

## INTEGRATED PROJECT MANAGEMENT IN THE AGRO-CONSTRUCTION COMPLEX: EFFICIENCY ANALYSIS AND STRATEGIES FOR IMPROVING CORPORATE IDENTITY

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**Introduction.** Ukraine is known for its fertile land and a variety of agricultural crops, which creates significant potential for the development of the agro-construction complex. This complex includes agriculture, animal husbandry, fisheries, and industries related to the processing of agricultural products. The agro-construction complex is a system of enterprises and organizations involved in the design, construction, and maintenance of agro-industrial complex facilities. It encompasses construction companies as well as organizations that specialize in the production of machinery, equipment, and infrastructure for the agricultural sector. In the current conditions, where construction enterprises are in high demand, the integrated project management in the agroconstruction complex has become increasingly relevant. This approach to management is an important tool that ensures the stability of project implementation and contributes to the formation of an effective corporate identity for construction enterprises.

Integrated project management in the agro-construction complex is an approach that combines the management of various project aspects, such as resources, costs, timelines, and quality, to achieve the successful completion of project tasks in agriculture and construction. This approach helps optimize project management processes, ensuring effective use of resources, avoiding delays, and maximizing quality outcomes. Integrated project management is crucial not only for the present agro-construction complex but also for construction companies, requiring constant structural analysis. It helps increase production efficiency, reduce costs, and accelerate project completion, which is especially important in the context of constant market changes and business management complexities.

**Analysis of recent research and publications.** Research on integrated project management in the agro-construction complex has been ongoing for several decades. Among the well-known scholars and researchers who have worked in this field, Smetanyuk O.A. and Bondarchuk A.V. [1] are particularly notable for their focus on the study of project analysis and the evaluation of project effectiveness. These researchers also paid significant attention to the structure of project analysis. They viewed a project as a set of activities aimed at achieving a defined final goal within the constraints of limited resources and predetermined start and end dates. Mykytiuk P., Brych V., Mykytiuk Y., and Trush I. in their works describe the main methods and tools used for effective project management, including planning methods, risk management, and performance evaluation. These scholars place particular emphasis on risk and change management, examining the importance of managing risks in a project, especially in the context of unforeseen factors and the need for real-time plan adjustments [2]. Ryzhakova G. and Petrukha N. identify integrated project management as one of the key tools for the innovative development of enterprises, which will create a synergistic effect to enhance the efficiency of stakeholder activities [3].

The topic of integrated project management in the agro-construction complex remains relevant and the research continues, as new challenges and technologies constantly change approaches to project management. However, questions regarding the identification, justification, and analysis of performance indicators for such management remain insufficiently explored.

**Objective of the article.** The objective of this article is to investigate effective integrated project management in the agro-construction complex and to develop strategies for improving such management for enterprises

**The main material of the study.** Integrated project management ensures coordination between different teams and processes, reduces risks and costs, increases productivity and project execution quality, and promotes overall effective corporate management. When applying such management, it is important to take into account the specifics of the agro-construction complex, such as seasonal work, the large volume of resources, and the need to consider natural factors. The main characteristics of integrated project management in the agro-construction complex are [4; 5]:

- monitoring all aspects of the project: Consideration of agricultural production processes and construction work, management of planning and task execution.
- Accounting for sector specifics: Management of resources for land cultivation, use of agricultural machinery, and planning and construction of agricultural facilities.
- Flexibility and adaptability: The ability to quickly respond to changes in plans or project conditions, taking into account the specifics of the agro-construction sector.
- Collaboration with various specialists: Taking into account the specifics of working with agricultural enterprises, construction companies, and engineering firms.

The presence of integrated project management ensures the effective and synergistic work of all parties involved in a project within the agro-construction complex. Table 1 compares the costs of different types of projects in agro-construction, providing information on total expenses, capital expenditures, government support and profit.

Table 1

Comparison of Costs for Different Agro-Construction Projects

Project Type	Construction Cost (thousand UAH)	Share of Capital Expenditures (of total cost), %	Average Payback Period (years)	Government Support (UAH)	Expected Annual Profit (thousand UAH)
Animal Farm (10,000 heads)	50,000	70	6–7	5,000	8,000
Grain Elevator (30,000 tons)	45,000	60	5–6	4,500	7,000
Greenhouse Complex (2 ha)	20,000	50	4–5	3,000	5,000
Fruit Storage (5,000 tons)	15,000	55	4	2,500	4,500

Source: completed on the basis of sources [4]

The effectiveness of integrated project management can be characterized by the following indicators: timeliness of project completion (the more accurate the definition of deadlines for tasks, the more effective the project management); budget discipline (effective project management requires accurate cost estimation and adherence to the planned budget), quality of work performance (it is important that each project stage is completed with high quality and according to requirements); client satisfaction (the successful completion of a project and the satisfaction of its results are key factors in the effectiveness of project management in the agro-construction complex); resource utilization (efficient use of resources (human, material, financial) during project execution) [6].

