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FEATURES PREPARATION OF THE PROJECT MANAGER IN THE ARCHITECTURE AND CONSTRUCTION INDUSTRY

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INTRODUCTION: The architectural and construction sphere is very relevant in the modern world with numerous social, economic and technological challenges. A special role in the industry is played by the activities of the manager and its specificity. The management of domestic architectural and construction enterprises is interested in the presence of qualified economic professionals who could professionally carry out management tasks, including planning and operational management of all aspects of economic and production activities of the organization, marketing research, price and commodity policy, as well as financial activities and financial activities resources.

FORMULATION OF THE ARTICLE OBJECTIVES. The purpose of the study is to identify and analyse the theoretical and practical features of the activity of a manager in the architectural and construction industries.

RESEARCH HYPOTHESIS: Architecture and construction manager has a combination of theoretical and practical skills that are needed for successful activities. The peculiarities of this role include several areas of activity, including theoretical knowledge, project management, understanding of legal aspects, leadership and communications skills, financial management, technical knowledge and innovative approach. This scientific and applied constant is a benchmark for the selection of managers in domestic architectural and construction enterprises and requires description, concretization and verification in practice.

METHODS: analysis of literature – review of scientific publications, journals, books and other sources for collecting and analyzing information about this topic of research; system analysis – study of the object of study as a complex system with interconnected elements; deductive and inductive methods – the use of logical thinking to derive general principles or conclusions from specific facts or data; The interdisciplinary approach is the integration of knowledge, methods and practices in different disciplines to solve a certain problem. The combination of these methods ensures the quality of the study.

CONCLUSIONS: The manager in the architectural and construction industry plays a critical role in managing construction projects and enterprise development. This position requires a combination of theoretical knowledge of architectural and construction processes with practical skills in project management. The peculiarities of this role include several areas of activity, including theoretical knowledge, project management, understanding of legal aspects, leadership and communications skills, financial management, technical knowledge and innovative approach. Ukraine has considerable potential in the development of the architectural and construction industry, and managers in this area have an important role in the realization of this potential. Ensuring effective management of construction and development projects will contribute to the sustainable and progressive development of the Ukrainian economy.

KEYWORDS: architecture and construction industry; manager; project; management decisions; risks; construction technologies; construction standards and regulations; architectural and engineering solutions.

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ОСОБЛИВОСТІ ПІДГОТОВКИ ПРОЕКТНОГО МЕНЕДЖЕРА АРХІТЕКТУРНО-БУДІВЕЛЬНОЇ ГАЛУЗІ

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ВСТУП: архітектурно-будівельна сфера є дуже актуальною в сучасному світі з численними суспільними, економічними та технологічними викликами. Керівництво вітчизняних архітектурно-будівельних підприємств зацікавлено в наявності кваліфікованих економічних фахівців, які могли б професійно виконувати управлінські функції, включаючи планування, організацію та оперативний контроль за всіма аспектами господарської та виробничої діяльності маркетингової аналітики, цінової та товарної політики, а також фінансової діяльності.

МЕТА ДОСЛІДЖЕННЯ: визначити та проаналізувати особливості підготовки проектного менеджера архітектурно-будівельної галузі.

ГІПОТЕЗА ДОСЛІДЖЕННЯ: проектний менеджер у сфері архітектури та будівництва формує загальні та спеціальні компетенції, які охоплюють економіко-управлінські та фахові компетенції. Особливості цієї ролі включають декілька напрямків діяльності, зокрема теоретичні знання, управління проектами, розуміння правових аспектів, навички у лідерстві та комунікаціях, фінансове управління, технічні знання та інноваційний підхід. Ця науково-прикладна константа є орієнтиром для відбору менеджерів у вітчизняних архітектурно-будівельних підприємствах конкретизації та перевірки на практиці.

