

Formation of management reporting in the enterprise controlling system

Management reporting is an important element of both corporate governance and internal processes that are carried out in the enterprise's controlling system. The primary purpose of management reporting is to provide information support for management decisions, which includes financial planning, financial reporting, financial analysis, management accounting, budgeting, controlling, and management reporting. Obstacles to the implementation of an effective financial reporting management system are the lack of formalized rules for the formation, submission, preparation, correction, and control of management reports. In order to overcome this shortcoming, the article introduces the term «life cycle of a management report», which is understood as a period of time that includes the development, implementation, and use of a management report until it meets user information requests. At the same time, the following stages of the management report life cycle are proposed: identifying a request from the user; identifying responsible persons and the working group participants for developing the report form; identifying reporting objects that correspond to the user's request; defining accounting and analytical sources of information; finding out the degree of aggregation of indicators; automating data submission for updating reports; visualizing the reporting form, testing the form; identifying necessary corrections; formulating recommendations for decision-making guidance; identifying new requests. This approach will help to solve the key problem of information support for the management decision-making process, namely, the lack of coordination between user information requests and the availability of information sources to ensure them.

Keywords: management reporting; controlling; management decision.

Topicality of the research. The ultimate goal of making managerial decisions is usually to reduce costs and reduce the probability of risks. These decisions are based on information provided in management reports. Such reports are an element of the controlling system as an object-type system that operates in a certain organizational, technical and information environment when implementing planning, accounting, analysis, monitoring and control processes. Within this system, the manager most often generates the following queries: what profit the company has received, what sales areas, products or customers are most profitable for the company, what is the profitability of production, what fixed costs the company has, and what are the variable costs per unit of production. If the information system does not meet user's requests, the manager questions the need for an existing reporting system, since this does not contribute to business development. Another disadvantage of implementing management reporting in an enterprise is that the company's strategy and management reporting are not synchronized. In addition, it is necessary to find approaches to staff motivation in various forms of reporting. So, the obstacles to generating management reports in the controlling system are:

- 1) absence of a designated person responsible for generating management reporting;
- 2) delaying the implementation of management reporting forms;
- 3) lack of agreed accounting rules that are the basis for the reporting system;
- 4) lack of automation of the reporting process;
- 5) inconsistent reporting deadlines;
- 6) poor presentation of information in tables and with significant quantitative indicators, which makes visual perception difficult.

Analysis of recent research and publications that the author relies on. The issue of implementing management reporting in the controlling system is quite widely considered in the works of Ukrainian and foreign scientists. For instance, A.Bienkovska, Z.Kral, A.Zablotska-Kluchka [1] substantiate the criteria for the feasibility of applying strategic controlling depending on the size of enterprises. P.Kutsyk and N.Ostapiuk [2] propose the introduction of such controlling tools as functional cost analysis, factor deviation analysis, ABC analysis, XYZ analysis, quality cost analysis, life cycle analysis, financial analysis (retrospective, current, perspective), econometric methods, budgeting, linear programming, network planning, EOQ model, constraints analysis, reengineering, etc. The results of applying these tools are elements of management reporting. The discussion about the choice and use of controlling tools is continued by L.Maliarets and O.Yastremska [3]. In their opinion, the choice of optimal tools should ensure control, coordination, regulation and adoption of timely and reasonable management decisions. The main issue when choosing tools should be an understanding of its specific features in the enterprise, which will allow you to fully use the existing advantages, since different enterprises can use different control tools. In the context of the principles of sustainable development, controlling is reviewed by Z.Zeman [4], whose work highlights the concept of eco-control as a self-regulating system of activities related to

the environment, including the acceptance and correct interpretation of environmental market signals. Eco-control, according to the author, should be integrated into the company's management system, since this is the only way to ensure this connection between environmental control and the control of other subprocesses. We support the author's position that operational eco-control provides environmental information, on the basis of which it is necessary to make environmental decisions. Y.Honos, M.Mukhova, L.Domaratska [5] emphasize that controlling is an important and necessary tool for monitoring the economic activity of enterprises, which will contribute to the innovative development of the company. They justify their position by conducting a survey of industrial enterprises of the Slovak Republic. The experience of forming an information system for enterprises based on IFRS in the Slovak Republic is also described by a group of authors headed by M.Tumpakh [6]. Paientko T.V. and others [7] argue that the increase in the scale of business processes, their complexity and internationalization require improvement of management methods, accounting and control, the development of new technologies in the field of coordination of information and financial flows, which determines the formation and development of financial controlling as a separate component of financial management at the micro level. At the same time, the authors supplement the traditional controlling functions with specific ones – information, technological, monitoring and motivational. Lemishovskyi V.I. [8] considers the objects, subjects, purpose, subject matter, goals and functions of controlling in a machine-building enterprise, emphasizing the importance of the industry aspect in the implementation of a controlling system. Berdar M.M. [9] states the existence of skeptical views of management on the introduction of financial controlling, the results of which are not immediately noticeable, and the implementation is quite expensive and time-consuming.