The analysis of these indicators helps understand how effectively the project management system works in the agro-construction complex and reveals opportunities for improvement. An essential condition for examining the completeness and quality of project decisions in integrated project management is the use of project analysis, which consists of special sections. The structure of this analysis allows evaluating the effectiveness of integrated management and the feasibility of these projects (Fig. 1).

Commercial project analysis in the agro-construction complex focuses on assessing the commercial attractiveness and competitiveness of a project. The main elements of commercial analysis include (Figure 1) [2]:

- market Analysis: Assessing current and forecasted demand for agricultural products; studying the competitive environment; alternative offerings; analysis of distribution channels, logistics, and market access.
- Marketing Analysis: Defining the target audience of consumers; developing a marketing strategy (pricing, promotion, distribution); evaluating the effectiveness of marketing activities.
- Product Analysis: Assessing the competitive advantages and uniqueness of the offering; analyzing innovation and technological excellence, evaluating compliance with market standards and requirements.
- Sales and Contractual Relations Analysis: Assessing the potential for long-term contracts; analyzing supply, logistics, and transportation conditions; evaluating the solvency and reliability of key consumers.

Commercial analysis helps identify market opportunities and risks for the project and assess its financial attractiveness [7].

Financial analysis of projects in the agro-construction complex has several characteristics. The main ones are:

- Seasonality: The impact of agricultural seasons on cash flow and planning. The average seasonal variation in income can reach 50–70% (table 2).
- Significant Impact of Natural and Climatic Factors: Consideration of weather conditions, soil fertility, and water availability, which can reduce crop yields by up to 20% under unfavorable conditions [8].
- Revenue Specificity: Dependence on the productivity of agricultural production – for example, the price of grains can fluctuate by 30–50% depending on weather conditions.
- Government Support: Subsidies and tax incentives for agribusiness, which can cover up to 20–30% of construction costs for new facilities.
- Environmental Requirements: Compliance with environmental standards, which may require an additional 10–15% investment in environmental protection measures.

Project effectiveness analysis includes evaluating revenue from product sales, seasonal variations in costs, technological solution alternatives, construction or reconstruction options, and government support. According to various studies, the payback period for agro-construction projects typically ranges from 5 to 7 years.

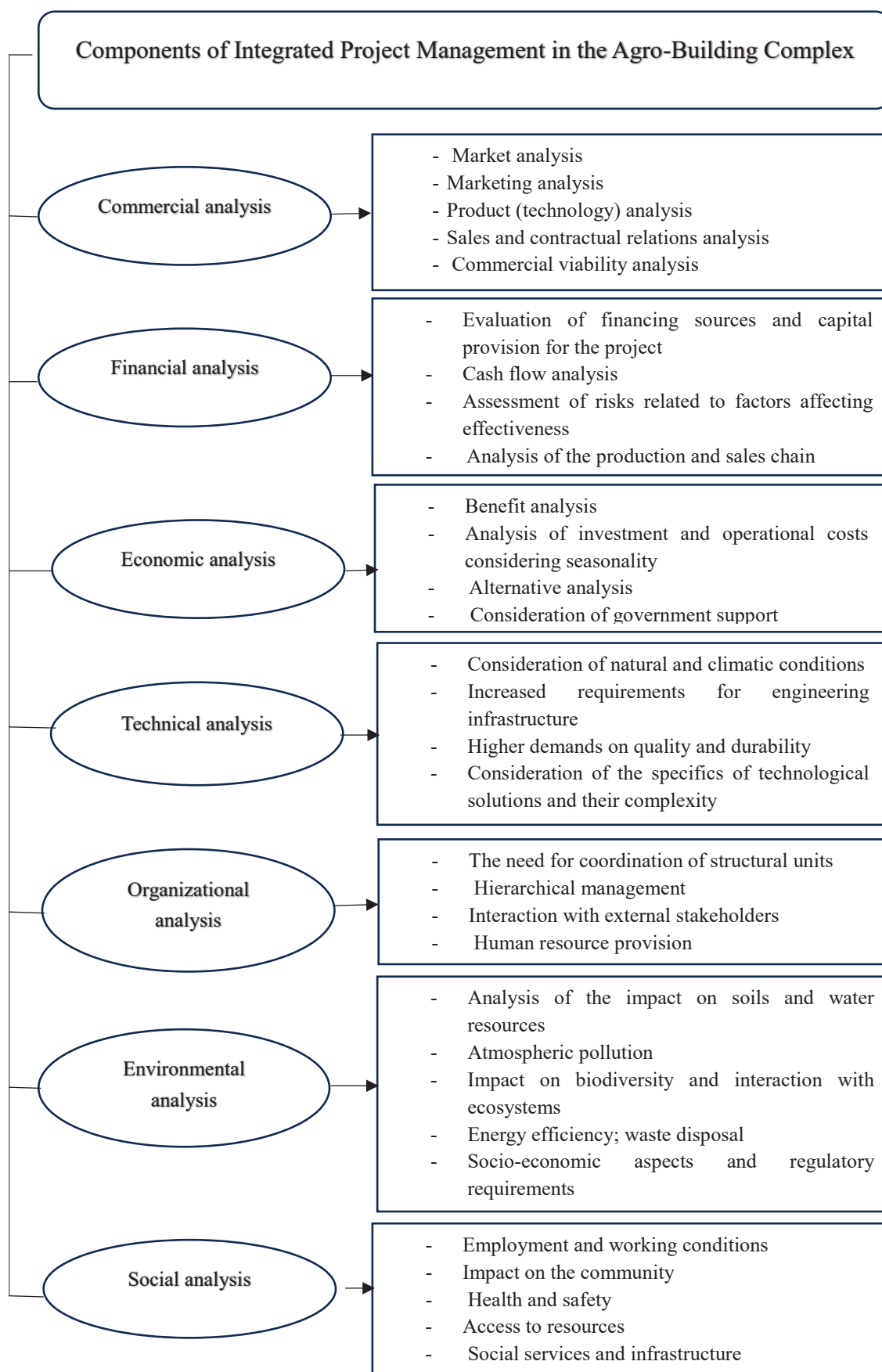
Technical analysis requires attention to natural conditions (optimal site selection, climate factors), high demands on engineering infrastructure (water supply, energy provision, transport, where engineering costs can account for up to 25–30% of the total project cost), specialized technological solutions (agro-construction equipment, flexible production lines), the quality and durability of materials, and complex design solutions integrating construction and technological systems [9; 10].