МЕТОДИ: аналіз літератури – огляд наукових публікацій, журналів, книг та інших джерел для збирання та аналізу інформації про дану тему дослідження; системний аналіз – вивчення об'єкта дослідження як складної системи з взаємозв'язаними елементами; дедуктивний та індуктивний методи – використання логічного мислення для виведення загальних принципів або висновків із конкретних фактів чи даних; міждисциплінарний підхід – інтеграція знань, методів і практик з різних дисциплін для розв'язку визначеної проблеми. Комбінування цих методів забезпечує якість проведеного дослідження.

ВИСНОВКИ: менеджер у архітектурно-будівельній галузі відіграє ключову роль в проектному управлінні будівельними об’єктами та розвитку підприємства. Ця посада вимагає поєднання теоретичних знань про архітектурні та будівельні процеси з практичними навичками в управлінні проектами. Особливості цієї ролі включають декілька напрямків діяльності, зокрема теоретичні знання, управління проектами, розуміння правових аспектів, навички у лідерстві та комунікаціях, фінансове управління, технічні знання та інноваційний методи організації. Україна має значний потенціал у розвитку архітектурно-будівельної галузі, і менеджери в цій сфері мають відігравати ключову роль у воєнній та повоєнній відбудові. Забезпечення ефективного управління проектами будівництва сприятиме сталому і прогресивному розвитку української економіки в умовах воєнного та повоєнного відновлення.

КЛЮЧОВІ СЛОВА: архітектурно-будівельна галузь; менеджер; проект; управлінські рішення; ризики; будівельні технології; стандарти та нормативи у галузі будівництва; архітектурні та інженерні рішення.

Problem statement. In today's world, with its many social, economic and technological challenges, architecture and the construction industry are highly relevant. Here is a list of a few of the main points which underline its relevance:

1. There is a demand for sustainable expansion and redevelopment of the urban environment due to increasing urban populations and rapid urban growth. In the design and construction of residential, commercial and infrastructure facilities that meet the needs of developed urban areas, architects and construction professionals play a crucial role.
2. Environmental issues for sustainability: Increasing environmental awareness and the drive for sustainable development require the development of buildings that are energy efficient, minimise negative environmental impacts and use renewable materials and technologies.
3. Innovation and technological improvements: introducing the latest building materials, construction technologies and automated building systems develops the industry and ensures higher quality and more efficient construction projects.
4. Meeting global challenges: Modern challenges require adaptive architectural and construction solutions that can respond to changing conditions and needs, such as climate change, population migration, globalisation and pandemics. Thus, responding to the challenges of our time by developing a sustainable and innovative environment for consumption and work, architecture and construction remain highly relevant.

Another aspect is the activity of the manager of an architectural and construction company. In our opinion, managing various aspects of the business related to construction projects, production of building materials, organisation of work processes and personnel management are among the professional activities of the manager of an architectural and construction company. The manager needs to have a sound knowledge of both architecture and construction as well as business management. Developing and controlling a business strategy, planning and coordinating construction projects, analysing the market and managing marketing processes, managing the company's finances and resources, and ensuring a high level of quality of work and the development of the company are among the main responsibilities of a manager in an architecture and construction company. In addition, maintaining documentation, interacting with contractors, resolving legal issues, ensuring compliance with legislation and standards, managing staff and creating a favourable corporate culture are also the responsibilities of an architectural and construction manager. The role of the manager of an architectural and construction company therefore involves a number of important tasks that involve managing business processes, finances, resources and people to successfully deliver projects and develop the company.

In general, it is necessary to master the new rules of adapting to and interacting with the environment in the current conditions of operating architecture and construction companies in Ukraine. It is necessary to use modern approaches, principles, effective methods and tools of business management for successful functioning in the competitive environment. The management of domestic architectural and construction companies is interested in the availability of qualified economic specialists who could professionally perform management tasks, including planning and operational management of all aspects of the organisation's economic and production activities, market research, pricing and product policy, as well as financial activities and providing companies with credit resources.