The aim of the article is to determine the sequence of generating management reports in the controlling system.

Presentation of the main material. To understand the recommended procedure for implementing management reports in the controlling subsystem, we will introduce the concept of «management report life cycle», which we will understand as a period of time that covers the development, implementation, and use of a management report until it meets user information requests (fig. 1).

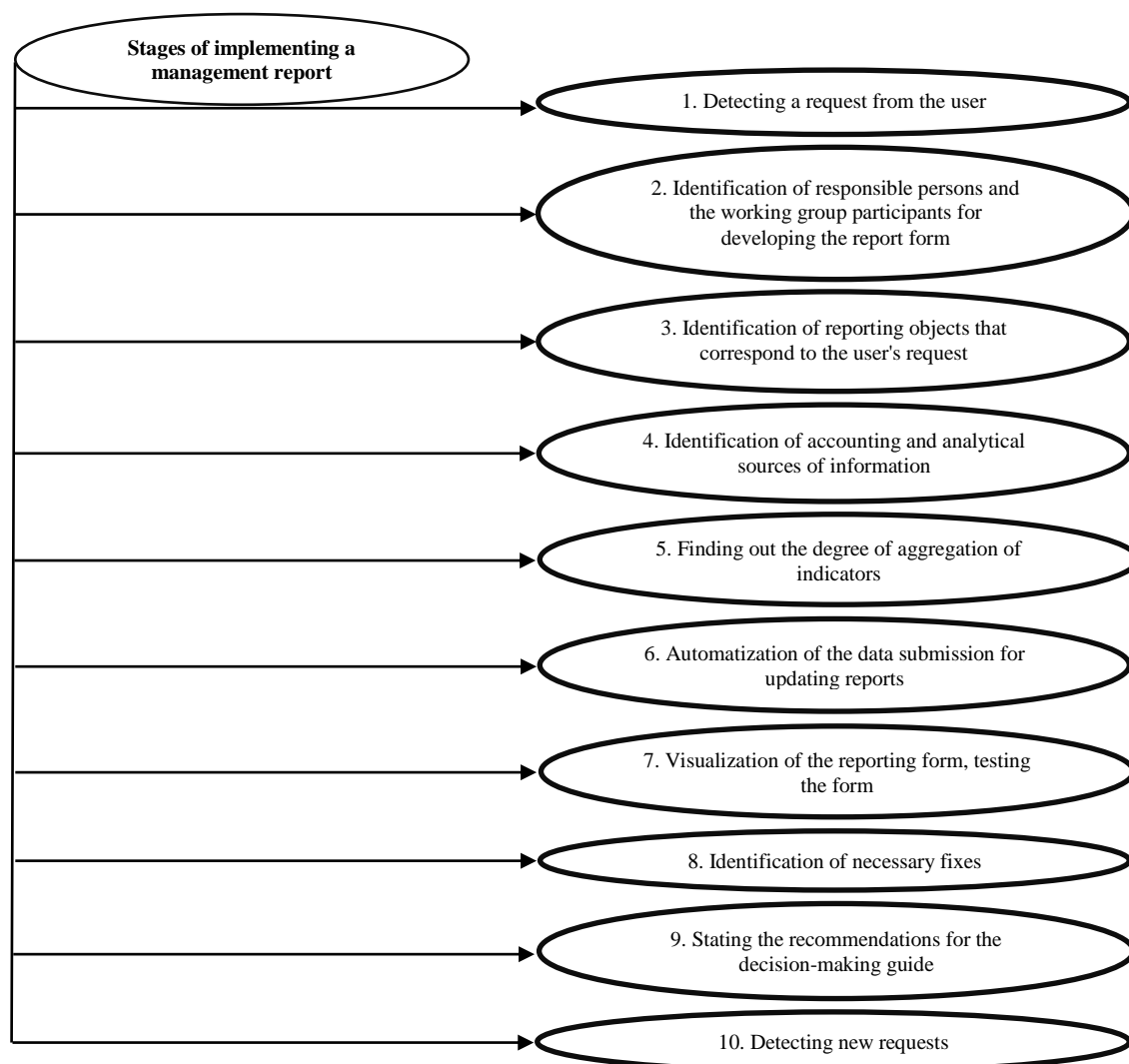


Fig. 1. Stages of implementing a management report

We suggest dividing the life cycle of a management reporting into the following stages:

1. *Detecting a request from the user.* A typical problem in the preparation of management reports is the response to a single request from the manager without interconnection with correlated indicators. Such a separate consideration of parts of the business leads to unjustified decisions. For example, the head of the purchasing department has a request to calculate the purchase requirement. Such a request can be satisfied with input data about the current balance and current production plan, available deliveries (confirmed, paid-up). At this stage, you also need to agree on the format of submitting information – quantitative, qualitative, mixed (quantitative with a comment);

2. *Identification of responsible persons and the working group participants for developing the report form.* At this stage, it is advisable to check the data on request at all sites where information is generated, in order to find out which departments will provide it. Another way to check the request is to determine at each workplace what will be useful for management. This indicator should be linked to the key indicator for the business process and thus motivate those responsible for this business process, for example, in the case when the purchasing manager saved on purchasing raw materials without compromising the quality of products;

3. *Identification of reporting objects that correspond to the user's request.* A controlling system can consist of various types of subsystems: object, environment, process, and project. Object systems are characterized by the presence of known boundaries of system placement in space, but there is no certain limit of functioning in time. For process systems, time boundaries are known, but spatial boundaries are not defined. For design systems, both spatial and time boundaries are defined, and for environmental systems, both boundaries in space and time are undefined. For example, new products should be a separate planning object. By their appearance, they can affect the supply and demand for existing products. Such an impact should be anticipated and monitored. Future demand for a new product is calculated roughly. The management request that arises in this case is whether a sufficient number of products is provided to support its introduction to the market, whether materials for marketing and merchandising are prepared timely, and whether the sales team of a new product is trained within the given timeframe. Another example: to confirm payments in this reporting period, you must have information about the limit funds in the next reporting period. If this information is not available, the manager may make incorrect use of monetary resources using irrelevant information;

4. *Identification of accounting and analytical sources of information* According to existing practice, management reports have the following types of data: planned, actual, and forecast. Planned data includes targets for customer service, inventory level, cost, and production capacity. Actual data includes actual production, actual sales, accepted orders, and final inventory of finished products. Forecast data is statistical forecast data for demand planning. At the same time, accounting information has certain limitations and does not contain, for example, information about intentions to bring new products to the market, expectations of a tender decision, changes in prices and the number of points of sale, competitor activity, dynamics of changes in the market and in the industry. This list forms assumptions based on which the forecast may be inaccurate. In management reports, priority is given to natural measuring instruments, because if the reports were compiled only in value terms, they may have been devoid of specifics and practical benefits. In this regard, the efficiency of submitting a management report is more important than a reliable cost assessment. However, in the activities of enterprises, the advantage is given to the software that allows building accounting for controlling subsystems or business processes. Thus, in order for the reporting system to start working, it is necessary to set the goal not to promptly submit reporting forms, but to bring the accounting system closer to the built-in controlling system;

5. *Finding out the degree of aggregation of indicators.* An effective way to generate management reports for strategic planning is not to decompose all the details and sum them up, but to make detailed plans only up to the time limit when planning, that is, to the point where the details for individual products should be known. For example, there are two approaches to displaying product information: for each product type and for a product group. Information on product groups will better show existing sales trends. The degree of detail of the management report also depends on the level at which the information is predicted: company, division of the company, market segment, product group, brand, model, package size, inventory storage unit. However, it is not always the smallest detail that is achieved in accounting thanks to multi-level analytics that makes it possible to get more reliable information. Forecasting at the most detailed level gives a large forecast error. In other words, one of the key issues of cross-sections of management reports is the decision to predict on generalized indicators or at a detailed level. To do this, it is important to set a time limit when planning; this is a certain point in the future to which details play a role and are important to the user. It is calculated as the total cycle duration, i.e. the sum of the time for the delivery of materials and the time for the production of finished products from these materials, and the time for planning and forming orders is added;