Organizational analysis involves evaluating the management structure, interactions with external partners (agricultural enterprises, government bodies), the preparation of highly qualified specialists (the need for experts may exceed 10–15% of the total project team), the efficiency of technological processes, and systems for quality and risk management. For example, implementing a monitoring system can reduce operational costs by 10–12% [11].

Environmental analysis considers the requirements of legislation, environmental impact assessments, resource use efficiency (for example, optimizing water use can reduce water supply costs by 15–20%), the implementation of sustainable technologies, and the involvement of local communities. Environmental certification programs can increase project costs by 5–7%, but they also reduce environmental risks and improve reputation [6].

Social analysis requires consideration of the impact of projects on local communities, infrastructure, economic development, and cultural factors. It is also important to ensure inclusivity and the involvement of women and vulnerable groups. According to research, agro-construction projects can create up to 300 new jobs per project, significantly boosting economic activity in local communities [12; 13].

To improve project management in the agro-construction complex, the following strategies are proposed: applying a systematic approach, utilizing modern management technologies, ensuring active stakeholder participation, conducting risk assessments, emphasizing social and environmental responsibility, training personnel, adopting flexibility in management, and monitoring effectiveness. These strategies will contribute to improved project efficiency and the sustainable development of the agro-construction complex.



**Figure 1. Components of effective integrated project management in the agro-construction complex**

*Source: compiled on the basis of sources [5]*

Table 2

## Seasonality and its Impact on Cash Flow, 2023

Parameter	January, %	March, %	June, %	September, %	December, %
Income (Revenue from product sales)	0	0	30	3	0
Production Costs	5	10	25	5	5
Total Operating Costs	10	12	25	3	1
Net Profit	-15	-22	5	-2	-6

Source: completed on the basis of sources [4]

**Conclusions.** Integrated project management in the agro-construction complex has a significant impact on the implementation and outcomes of corporate governance. It allows for process optimization, leading to reduced costs and time in project implementation, thereby increasing the company's efficiency and competitiveness. Through a systematic approach and coordination of all project stages, integrated management increases the quality of the final product, positively influencing the company's reputation.

Integrated management encourages the adoption of new technologies and methods, promoting the company's growth and adaptation to changing market conditions. By reducing the likelihood of negative outcomes through systematic monitoring and risk assessment, construction companies become more resilient to external challenges.

Moreover, integrated management promotes the consideration of environmental and social aspects, which can enhance the company's responsibility and reputation in the market. Stakeholders using integrated management may be more attractive to investors, as they demonstrate efficiency and transparency in their operations. Integrated project management creates the conditions for the stable and sustainable development companies, increasing their lity to adapt to changes and market challenges.