Analysis of recent research and publications. This problem is not sufficiently treated in the modern research, there are no generalising works at all, but some aspects are identified in the researches of scientists, as they are presented in the following. In the works of Ukrainian scientists various aspects of this problem have been studied and presented, such as V. Karpov (2021); Y. Veligotska (2017); O. Pasko and M. Kravchenko (2023); O. Danchenko, V. Zanora (2019); S. Dunda, T. Rybachuk-Yarova and I. Tiukha (2022); I. Kurashova (2021); M. Savchyn (2020); O. Marchenko and D. Sushko (2018); L. Lukianova, I. Androshchuk and O. Banit (2019); R. Trach, H. Ryzhakova and V. Kryzhanovsky (2017); L. Zgalat-Lozynska and O. Zgalat-Lozynsky (2019); D. Chernyshev, E. Zayats and V. Kovalov (2018).

Formulation of the article objectives. The purpose of the study is to identify and analyse the theoretical and practical features of the activity of a manager in the architectural and construction industries.

Presentation of the main research material. An architectural and construction manager plays an important role in organising and managing construction and development projects. This position requires combining theoretical knowledge of architecture, construction and management with practical skills in these areas.

The most important theoretical aspects of the activities of an architectural and construction manager are the knowledge of building design, construction technologies, construction standards and regulations, architectural and engineering solutions. In addition, the manager will need to understand the technical aspects of construction, including structural calculations, materials specifications and technical aspects of construction. Practical aspects of the manager's activities include the ability to manage construction projects, planning, budget control, communication with clients and contractors, human resources management and conflict resolution. The manager must be able to assess risks and make management decisions aimed at achieving project objectives, and must have an understanding of the economic and legal aspects of construction.

An architectural and construction manager has both the theoretical and the practical skills that are essential for the successful performance of the role. This role is characterised by several areas of competence: theoretical knowledge, project management, legal knowledge, leadership and communication, financial management, technical knowledge and innovation.

Theoretical knowledge. An architectural and construction manager needs to understand the basic concepts of architecture and construction, including design principles, technical standards and regulations, construction materials and technologies. The manager should have an understanding of the principles of design, the cultural and historical contexts of architecture, and the processes of spatial planning and the composition of architectural objects. He or she should also have knowledge of technical standards and regulations, construction materials and technologies. This will enable him or her to understand the construction process, the choice of materials, their technical characteristics and the possibilities of using modern technologies in construction.

Thus, the profession of architect is a type of activity that contributes to satisfying the social, humanitarian and physiological needs of a person by creating comfortable living conditions. Historical periods when supporters of the art of architecture and construction study the lives of architects and the objects of their designs even after graduation are important examples of respect for the professions of architects and builders.

The main stages, which play an important role as examples in the professional portrait of a modern specialist, can be the historical styles of the Renaissance or Baroque: The role of professionals in the synthesis of the arts in the Renaissance was based on scientific generalisation and the combination of mathematical knowledge with the mastery of architectural design, painting and sculpture; in the Baroque period in Europe, architects were transformed from craftsmen into respected professionals and theorists, who became artists in society at the level of respected artists of the new era; in the 16th century in Europe, in addition to craftsmen and painters, the professions included architects, painters and sculptors with a scientific education, while the academies brought together architects who achieved extraordinary fame. At the beginning of the 17th century, professional training was rare in Ukraine; architects came from craftsmen's families or were employed by slave artists, painters and folk craftsmen. At Kyiv Academy and the Kharkiv Collegium, the appeal to foreign specialists with technical knowledge led to an understanding of the need to streamline the system of education for architects. The professional standards of architectural education in Ukraine were constantly changing throughout the 19th century. At the end of the 19th century, the status of the creative personality in Ukraine grew, which led to the high status of the architect, who changed from a free entrepreneur to a civil servant. In the 19th century, the professionalism of the architect as a town and

landscape architect was in evidence. The architect was considered a highly qualified professional in the late 19th and early 20th centuries. Today, as ever, the professional work of Ukrainian artists is important (Karpov et al., 2021, p. 60). To sum up, we can say that the role of professionals in the formation of Ukrainian architecture has been decisive in different historical periods. The training of architects in Ukraine has undergone constant changes. However, it has always been an important factor in the development of the profession. Ukrainian architects gained high status and recognition as creative individuals in the late 18th and early 19th centuries. Their professional work was considered to be of great importance, and there was recognition of their role in the shaping of the architectural environment.