6. *Automatization of the data submission for updating reports.* Data collection for a management report involves setting up computer programs that allows constantly updating files with data on inventory, production, actual sales, and other objects. At the stage of submitting a management report, it is important to ensure that information is regularly updated and spread to the decision makers. At this stage, the binding of financial statements to management reports is checked; software testing is performed. Proper automatization will allow

immediately comparing any indicator with the previous period, delving into any of its components and areas of activity. The negative case is when management reporting is generated in a separate module where resources are planned, since this usually requires double input of information, and there is also an desynchronization of reference books. Digitalization of accounting at this stage is a favorable electronic environment;

7. *Visualization of the reporting form.* At this stage, you can select the report submission form (table, graphs) and select a dashboard (a tool for visualizing and analyzing information about business processes and their effectiveness). The main requirement of users is the conciseness of information that can be explored through its visualization. Otherwise, the manager complains about wasting time. When visualizing reports, you need to pay attention to such basic requirements as the font of the text, the amount of numerical data, the availability of direct answers (yes or no), the colour scheme, the program in which the report is designed, and which communication channel is sent (to the phone, email). An example of a direct response in an internal report is the statement: the enterprise has certain mechanisms to function continuously in 2–3 places. In this case, the formation of a response involves confirming empathy (sensitivity, attempts to help, fruitful cooperation). Visualization aims to localize the presentation of information on any issue, but make its presentation useful and clear (answer the questions that managers asked in the form that is convenient for them). The usefulness of such a report directly depends on the competencies of the developer and users of the report. In such conditions, it is advisable to use the dashboard as a complete solution for building reports and creating indicator panels for the platform. This is a modern, professional monitoring, management and analytics tool that will allow analyzing information in a timely manner, make the right decision and develop your business. To select available software products, you need to consider:

- 1) a set of tools for reporting and creating indicator panels;
- 2) a report export system that supports various formats
- 3) report generator core power;
- 4) ability to visualize data and create your own infographics;
- 5) ability to apply the necessary filters as well as to sort, aggregate data, perform calculations of any complexity;
- 6) product versatility, the ability to create indicator panels for any field of activity (finance, trade, industry);
- 7) ability to add analytics to your app;
- 8) availability of component libraries for creating indicator panels and implementing them in your own software product;
- 9) providing a full cycle of reporting, starting from creating report layouts and ending with displaying them in the browser;
- 10) availability of necessary components for designing, editing, and viewing reports;
- 11) ability to create, view, print and export reports.
- 12) ability to create and view reports on the Internet using client-server technology;
- 13) ability to use the program on different platforms, on different operating systems, and on different hardware;
- 14) ability to create and edit reports, store, view, and deploy reports in applications.

8. *Identification of necessary fixes.* At the stage of testing a management report, as a rule, corrections and clarifications can be introduced. For example, maintaining cost estimates in various dimensions (cost, sales price), adding a new type of product.

9. *Stating the recommendations for the decision-making guide.* The problem with implementing management reports, as discussed above, is the lack of a unified accounting policy. At this stage, it is important to demonstrate to management that planned and actual data should be based on the same accounting policy rules.

10. *Detecting new requests.*

Checking the effectiveness of implementing a management report is determined by the following criteria:

- 1) management report is a regular process;
- 2) management report covers the required product life cycles;
- 3) there is a distribution of duties of responsible persons for drawing up and submitting a report;
- 4) management report is regularly discussed;
- 5) a person who makes the management report has access to the forecast information;
- 6) in the form of the management report, deviations are quickly detected and corrective actions are promptly initiated;
- 7) the report table contains not only quantitative indicators, but also qualitative, verbal information in the form of clarifications that should be taken into account;
- 8) there are effective communication processes between all participants in the process;
- 9) the organization of financial accounting at the enterprise ensures the reliability of management reports;
- 10) management report forms are easily compared with the business plan, annual budget, annual plan;
- 11) users of the management report are regularly interviewed for critical comments.

A factor in the successful implementation of management reporting in the controlling system is the optimal structure of responsibility of employees of financial management, financial director, senior accountant and other employees of the financial department (fig. 2). This helps to correctly establish responsibility for project implementation, as well as increase the speed of implementation. Most often, the functions of the finance department include financial and management accounting, as well as IFRS.