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JEL L6, O12, O14, Q1, Q2

**Nadiia Onikiienko**, Candidate of Economic Sciences, Assistant of Management Department, Kyiv National Economic University named after Vadym Hetman. **Integrated project management in the agro-construction complex: efficiency analysis and strategies for improving corporate identity.**

The article explores the importance of integrated project management in the agro-construction complex, emphasizing its crucial role in enhancing the efficiency and success of projects. Integrated project management involves coordinating and combining the key elements of project management—planning, execution, control, and evaluation—into a unified system. In the context of the agro-construction sector, this approach covers the management of construction projects, the production of agricultural machinery, resource distribution, and other related areas. To achieve optimal project outcomes, it is essential to conduct a comprehensive analysis in several areas, including commercial, financial, technical, economic, organizational, social, and environmental analyses. The article highlights that the effectiveness of integrated project management in the agro-construction complex depends on factors such as proper planning, organization, teamwork, technological innovations, risk management, financial control, stakeholder interaction, quality assurance, and continuous staff development. The successful integration of these factors is critically important for enhancing project management efficiency, ensuring the competitiveness of construction enterprises, productive corporate management, and corporate identity. By incorporating these key elements, companies can enhance their ability to manage complex projects effectively, reduce risks, and achieve greater long-term success.

**Keywords:** agro-construction complex, enterprises, integrated project management, corporate management, corporate identity, efficiency, project analysis.

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JEL L6, O12, O14, Q1, Q2

**Онiкiєнко Надiя Володимирiвна**, кандидат економiчних наук, асистент кафедри менеджменту Київського національного економiчного унiверситету iменi Вадима Гетьмана. **iнтегроване управлiння проєктами в агробудiвельному комплексi: аналiз ефективностi та стратегiї вдосконалення корпоративної iдентичностi.**

В статтi обгрунтовано, що iнтегроване управлiння проєктами є важливим iнструментом для забезпечення ефективностi та синергiї в агробудiвельному комплексi, де поєднуються аграрнi та будiвельнi аспекти. Цей пiдхiд дозволяє знизити ризики, пiдвищити продуктивнiсть i якiсть робiт, оптимiзувати використання ресурсiв, а також сприяти формуванню ефективної корпоративної iдентичностi. Врахування специфiки агробудiвельного сектору, зокрема сезонностi робiт, масштабiв ресурсiв та природних умов, є важливим чинником у забезпеченнi успiху проєктiв. Актуальним є використання сучасних iнструментiв управлiння, таких як програмне забезпечення для планування та монiторингу, що дозволяє забезпечити точнiсть i своєчаснiсть виконання завдань. Одним з основних аспектiв iнтегрованого управлiння проєктами є комплексний пiдхiд до оцiнки ефективностi проєктiв, включаючи термiни виконання, бюджетну дисциплiну, якiсть робiт та задоволення клiєнтiв. Такi показники дають змогу не лише вимiряти успiх проєкту, але й визначити можливостi для його вдосконалення. Важливим етапом у забезпеченнi повноти та якостi рiшень є проєктний аналiз, що включає комерцiйний, фiнансовий, технiчний, економiчний, органiзацiйний, екологiчний та соцiальний аналiзи. Кожен з цих етапiв дозволяє оцiнити ризики, вигоди, витрати та можливостi проєкту, забезпечуючи надiйнiсть i життєздатнiсть реалiзацiї. Особливiсть фiнансового та економiчного аналiзiв полягає в урахуваннi високої капiталомiсткостi, сезонностi та природно-клiматичних умов, що iстотно впливають на витрати та доходи в агробудiвельних проєктах. Технiчний аналiз включає детальний розгляд iнженерних рiшень, iнфраструктури та вимог до матерiалiв, що важливо для забезпечення довгочасностi та безпеки об'єктiв. Органiзацiйний та екологiчний аналiзи оцiнюють ефективнiсть взаємодiї мiж рiзними учасниками проєкту та його вплив на довкiлля, зокрема, на локальнi громади та природнi ресурси. Для вдосконалення корпоративного управлiння в агробудiвельному комплексi важливо застосовувати системний пiдхiд, враховувати зацiкавленi сторони, здiйснювати регулярний монiторинг ризикiв та адаптуватися до змiн. Застосування сучасних технологiй, монiторинг ефективностi та забезпечення фiнансової стабiльностi є ключовими для успiху проєктiв у цiй галузi.

**Ключовi слова:** агробудiвельний комплекс, iнтегроване управлiння проєктами, корпоративне управлiння, корпоративна iдентичнiсть, пiдприємства, ефективнiсть, проєктний аналiз.