Construction of a Conceptual Model of the Accounting and Analytical System of Report Formation Under IFRS

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Abstract—as a result of the study, the mechanism of modeling the accounting process at the present stage is considered and a conceptual model of formation of accounting and management reporting in the context of transition to IFRS is built. The necessity of developing a mechanism for the formation of management accounting policy aimed at preparing information in accordance with IFRS requirements, which increases the degree of reliability of information and allows optimizing the process of making management decisions at various levels of management, is proved. The article analyzes the methods of obtaining IFRS reporting by Ukrainian enterprises and develops a model of automated processing of accounting information using the combined method of reporting. The proposed methodology will automate the preparation of financial and management reports of enterprises in the context of transition to international accounting standards. The practical significance of the obtained results lies in the possibility of using the developed scientific and methodological recommendations, models and methods, which, in accordance with the principles of international financial reporting standards, will help to improve the quality of information resources and increase the efficiency of economic resources of business entities.

Keywords—IFRS, modeling, conceptual model, accounting policy (AP), financial reporting, transformation of financial reporting, management reporting.

I. INTRODUCTION

The accounting system, as the most important part of the company's information system, is currently at the stage of reform. One of the directions of the further development of accounting and reporting is the improvement of the quality of the resulting information through the construction of an effective accounting process, which led to the need to study the possibilities of accounting modeling.

The application of the modeling method to the study of the accounting system consists in reflecting the sequence of stages of transformation of accounting information from a general conceptual model to an algorithmic model, which allows calculating the optimal result of the accounting process from an economic point of view [1-6]. The construction of an effective accounting process at the enterprise will contribute to the more active use of international financial reporting standards (IFRS), which are the main tool for reforming accounting on the way to

European integration [7-10]. Thus, there was a need to create models that reflect the process of reporting in accordance with international standards.

Ukrainian organizations interested in attracting foreign investors, entering international capital markets, and establishing partnerships with foreign counterparties face the challenge of immediately applying IFRS, which is a prerequisite for integration into the global economic space, improving the efficiency of enterprises, reducing the tax burden, and increasing competitiveness [11-19]. In this regard, it is especially necessary to develop a comprehensive and systematic approach to the implementation of IFRS in domestic accounting practice. However, the lack of knowledge and requirements of individual IFRS, and the understanding of their essence as a whole, which has developed in the Ukrainian professional accounting community, is a cause for concern.

II. STATEMENT OF THE TASK

The purpose of the study is to improve the theoretical and methodological approaches to the formation of an accounting and analytical system of financial and management reporting based on IFRS information platforms using process modeling, which will improve the quality of operational information and create acceptable conditions for the transition to the use of international financial reporting standards [20, 21].

To achieve the goal, the following tasks were solved:

— to develop an accounting policy model that ensures compliance of financial reporting with the requirements of IFRS;

— to propose a mechanism for the formation of managerial accounting policy according to IFRS and NAR(S) based on the information platform of IFRS;

— to compare the methods of drawing up accounting (financial) reporting according to international standards, to determine the advantages and disadvantages of each, to summarize their essence and to propose a new, more effective method, which is implemented under the condition of automated processing;

- propose the concept of forming a management accounting and analytical system based on the IFRS information platform [22];
- to develop a model of transformation of accounting reporting into the format of management reports adapted to the requirements of IFRS.

III. THE RESULTS

The process of transition to IFRS is not simple, therefore, as a result, the IFRS Council developed the IFRS 1 standard "First-time application of international financial reporting standards", which entered into force on 01.01.2004 and which contains a clear algorithm preparation of such reporting.

For the transition to IFRS and the preparation of the first reports, the choice and application of accounting policies are of great importance. According to the International Financial Reporting Standards, the accounting policy of the enterprise must be drawn up in accordance with IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors".

The organization's choice of accounting policy, which constitutes reporting in accordance with IFRS, is not arbitrary, but is limited by the provisions of standards and interpretations. Nowadays, 2 models of accounting policy formation are used in practice (Table 1) [23-28].