The project manager should be responsible for implementing management reporting, since all senior management personnel are involved in this project. Since reporting involves comparing a plan with a fact through financial responsibility centers, it is necessary that planning is subordinate not only to the finance department, but also to those who are directly responsible for the business process for which financial and non-financial indicators are reflected in the financial statements.

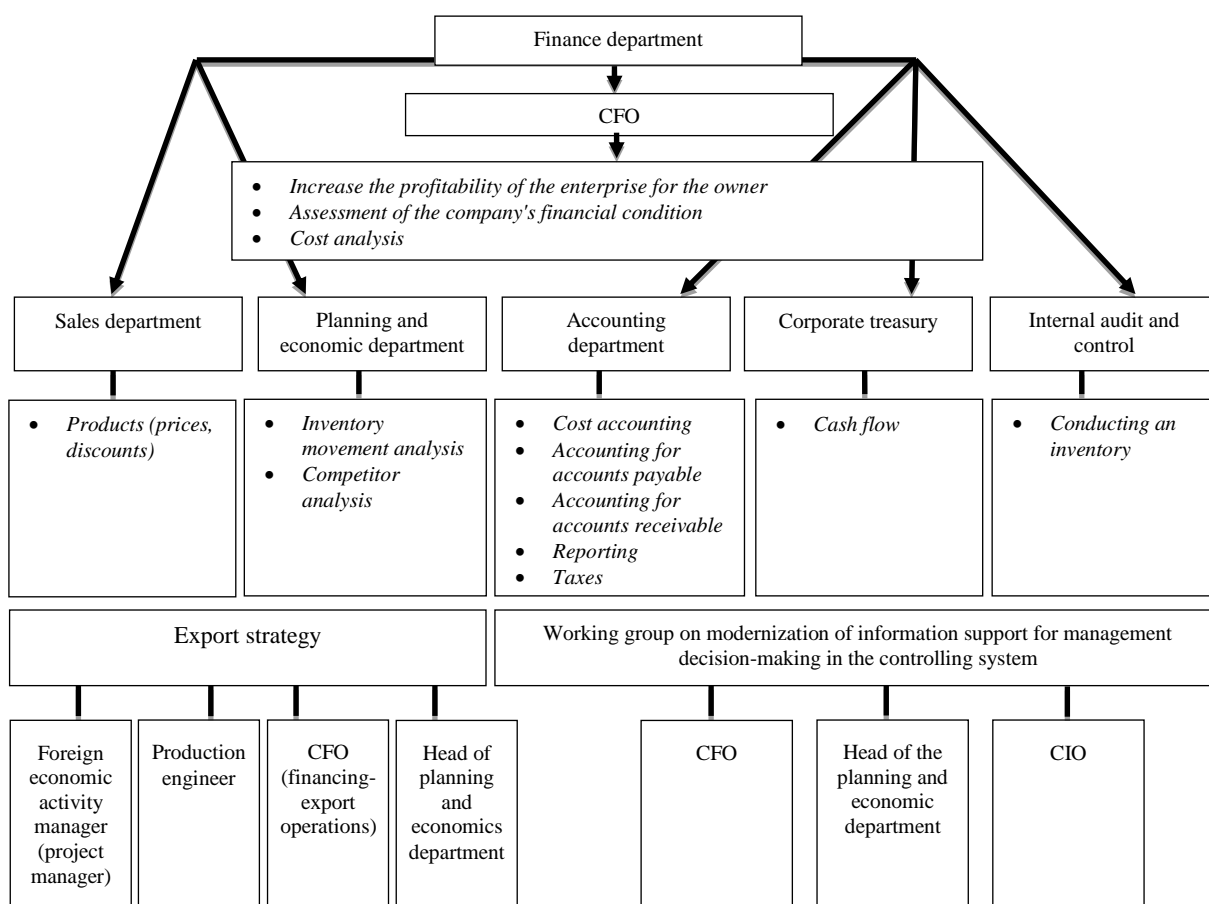


Fig. 2. Model of the company's financial department

Conclusions and prospects for further research. Management decision-making requires financiers to provide management with appropriate financial data analytics on an ongoing basis. The basis for management reporting is the initial data of the controlling system. The formation of management reports in the controlling system should take into account the specifics of the enterprise's activities, contribute to the implementation of strategic tasks, and take into account the management structure formed at the enterprise.

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