The knowledge that is required for a modern architect and builder is very diverse and includes the following aspects:

1. Architectural design: the ability to develop and implement architectural concepts through the application of knowledge of structures, forms, materials, functionality and aesthetics.

2. Construction technology: knowledge of construction processes, properties of building materials, structures and technical systems, including communications, electricity, heating, ventilation, etc.

3. Urban design and planning: the ability to design and organise the spatial structure of cities and settlements, taking into account the needs of the community in developing urban and regional plans.

4. Historical aspects: understanding the development of architecture and construction in different historical periods, studying the works of prominent architects and analysing their influence on contemporary practice.

5. Sociocultural aspects: understanding and taking into account the social and cultural needs of those consuming and using buildings, as well as the impact of architectural solutions on the community and the environment. These are just a few of the aspects of knowledge that are important for the successful performance of the work of an architect and a building owner. Each of these aspects requires in-depth understanding and continuous learning, as the profession of architecture and the built environment is an evolving constant in a field where technological developments and societal needs require constant adaptation and new solutions.

Understanding the processes of spatial planning and the composition of architectural objects is one of the most important components of a manager's work in the architecture and construction sector. This will help the manager to interact with designers and architects, to manage the design process and to ensure that the project meets the requirements of the client. In particular, knowledge of the processes of spatial planning helps the manager to understand the basic principles of the organisation of space and to determine the rational

location of objects and functions within a building or an area. He or she will find the optimal size and proportions of rooms, and summarise the ideas of the designers, in order to find compromises between comfort and functionality. Understanding the composition of architectural objects also helps managers determine how to harmonise and balance the elements of an architectural project. In order to understand basic aesthetic principles and influence decisions, it is necessary to have a basic knowledge of the arrangement of different elements, their relationships and characteristics.

For example, it is advisable to develop an optimisation model that takes into account three key aspects of the problem (methods) and determines the stage-by-stage formation of the architectural image of the building as an integral environmental object, according to the methodology of an integrated approach to making architectural decisions for buildings. These stages include: the formation of the spatial structure of the building, the formation of its compositional structure, as well as the formation of the decorative and plastic, graphic and information and sign structure of the environment (Veligotska, 2017, p. 141). Ultimately, managers will be able to control the process of creating an architectural project, ensure the quality and timeliness of its implementation, and meet the needs and expectations of clients, if they understand the processes of spatial planning and composition of architectural objects.

Then there is project management: the management of a construction project is one of the most important aspects of the work of an architect and a construction manager. They must have knowledge of the methods of planning, organisation, control and execution of a project, taking into account budget, time and quality constraints.

Time, cost and quality of the final product are the main components of a successful project. At the beginning of project development, a specialist must do market research. This research helps to find out who the product's target audience is. It allows you to create solutions that meet the needs and expectations of future users. Market research helps the specialist to find out what the problems or needs are in the area in which he or she intends to work. It is a great way to focus on the development of products that will be truly useful and popular. Market research allows you to study your competitors, their products and their approaches to design. It is a great way to have an understanding of how you can be unique and how your product can be different from others on the market. This is important because market conditions are always in a state of flux (Pasko and Kravchenko, 2023, p. 82).

Project time management is the next step. Regardless of the size or industry, time management is a critical component to the success of any project. Effective management of this resource is the key to ensuring that work is completed on time. The ability to meet deadlines is key to the satisfaction of

clients and the maintenance of trust in a professional or an organisation. It is well known that delays in a project can have the effect of costing more than anticipated. This can have a negative impact on budgeting and profitability of the project (Dunda, Rybachuk-Yarova and Tiukha, 2022).

The ability to plan the time needed for a project is what gives a specialist the ability to calculate the budget. This is the next skill that a project manager needs to have. The project schedule is the basis for estimating the cost of resources. This includes working hours, salaries, materials and other costs associated with the project. Estimating the time frame helps you to understand the amount of resources required for the completion of the project. For example, how many hours will be required for concept development, prototyping, testing and debugging. If there are unexpected changes or delays in the project, you can also adjust the budget.