TABLE I.   MODELS OF ACCOUNTING POLICY FORMATION

Model	Characteristic
MODEL I	The formation of the accounting policy is carried out in the aspect of preparing and submitting only financial statements, i.e., the sections of the policy are developed according to the purpose of each IFRS or paragraphs of NAR(S), which provide for the procedure for drawing up, submitting and making changes to the statements. In each section, the basic requirements of each IFRS standard or paragraph of NAR(S) regarding the organization's activities are described in a short and easy-to-understand form. Therefore, the issues of organization, preparation and maintenance of accounting are not considered in this version of the accounting policy and must be presented in separate organizational and administrative corporate documents (regulations, instructions, orders, etc.). Such documents are developed on the basis of the Law on accounting and financial reporting and the order.
MODEL 2	The formation of the accounting policy is carried out only for operations actually carried out in the organization. In the future, when new transactions or events appear, the order of their reflection is included in the current accounting policy in the manner prescribed by IFRS 8. At the same time, the accounting policy includes sections that establish the methods and principles of financial reporting, as well as specific methods and techniques of accounting, including organizational-technical and methodological ones. This type of accounting policy is provided for by the Law "On Accounting and Financial Reporting".

Having considered the advantages and disadvantages of each model, the authors proposed a conceptual model of accounting policy in accordance with international financial reporting standards (IFRS), which is based on the results of the analysis of model 2. This model involves the disclosure of the main provisions of accounting policy as part of financial reporting under IFRS from the point of view of its use external users. The proposed model is a practical tool for independent preparation of accounting policy in relation to IFRS by domestic commercial organizations.

In our opinion, the accounting policy under IFRS should have two main components - organizational and technical and methodical. The organizational and technical component of the accounting policy consists of forms of primary documentation, reporting forms and notes to them, document flow according to IFRS, as well as other organizational and administrative documents.

In order to form an accounting policy in the management accounting and analytical system based on the IFRS information platform, it is recommended to take as a basis the accounting policy drawn up according to domestic standards and strictly regulated domestic legislation. Next, it is necessary to analyze its main provisions from the point of view of implementation in the field of management accounting and try to turn them into accounting policy provisions for the purposes of management accounting according to IFRS, which are oriented to professional judgment and, as a result, give great freedom of action. The mechanism of this procedure is presented in Fig. 1.
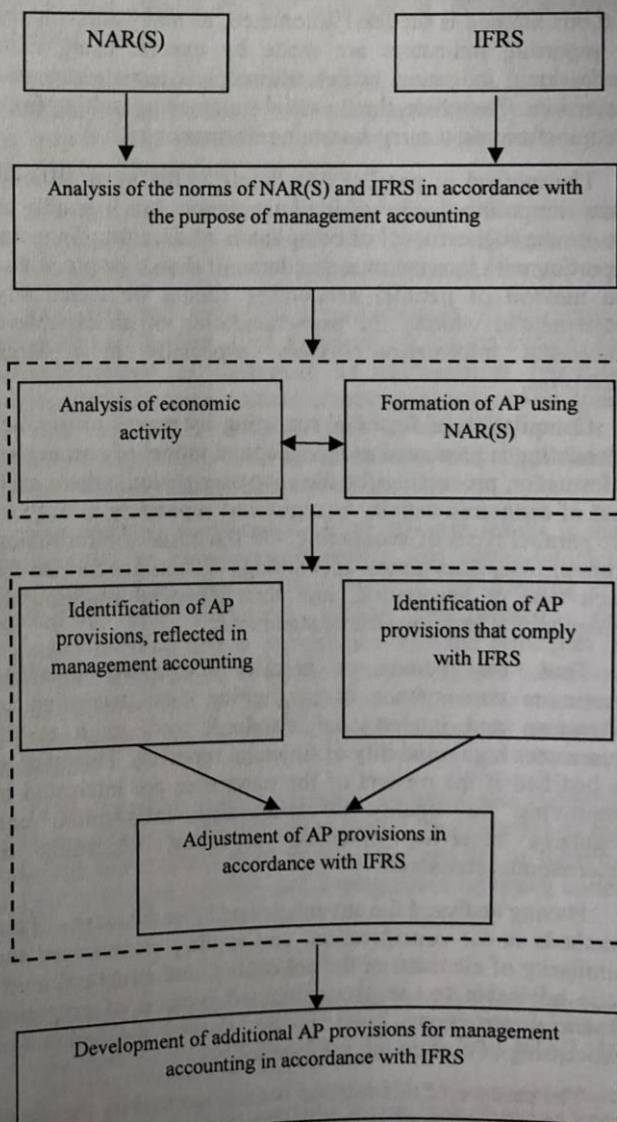

