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## **INTERACTION OF FINANCIAL CONTROLLING AND COST MANAGEMENT IN PROJECT MANAGEMENT**

### **ВЗАИМОДЕЙСТВИЕ ФИНАНСОВОГО КОНТРОЛЯ И УПРАВЛЕНИЯ СТОИМОСТЬЮ В ПРОЕКТНОМ МЕНЕДЖМЕНТЕ**

Контролинг как инструмент поддержки принятия управленческих решений на основе аналитической информации способствует повышению эффективности управления бизнесом. В современных условиях рынки становятся более глобальными, цели создания ценности меняют свою конфигурацию под влиянием инновационных технологий и развития 4.0 индустрии. Для повышения эффективности деятельности предприятия, в нынешних экономических условиях, необходимо применять соответствующие сложности внешней и внутренней среды, методы и инструменты контроллинга и управления затратами. Современные организации все чаще используют проектный подход для развития своего бизнеса, где заметную роль в успехе управления затратами играет контролинг.

The globalization of economic communications, information technology development, technological progress, competition and market requirements are processes which characterize the present stage of the world economy development. For the survival and development of the enterprises, especially small ones, they must adapt not only to rapidly changing environment conditions, but also to the speed of the changes. Tasks that enterprises tackle are associated with strategic changes and renewal of production, finding new markets and good sales channels, cost management and cost reduction, development of alternative strategies, and improvement of competitiveness. Solving these problems requires strategic vision and competences of the business managers. Therefore, the management of enterprises must pay attention to the modern concepts and approaches of business management where the controlling plays a key role. Consequently, the balance between control and flexibility becomes the main point in the modern controlling process. Controlling is a tool of support for the effectiveness of project and business management.

The modern enterprise is a complex system that has developed on the basis of scientific and technical progress, the rapid changes in the external environment and highly competitive environment. In these conditions achievement of their strategic targets is not a simple task. For the operative decision-making, every manager needs timely and relevant information about the changes occurring both in external and internal environment of the enterprise, therefore enterprise management system must be constantly improved. Consequently,

according to goals formulated, time span and measure of tasks to be solved, operative or strategic controlling could be chosen. Both strategic and operative controlling have similar goals, but they differ in the modeling used for said purposes. Controlling could carry out the control process over achieving both strategic and operative goals of enterprise activities. They also differ in tasks and applied tools. Strategic controlling is a management activity that comprises the planning, testing, implementation and monitoring of strategies analyzing the following: internal and external environment; competition policy, main factors (clues) of success, strategic portfolio creation, analysis of strategic plans and parameters of performance assessment available, analysis of chain of values, analysis of strategic statement, analysis of costs, connecting with basic factors. Operative controlling is a management activity that comprises the fixing of objectives, budgeting and controlling in the medium-term, its goal is the creation of an adequate management system and it tries to optimize the proportion of costs/profit. Operative controlling leads to short-term effectiveness, it controls profit margin, costs, liquidity and productiveness. (Horvath P., 2006)

In each company, there are four hierarchical levels of management: material, operative, strategic and intellectual. These levels of management are responsible for tasks connected with running the enterprise. The first two levels (material and operative) are concerned with operative controlling and the last two levels (strategic and intellectual) are concerned with strategic controlling. Therefore, the controlling hierarchical perspective includes the levels of strategic planning, managerial control and operational control. The controlling process consists of various stages (Fig.1). Controlling is also viewed as an integral part of managerial responsibilities and activities. Thus, controlling is not something performed after the fact, but a continuous function performed along with other functions (planning, organizing and directing) necessary for the success of the organization. It is widely recognized that management’s functions include planning, organizing, staffing, directing and leading, controlling, and coordinating. It is the management’s responsibility to put enterprise resources to use, sometimes taking risks, to achieve the goals of the organization, be it to earn a profit (in the private sector) or to provide a social service (in the public sector).



*Fig.1. The main stages of the controlling process*

Source: prepared by author

Management sets goals and formulates policies, develops plans to achieve goals within the framework of the entity’s policy guidelines, implements programs of action designed in accordance with the plans, maintains information systems to report progress towards achieving the specified targets, and reviews the results of all of these activities, identifying needed changes to goals, policies and plans. (Garrison, R., Noreen, E. Seal, W., 2003) Robert Mautz and James Winjum describe various concepts of control from a historical

perspective and distinguish between accountants' views about control and management's views. (Mautz, R., 1981) They point out that management's concept of control is much broader than that traditionally espoused by accountants. Most current definitions of control refer to the strategy process in the same way. Roberty Anthony defines management control as «the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives» and later as «the process by which managers influence other members of the organization to implement the organization's strategies». (Anthony, R., 1964)

Management controls benefit rather than encumber management and must make sense within each organization's unique operating structure and environment. Managers are responsible and accountable for the quality and timeliness of program performance, increasing productivity, controlling costs, protecting resources, mitigating adverse aspects of operations, and assuring programs and functions are managed with integrity and in compliance with laws. Control is concerned with ensuring that the plan is followed. Notably, the accounting function plays a major role in the control phase. Accountants maintain the databases and prepare the reports that provide feedback to managers. The feedback can be used to reward particularly successful employees, but more importantly, the feedback can be used to identify potential problems and opportunities that were not anticipated in the plan. Based on feedback, it may be desirable to modify the plan. The feedback can be also used to identify parts of the organization that need help and those parts that can provide advice and assistance to others. Anthony defines «managed costs» in making a distinction between management control and technical control. Management control involves the whole organization and includes those parts of the organization where managed costs are significant. (Anthony, R., 1964)

Technical control involves only activities where there are no significant managed costs. Management control covers the whole organization, where technical control relates to subunits, or activities of subunits. The focus of management control has changed over the years. Historically, the focus of management control was accounting, based on financial information. Factory accounting, budgeting and cost accounting were the main activities performed. Management accountants provided support in areas of planning and control using financial data. Non-financial data was used only in providing financial advice. The term «control» is used in a wide variety of situations to describe many different phenomena. Consequently, different disciplines use the term differently.