Problems, or risks, can arise during implementation because every project has its own strengths and weaknesses. Risks are the cause of project delays and cost overruns. The ability to identify risks is key to the successful management and delivery of projects with minimal negative impact. The identification of risks helps to identify in advance any possible problems or threats that may arise during the work. O. Danchenko and V. Zanora emphasise that, since change is inevitable in a project, the project manager needs to develop procedures for managing change using the approaches outlined above. As the analysis has shown, in the modern methodology of project management there are no methods for the quantification of changes (Danchenko and Zanora, 2019, p. 35).

The overall effectiveness of a project is made up of a number of components, the most important of which are efficiency and effectiveness. Effectiveness is used to measure economic efficiency. Cost-effectiveness is a measure of economic efficiency and is a comparison of costs with products and results. Efficiency is a measure of the content of the activities that are carried out. Effectiveness is a measure of the extent to which the intended results of the project have been achieved, how sustainable they are and what impact they have had on the environment. A good project provides a positive solution to the problems for which it was implemented and has a positive impact on the environment in which it operates (Marchenko and Sushko, 2018, p. 24). To sum up all the material, it is clear that it is important for managers in the architecture and construction industry to study and practise the key concepts and principles of project management that will help them to successfully translate their creative ideas into practical projects.

Understanding the legal issues involved: An understanding of building codes, local and national building regulations, zoning, permitting and regulatory processes is important in the construction industry.

According to I.M. Kurashova, it is correct to use the term "certification of responsible contractors" (Kurashova, 2021, p. 173) to determine whether specialists in the construction industry have the appropriate qualifications and to establish their compliance with the requirements for performing certain types of works or providing services. Currently, scholars and practitioners are considering international “soft law” instruments. These do not create legally binding standards, but gain their normative force through the recognition of societal expectations by states and other key stakeholders, including business (Savchyn et al., 2020, p. 7).

In the construction industry, therefore, it is essential to understand building codes, local and national building regulations, zoning, permitting and regulatory processes. Here are some of the most important legal aspects that need to be considered:

1. Building and construction codes: It is necessary to comply with the established building codes and regulations contained in the relevant regulatory documents in order to construct buildings in Ukraine. For example, in Ukraine there are the State Construction Norms, which are regulatory documents that define the requirements for designing, constructing, operating and reconstructing buildings.
2. Building regulations – local and national: In addition to the general building and construction codes, it is important to be aware of any local and national requirements that may apply to a particular area or to a particular type of construction. For example, the development and use of land may be governed by local zoning codes, regional planning documents and other regulations.
3. Permitting and regulatory processes: The construction of buildings requires various permits and regulatory processes. These may include, for example, approvals for the preparation of project documentation, approvals for the commencement of construction work, state expertise of projects, registration of land ownership, etc.
4. Labour protection: Compliance with occupational health and safety standards is particularly important in the construction industry. This includes the provision of safe working conditions for workers, the use of the necessary protective equipment, fire protection, etc.

These legal aspects are provided for general information only, and the actual requirements may vary depending on the specific circumstances and the regional characteristics. For specific and up-to-date information, it is always advisable to consult legal counsel or professionals with experience in the architecture and construction industry.

On leadership and communication skills. A modern manager must also be a team leader and a conflict manager in the context of construction projects. In our view, the ability to communicate effectively with a wide range of project

stakeholders is an important quality for a project manager. He or she must have the listening skills to understand the needs and expectations of each party, and to express his or her thoughts and ideas in a clear and convincing manner. In addition, the manager must have a willingness to be a mediator in conflicts that may arise between different parties to the project. In order to ensure the success and progress of the project, the ability to find compromise solutions, promote cooperation and resolve conflicts peacefully is essential. In particular, the diversity of the communication needs and styles of the different stakeholders in the project needs to be taken into account. Some may prefer written forms of communication (e.g. email or project documentation). Others may prefer face-to-face meetings or video conferencing. It is also important to consider the involvement of government agencies and regulators in the communication process, particularly for obtaining necessary approvals and complying with legal requirements. In addition, a leader in this field must have the ability to think strategically, analyse problems, make decisions and work under conditions of uncertainty. A true leader is a "team player" who is capable of collective interaction, an innovative manager with in-depth knowledge in various fields and who is capable of continuous learning (Lukianova et al., 2019, p. 11).

