementation of a new approach to applying analytical indicators that can be presented in the sustainable development reporting, broadening of the range of

targets in terms of social and environmental components.

A business entity that plans to release information through sustainable development reporting should develop a set of internal regulations for integrating different information subsystems and their methods and methodologies. Such changes should take place in accordance with the selected system of managing such sort of reporting as: Global Reporting Initiative or International Integrated Reporting Standard.

Based on the above, we propose to approve at a business entity the following set of internal regulations and to amend a number of the existing ones (Table 1).

Document name	Contents	Qualitative properties
Order on approving accounting policies	- to envisage objects of accounting presentation related to environmental and social accounting components in accordance with GRI protocols; - to develop a classifier of business operations related to environmental and social risks; - to take into account properties of all objects that are indicated in the sustainable development report	Completeness, comparability, clarity, importance, balance, integrity
Work plan for accounts	- to provide invoices for accounting new environmental and social objects when developing a work plan for accounts; - analytical accounting should include all properties of the objects	Completeness, comparability, importance, integrity
Regulations on organization of accounting	- to envisage interrelations of accounting services with other departments for information reporting purposes; - to provide a responsible accountant;	Reliability, timeliness, balance, confidentiality
Job instruction	- to develop a job description of the accountant responsible for GRI reporting	Timeliness, confidentiality, competence
Regulations on organization of management accounting	- to envisage information indicators that only management accounting system can provide	Completeness, importance, timeliness, balance, integrity
Methodological recommendations for product calculation	- to provide a system of calculation for separate business processes of environmental direction (for example, waste management, discharges, emissions)	Completeness, comparability, integrity
An album of forms and recommendations for filling in management reporting	- to approve a set of internal reporting forms as interim reporting to generate GRI reporting indicators	Comparability, reliability, importance, balance, integrity, competence
Documentation system provisions	- to amend the workflow and develop new forms of primary documents that relate to new objects or properties of the existing ones	Completeness, reliability, importance, timeliness, integrity, confidentiality, competence

The specified directions of forming internal accounting regulations for ensuring quality of the published information through the sustainable development reporting are aimed at formalizing accounting procedures and establishing responsibility for forming a qualitative information resource, which will provide the user with the data necessary for implementation of management decisions. We believe that all of the above areas of accounting regulation should comply with the factors of influence identified above and strategic goals of the company.

It should be noted that such changes in the system of accounting regulation at a business entity should comply with national and international accounting standards, because none of the international standards of sustainable development reporting (integrated

reporting, corporate social reporting) contradicts either international or national accounting legislation but it only puts forward certain requirements to a set of data to be submitted. The selected sustainable development reporting provisions can only influence extension of the procedure for the use of individual elements of the method.

Development of accounting system of financial reporting for quality assurance of information resources is offered in the context of the following provisions:

operating chart of accounts for a business should be synchronized with the accounting policy of the business and take into account the specifics of the information and computer technologies used;

organization of analytical accounting for each individual object or a group of accounting objects should provide most of the properties of the object or a group of objects. Moreover, such an opportunity is real, and it will not increase the time spent on displaying a particular business transaction, provided that the accounting information technology is used. It is also worth noting that there is no point in considering all properties for individual entities, as this may reduce the quality of accounting information, for this can bring down quality of accounting information which is why at the time of formulating accounting policies, an accountant employs professional judgment, the first step of which is to substantiate usefulness of individual properties of the object for users;

off-balance sheet accounts are classes of accounts that provide for the specific legal properties of an accounting object or objects for which there is a specific use in an entity's business activities. Thus, the current account plan provides: off-balance sheet accounts designed to summarize information on the availability and movement of: values that do not belong to the entity, but are temporarily in its use, disposal or storage (objects of operational lease of fixed assets, tangible assets responsible storage, processing, commission, mounting); conditional rights and obligations of the entity (collateral, guarantees, obligations, etc.); forms of strict accounting; written off assets (shortage of assets, receivables) to monitor the possibility of their compensation by the guilty persons (debtors); depreciation.