The project management approach is relatively modern. It is characterized by methods of restructuring management and adapting special management techniques, with the purpose of obtaining better control and use of existing resources. The rapid rate of change in both technology and the market has created enormous strains on existing organizational forms. Project management has long been discussed by corporate executives and academics as one of several workable possibilities for organizational forms of the future that could integrate complex efforts and reduce bureaucracy of the traditional business organizational form.

Projects and project management processes vary from industry to industry; however, there are more traditional elements of a project. The overarching goal is typically to offer a product, change a process or to solve a problem in order to benefit the organization. Project Controls encompass the people, processes and tools used to plan, manage and mitigate cost and schedule issues and any risk events that may impact a project. Project control is substantially equivalent to the project management process stripped of its facilitating subprocesses for safety, quality, organizational, behavioural, and communications management.

Project Management Institute, Inc. (PMI) defines project management as «the application of knowledge, skills, tools and techniques to a broad range of activities in order to meet the requirements of a particular project.» The process of directing and controlling a project from start to finish may be further divided into basic phases:

1. Project conception and initiation.
2. Project definition and planning.
3. Project launch or execution.
4. Project performance and control.
5. Project close.

Classical management is usually considered to have five functions or principles: Planning, Organizing, Staffing, Controlling, Directing. Project management is the planning, organizing, directing, and controlling of company resources for a relatively short-term objective that has been established to complete specific goals and objectives. Furthermore, project management utilizes the systems approach to management by having functional personnel (the vertical hierarchy) assigned to a specific project (the horizontal hierarchy). The project manager does not staff the project. Staffing is a line responsibility. The project manager has the right to request specific resources, but the final decision of what resources will be committed rests with the line managers. Moreover, not all industries have the same definition for a short-term project. Long-term projects, which consume resources full-time, are usually set up as a separate division or simply as a line organization.

The project management is designed to manage or control company resources on a given activity, within time, within cost, and within performance. Time, cost, and performance are the constraints on the project. If the project is to be accomplished for an outside customer, then the project has a fourth constraint: good customer relations. (Kerzner, H. R., 2013)

Project controls are the data gathering, management and analytical processes used to predict, understand and constructively influence the time and cost outcomes of a project or program, through the communication of information in formats that assist effective management and decision-making. In general, the basic elements and directions of activities of the project costs control are cost management, project budgeting, project cost estimating and analysis, life cycle cost analysis, cost reporting and analysis, cost performance index, analysis of resource management.

The cost control process monitors and controls costs and changes to the project budget. The quality control performance process measures specific project results to determine whether the project is meeting quality standards. This process tracks team member performance, provides feedback, resolves issues and coordinates changes to maintain and improve project performance. The performance reporting process collects and distributes performance information - including status reports, progress reports and forecasts. This process manages stakeholder communications and works with stakeholders to ensure that requirements are satisfied and issues are proactively resolved. The function of controlling is maintained by the management control system. The main purpose of monitoring and controlling activities is to be proactive in finding issues ahead of time and taking corrective action. Project controls encompass the people, processes and tools used to plan, manage and mitigate cost and schedule issues and any risk events that may influence a project. The execution of a project is based on a robust project plan and can only be achieved through an effective schedule control methodology. Furthermore, it is widely recognized by executives and scientists that planning and monitoring plays a major role as the cause of project

failures. The project performance can be improved if dedicated project controls systems are in place.

The financial controlling comprises the main processes such as cost accounting, budgeting, project investment assessment, cost recovery, where each process contains a number of sub-processes. Data collection and information processing capacity in financial accounting module are largely driven by external reporting requirements and financial management needs. Information technology and staff capacity are generally sufficient for current billing and accounting purposes, but would likely require enhancement to be able to support the additional tasks associated with decision support analysis. Current revenue and cost data represent potential building blocks for expanding cost accounting analysis. The current service and outcome data represent a greater challenge for the project. Successful implementation of a decision support software system of controlling requires further extending on the existing incentives and capacity in information technology, data development, and staff capacity.

The wide range of challenges such as market globalisation, increasing focus on core competences, greater customer-orientation in terms of products and services, as well as advances in information and communications technology have set new requirements for management and controlling. In other words, controlling now fulfils an essential service function with regard to the management of an organisation.

In today's world the traditional boundaries between management and controlling are slowly disappearing, and as a result controlling plays an increasingly important part in all executive tasks. Controllers and managers now form a symbiosis, thus controlling largely depends on cooperation between these two groups. The traditional tasks of a controller are as follows - project controllers manage the financial aspects of projects for clients and organizations in a wide range of industries. They are financial managers who oversee project revenues and expenditures to verify that projects are completed on time and within budgetary guidelines.

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