It is also common knowledge that customer focus is a prerequisite for an effective business management coordinate system. The main business effect of customer focus is the creation and maintenance of conditions for guaranteed, predictable profits through effective retention of regular customers and controlled development of relationships with new customers. Principles of customer orientation: a) attentive attitude to the customer and his needs; b) maximum respect for the customer; c) constant study of the customer's behaviour, collection and processing of information about the customer and his business environment; d) continuous improvement and enhancement of the quality of goods and services; e) open, timely, objective and fair settlement of disputes and conflicts arising in the course of cooperation; f) providing the customer with objective, reliable and complete information on the transaction; g) timely fulfilment of obligations and promises to the customer (Shyriaieva, 2016, p. 218).

Within the framework of modern methodological and methodological positions it should be noted that an effective coordinate system of business management requires a number of skills and qualities of the manager, including customer orientation, quality of communication and leadership. Customer orientation means that a manager must be focused on the needs and satisfaction of customers. They should know their customers, their requirements and expectations, and respond quickly to their needs. This involves active listening, market research and competitor analysis to provide the best solutions for customers. A key skill for a manager is good communication. They must be effective communicators. They must be able to express ideas and instructions

clearly and concisely. The ability to listen and understand others and adapt one's communication style to the needs and character of the other person is also important. Another important skill for a successful manager is how to lead and motivate. They must be able to lead and motivate their team in the achievement of their goals and objectives. A leader has to be able to influence others, to be a role model for them and to inspire them to achieve great results. Taking all these aspects into account, a leader must be an effective communicator, able to build and maintain harmonious relationships with all stakeholders.

Financial management: financial planning and budgeting, contractor contracting, cost control and risk assessment skills are required of the architect and construction manager. He or she must have an understanding of the financial aspects of the project, be able to analyse costs and profits, plan the budget and monitor the financial sustainability of the project. It is also important for an architect and construction manager to be able to draft contracts with contractors. This includes understanding the legal side of the contract, setting clear terms and conditions, protecting the company's interests and avoiding potential conflicts. The manager must also control project costs. This includes managing procurement and monitoring the costs of materials, technology and contractors' labour. It is also important to be able to assess risks and develop strategies to manage them in order to avoid negative consequences for the project.

The economic sustainability of the company is ensured by the manager's activities. In particular, there are a number of pillars:

1. Financial and organisational sustainability pillar. It includes the process of strategic decision-making and combines functions such as gathering and processing information, decision-making, management consultancy, controlling, analysing, regulating, organising and optimising the organisational structure, business planning and personnel management.

2. Functional sustainability pillar. It involves implementing strategic decisions on selling products and services, specialising the company and universalising it with a range of traditional and specific activities and services.

3. Commercial and capital sustainability pillar. It includes corporate communication, methodological support of the product range, system software, application software, functional and technological software, management of traditional risks (Hrynko et al., 2022, p. 231). As a result, the range of knowledge and skills required in the financial sector is very diverse.

It is also important to note that the decision-making process traditionally uses data from available sources, including financial statements. This data needs to be processed, systematised and analysed in order to be transformed into the required information. The main factor in this transformation is the needs of the user, such as the owner of the company, the manager, the potential investor, the creditor, etc. The difference between data and information is not in content, but

in its usefulness for decision making. From this point of view, financial accounting and reporting can be seen as a database that satisfies the needs of a large number of "information users", but at the same time cannot satisfy any of them completely. Management reporting is unique in that it is designed to meet the exclusive, pre-defined needs of a specific manager for a specific set of information. Management reporting has a dual function in a business information system. On the one hand, it models the information base on which management decisions are made. The tasks of the management accounting system are defined by formalising the requirements of the information user (management reporting). On the other hand, management reporting provides a feedback loop between the management accounting system and the users of the information. Without the use of modern information technology, the dual role of management reporting would not be possible. Management reporting can become a link between the manager and the management accounting database through the introduction of these technologies (Sopko et al., 2016, p. 5). This is a modern requirement for the professionalism of the manager of the architectural and construction industry.