In this direction we propose the following changes to the specified class of financial reporting accounting related to accounts:

1. 02 "Assets on responsible storage" to supplement with subaccounts: 026 "Assets received by the entity-operator of joint activity"; 027 "Assets of the state or communal ownership and obtained under a public-private partnership agreement"; 028 "Assets received on other specific legal bases".
2. 03 "Contract obligations" envisage subaccounts for certain types of contracts.
3. 05 "Guarantees and cover provided" and 06 "Guarantees for cover received" envisage subaccounts for certain types of contracts providing guarantees.
4. 09 "Depreciation" to envisage subaccounts for individual objects of non-current assets; to ensure considering individual properties of an object of accounting or user request, which cannot be foreseen by organization of analytical accounting, we suggest using transit book-keeping accounts.

The current accounts plan provides the following accounts for accounting display of costs by element - Class 8. Costs by elements. We propose to modify this class of book-keeping accounts as follows: Class 8 "Accounts for a specific information request".

We propose in the book-keeping accounting plan to anticipate the above modifications as to the name of the accounts and to allow the entities to separately implement subaccounts and analytical accounts proceeding from the specifics of the entity activity.

## RECOMMENDATIONS

Provisions for analysis of GRI reporting indicators should include the following components: the subject of the analysis, its rights and responsibilities; procedure of analysis; methods of analysis; analytical indicators; informational support of analysis; structure of the

analytical note; feedback, comparability, clarity, reliability, importance, timeliness, balance, integrity, confidentiality, competence.

These areas of the internal regulation of formation, verification and economic analysis of sustainable development reporting provide a set of internal documents that will ensure compliance of the reporting indicators to all quality properties of information.

The basic procedures before formulating provisions of these documents are: identifying the main users of sustainable development reporting and justifying the priority users on basis of which to identify their information request; determine composition of the GRI protocols according to which sustainable development reports will be generated, depending on the industry specifics, business process organization, management system and information subsystems; based on the established protocols, to justify composition of sustainable development reporting indicators to be published and to determine information support for them; identify potential risks of disclosing information by indicators in accordance with a specific GRI protocol.

## CONCLUSIONS

The model of formation and publication of information on business activity of entities through the mechanism of sustainable development reporting provides a set of measures for transformation of information management subsystems and the decision-making system of management itself. This, in turn, was the reason for substantiating directions of improving the system of internal regulations, both current and development of the new ones. In particular, a set of internal documents on accounting regulation, economic analysis, internal audit and the process of forming sustainable development reports were substantiated.

Directions for improving elements of the accounting method in ensuring quality of information resources are substantiated. These proposals provide for changes in the current accounting legislation, as well as directions for improvement of the internal system of accounting regulation at a business entity.

In order to ensure an effective system of information disclosure through sustainable development reporting, a structure and content of the system of internal regulation of the procedure of formation, information support and verification of reports have been formed.

Procedures for forming a set of internal regulations are proposed in the following stages: to identify main users of sustainable development reporting and to justify priority users on the basis of which to identify their information request; determine composition of the GRI protocols according to which sustainable development reports will be generated, depending on the industry specifics, business process organization, management system and information subsystems; based on the established protocols, to justify composition of sustainable development reporting indicators to be published and to determine the information support for them; to identify potential risks of disclosing information on indicators in accordance with a specific GRI protocol.

As a whole, it can be stated that the sustainable development reporting is a new mechanism for publishing information on business activities and, accordingly, generation of an information resource that is characterized by better properties and usefulness for a larger number of users.

Through introduction of the proposed model of generation and publication of information on business activity of business entities through the mechanism of sustainable development reporting, it is possible to ensure correspondence of an information resource to the following qualitative properties: completeness, consistency comparability, clarity, reliability, importance, timeliness, balance, integrity, confidentiality, competence.

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