

Summary

Architectural project management is an activity with high degree of complexity and requires professional knowledge in the field of architectural design, building law, widely understood construction, including knowledge of materials and geological conditions in the scope of assessing the possibility of erecting buildings on the area selected by investors. It is also advisable for architects to have a sense of aesthetics, the ability to recognize the needs in terms of adapting buildings to the expectations and safety of their future users. At the same time, architectural design takes place in design offices and is usually a type of collective activity carried out by a team of employees consisting of contractors - architects, architects assistants as well as project managers and office managers. Therefore, as a type of organized activity, architectural design is associated with the need to manage the company in all its functional aspects, at the operational as well as strategic level. It also requires the use of management instruments, especially widely developed professional methods of project management.

The thesis was aimed at achieving the main goal, which was to identify the conditions for managing an architectural project in terms of implementing pro-ecological Solutions and sustainable development in construction, and to verify the main hypothesis: Architectural project management shapes the effectiveness of implementing sustainable Solutions in building facilities and ultimately contributes to sustainable development construction. The content of the dissertation consists of a theoretical part written on the basis of extensive studies of domestic and foreign literature on the subject, and a research part based on the results of my own research, conducted in the form of surveys among designers and project managers employed in architectural offices and development companies. Particularly important in determining the role of architectural project management in achieving effects in the form of sustainable construction was the study conducted among companies - members of the PLBGC (Polish Green Building Council), whose owners and project managers have extensive knowledge and experience in the design of sustainable buildings. In addition, among the respondents, including members of the board of PLBGC, 4 people were selected, specialists in the field of sustainable design and innovative BIM technologies, who agreed to participate in the free interview. The information obtained in this way was confronted with the results of the survey.

The content of the dissertation has been divided into five chapters. The first chapter was devoted to resolving disputes and dilemmas related to defining a project in management and quality Sciences. Particular attention was paid to the type of sustainable project, the way of defining it was

discussed, the principles of sustainable project management were presented, and its practical potential in achieving sustainable development goals was indicated. In the second chapter, the focus has been shifted to the area of managing architectural projects as well as investment and construction processes. The content of the third chapter was devoted to the development of the issues of sustainable development and social responsibility in the management of architectural projects and the creation of sustainable buildings. The fourth chapter of the dissertation raises the problem of innovation in the architectural industry in the context of achieving sustainable development goals in the construction industry. The way of organizing work in an architectural design office was presented. Then the types of organizational structures used, practices in appointing project managers and executive teams to work related to the project were discussed. The fifth chapter of the dissertation has an entirely research character and is devoted to discussing the results of own research.

To sum up, the considerations carried out on the basis of literature studies as well as quantitative and qualitative research led to the achievement of the main objective and specific objectives, and finally to the positive verification of the auxiliary hypotheses and, as a consequence, the confirmation of the main research hypothesis of the dissertation.

Architectural project management contributes to the development of sustainable construction by achieving sustainable development goals. In particular, in the scope of Objective 9: "Build a stable infrastructure, promote sustainable industrialization and support innovation" by improving the exchange of information in the design and implementation of investment and construction projects. facilitating project teams' handling and segregation of data generated by complex infrastructural projects, creating a common data environment improves cooperation and enables effective design, construction and life cycle management of buildings, more effective design of structures and pro-ecological Solutions, and savings in construction costs. In relation to achieving Sustainability Goal 6: "Ensure access to water and sanitation for all through the sustainable management of water resources", architectural design management optimizes water efficiency through data-driven green design and making operational decisions during the design and construction phase. Also in the scope of Sustainable Development Goal 11: "Make cities and human settlements safe, stable, sustainable and inclusive" architectural project management with the use of professional management methods and innovative design technologies, allows to plan the most favorable

**pro-ecological Solutions in the designed buildings with limited funds, to generate the greatest value,** to make savings that can be spent on other publicly useful purposes, e.g. housing, waste management, environmental protection. In addition, Goal 12.2: "By 2030, ensure sustainable management and efficient use of natural resources" and Goal 12.5: "By 2030, significantly reduce the level of waste generation through prevention, reduction, recycling and reuse" can be implemented by managing architectural and construction projects with including sustainable Solutions focused on the use of renewable energy sources, energy-saving technologies, rational water management, the use of ecological materials in construction, including their recycling, designing green buildings and ultimately passive buildings.

Sustainable management of an architectural project means giving the designed building sustainable features that will have a positive effect on the environment and people throughout the life cycle of the building. Ultimately, it leads to the development of sustainable construction, but it is associated with numerous challenges that design offices and construction companies must meet. It introduces the need to invest in new tools and software, train staff in the field of innovative pro-ecological Solutions in construction and modern design technologies, create systemic legal and administrative Solutions that help overcome resistance to changes and funds that make sustainable construction more accessible. It is equally important to ensure full cooperation between all participants in the construction process as well as transparency and understanding of representatives of the entire construction industry in pursuit of the common goal of providing high-quality sustainable architectural designs, their implementation and use.