Fig. 1.   The process of unifying the accounting policy under IFRS and NAR(S) in the management accounting and analytical system based on the information platform of IFRS

The process of preparing the first IFRS reporting from an organizational point of view can be divided into several stages, each of which is associated with its own problems. The first stage, in our opinion, is the choice of the method of preparation of the first reporting under IFRS. According to Western standards, there are two main methods of reporting: transformation and conversion (parallel accounting). Recently, the method of posting postings has also been highlighted. The choice of method, as a rule, is determined by the estimated costs and the goal of implementing international standards at the enterprise. Each of the above methods has its own peculiarities in practical application.

Let's consider the existing approaches to the preparation of financial statements in accordance with IFRS by each method, the choice of which, as a rule, is determined by the expected costs and the goal of introducing international standards at the enterprise.

The method of reporting transformation allows to obtain IFRS reporting on the basis of reporting prepared in accordance with NAR(S), by adjusting the indicators for differences in accounting and reporting. We have established that this method is the least automated, as many adjustments to reporting indicators are made by experts using their professional judgment, which ultimately causes errors and distortions. Therefore, the financial statements resulting from the transformation carry a certain information risk.

The method of parallel accounting is the most difficult from the point of view of implementation, but it is able to ensure the highest level of compliance of domestic financial reporting with international standards. It should be noted that the method of parallel accounting cannot be technically implemented without the implementation of an expensive automated information system, especially in a large enterprise.

Compilation of financial reporting by means of parallel accounting is presented as a conceptual model of accounting information processing for the reporting period, where each fact of economic activity is registered separately in each of the parallel types of accounting. On the basis of information from primary documents, accounting registers are formed for each type of accounting, and then financial reporting is compiled for each applicable standard.

Thus, the method of parallel accounting provides maximum convergence of accounting data according to Ukrainian and international standards and, as a result, guarantees high reliability of financial reporting. However, it is justified if the owners of the enterprise are interested in improving the quality of accounting information and regularly receiving financial reporting according to international standards.

Having analyzed the advantages and disadvantages of the methods under consideration, and having summarized the similarity of elements at the conceptual and structural level, it is advisable to use the combined method of preparing financial statements used in the context of automated processing of accounting information.

The essence of this method is characterized by the use of a combined method of preparing financial statements in accordance with international standards, which will minimize time costs by automating the parallel accounting of individual objects that have differences in accounting and reporting

under national and international standards and speed up the process of filling out reporting forms, as well as increase the reliability of the information received in the context of accounting automation.

In the context of market transformations of the information system of enterprises, the management accounting system is also being improved, so the process of forming financial statements by the combined method can be presented in the form of a conceptual model of automated processing of accounting information for the reporting period (Fig. 2).
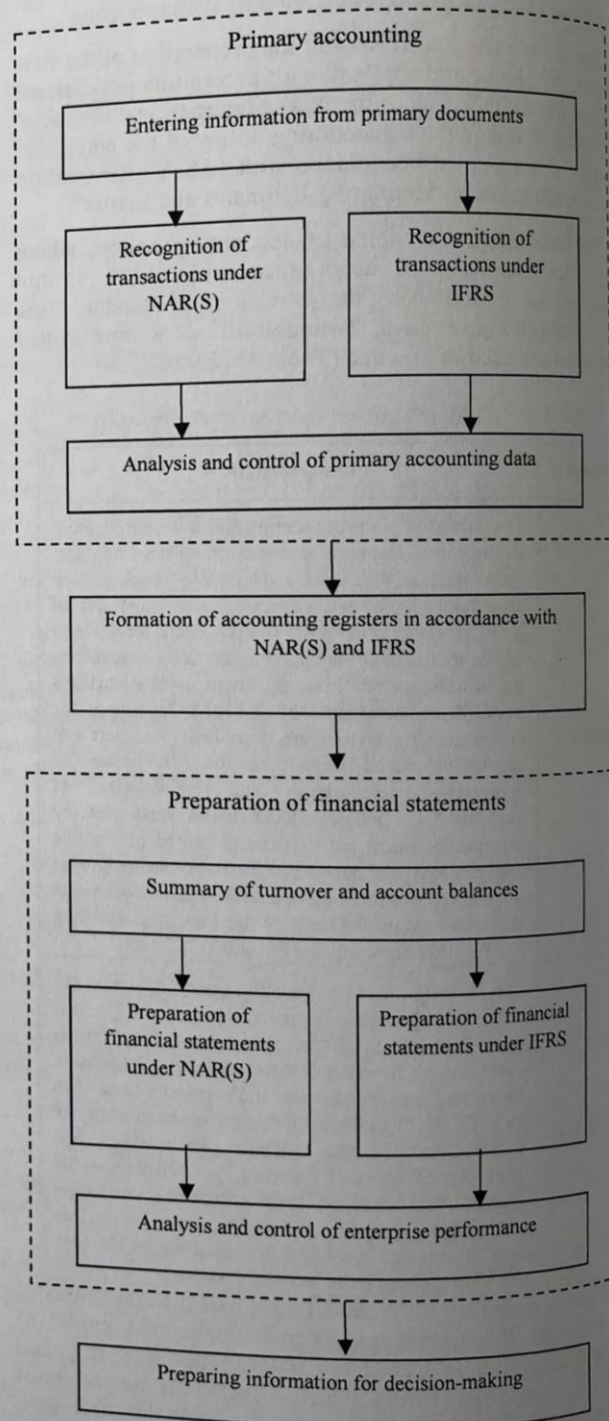

Fig. 2. Conceptual model of automated processing of accounting information

When choosing a management accounting system in a mixed form, it is necessary to take into account the specifics of the enterprise's activity, as well as the composition of economic operations. There is no universal algorithm for setting up a management accounting and analytical system or its optimization in a specific organization. Establishing a management accounting and analytical system is a complex task that is associated with certain difficulties. In the academic literature, there are enough publications that highlight the issue of the formation of management accounting and consider this process from different points of view. Despite the fact that many authors in their works touched upon certain methodological problems of the management accounting system at the enterprise, in these methods there is no single systematic approach that reflects the integration of management accounting and international financial reporting standards.

In this regard, we offer the concept of forming a management accounting and analytical system taking into account the IFRS information platform (Fig. 3).

Stage 1. Development of system of indicators and forms of management reporting

Determining the indicators for assessing the company's performance

Determining the structure and frequency of management reporting forms

Development of methodological recommendations based on NAR(S) and IFRS

Stage 2. Automated processing of accounting information (Fig. 2)

Stage 3. Transformation of financial statements into management reporting format

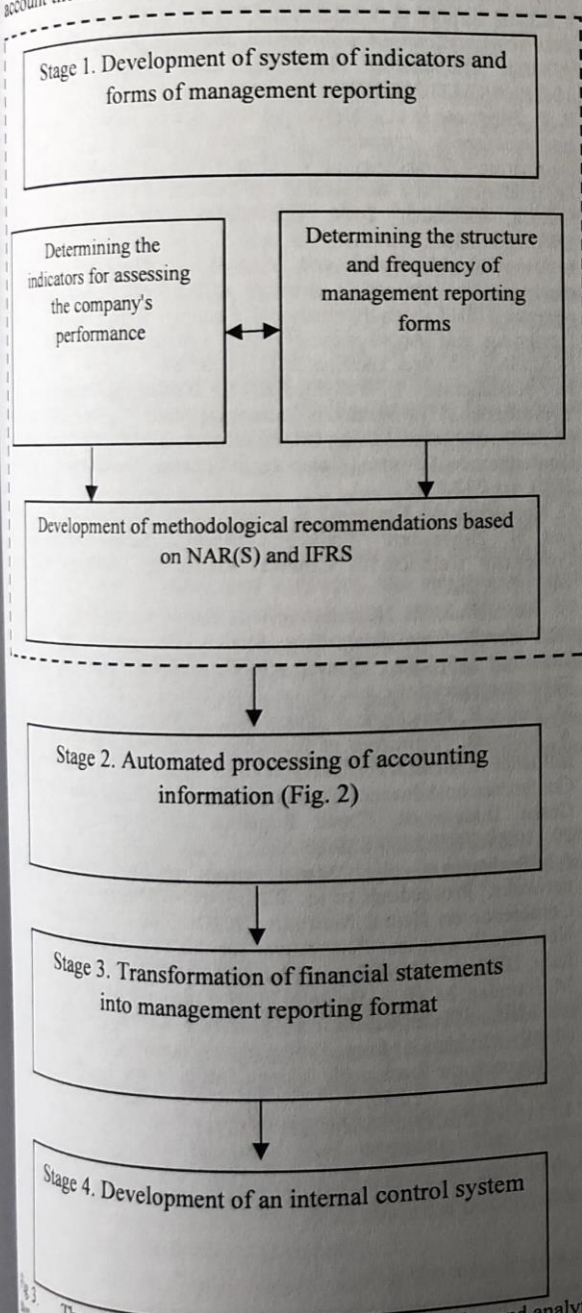Stage 4. Development of an internal control system

Fig. 3. The concept of forming a management accounting and analytical system based on the IFRS information platform

The specificity of the proposed model consists in the description of the step-by-step process of setting up individual elements of this system with the selection and specification of tools and technologies used at each level of the analyzed procedure.

The proposed approach to building the system increases the degree of accessibility of management decisions, which is due to the use of IFRS principles in the process of implementing this model.

CONCLUSIONS

Today, more and more companies use international financial reporting standards for management accounting and, accordingly, management reporting. Many domestic enterprises use accounting data, as well as financial and non-financial information from operational sources (for example, from the reports of heads of structural units) to prepare management reports.

Modern economic literature contains many articles related to the establishment of the management accounting system and describing the preparation of management reporting.

But in all the diversity of the given examples, the absence of a clear model is noted, which comprehensively describes the step-by-step process of carrying out procedures for drawing up management reporting.

In an attempt to find a solution to the specified problem, the authors proposed a model for the transformation of accounting reporting into the format of management reports.

The proposed model of transformation of accounting reporting into the format of management reports ensures the interrelationship of indicators of management reporting forms, allows the management of the organization to compare the received data in terms of types of activities and for a certain time period in order to substantiate and adopt timely and operational management decisions.

The practical significance of the research results is that the use of the developed scientific and methodological recommendations, models and methods of forming the accounting and analytical system of financial and management reporting in accordance with the principles of international standards of financial reporting will contribute to the improvement of the quality of information resources and the growth of the efficiency of the use of economic resources.

In the future, it is also advisable to investigate technical and organizational trends related to the development of the technical and technological basis of the process of forming and publishing accounting and management reporting under IFRS.

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