Technical knowledge: the technical aspects of building materials, structures, heating, ventilation and air conditioning systems, electrical systems, etc. must be understood by the manager of the architectural and construction industry.

For example, a description of the desired knowledge in this area is provided by the analysis of possible construction and process risks. Risks in the construction and installation industry include loss of or damage to construction materials and equipment due to adverse events (e.g. natural disasters, explosions, fires, criminal acts, etc.); disruption to the operation of the facility due to design and installation errors; injuries to employees working on the construction site; illegal acts by third parties (theft, robbery, assault, etc.); errors made by contractors during installation; defects caused by the carelessness or negligence of the contractor’s employees; damage caused during the transportation of items to the construction site, etc. Technological risks include: physical and moral deterioration of fixed assets; failure to achieve the technical parameters planned in the design and technological development; malfunction and breakdown of equipment and machinery; occurrence of side or delayed problems in the use of new technologies and products. We can also add the presence of defects in components, structures, machinery and equipment; low supply discipline, fuel and electricity interruptions; increase in material costs due to overspending on materials, raw materials, fuel, energy, as well as due to increase in transport, trade, overhead and other incidental costs; reduction in project prices due to its insufficient quality or negative changes in the market (Havrysh, Kuznietsova and Melnykova, 2023, p. 62–63).

An architectural and construction manager must therefore understand the technical aspects of building materials, structures, heating, ventilation and air conditioning systems, electrical systems and other important aspects of construction. This is necessary to effectively manage and coordinate work on site, and to understand how these factors affect the project and its costs. Knowledge of building regulations, health and safety, energy efficiency, standards and licensing in the construction industry is also important. Understanding the technical aspects will help the manager to better identify technical solutions, make improvements and ensure high quality design and construction.

Innovation: modern construction industry is constantly changing and the architectural and construction manager must be prepared to implement new technologies, green building standards and other innovative approaches.

Reconstructing Ukraine requires forging new relationships between local and international contractors, investors and governments, creating new opportunities and challenges for the industry. As companies invest in modern technology, machinery and construction equipment, the construction sector is characterised by a high degree of monopoly due to significant financial barriers to entry. At the same time, the understanding that innovation is a means of increasing the level of competitiveness of construction organisations leads to increased attention to innovative development, ways of activating it and increasing the efficiency of individual business processes and the company as a whole.

A modern manager must consider and exploit the following to ensure the company's innovation potential:

1. The ability to co-ordinate departments and the use of integrated computer systems, in particular integrated solutions for the automation of accounting, analysis, tax and financial reporting, have a number of advantages in the construction industry. One of the most advanced tools is Building Information Modelling (BIM). BIM helps to improve collaboration and communication between construction stakeholders. The use of BIM reduces the risk of unforeseen investment costs and speeds up the implementation of investment projects (Trach, Ryzhakova and Kryzhanovsky, 2017).

2. It is necessary to take into account the availability of new advanced construction technologies, machines and innovative materials in order to increase the efficiency of managing the innovative development of enterprises, especially in the field of construction technologies. With the introduction of new types of construction materials, including nanomaterials, recycled secondary materials and self-healing technologies, it is necessary to take into account the constant replenishment of the market of construction technologies and materials (Zgalat-Lozynska and Zgalat-Lozynsky, 2019).

3. Regarding the effectiveness of environmental measures, it is important to consider trends in creating cost effective, biosphere-friendly building projects. It is advisable to use energy-efficient, environmentally friendly and durable materials in construction projects. Care should also be taken to reduce waste and harmful effects on air, soil and water resources (Chernyshev et al., 2018).

Therefore, new technologies, green building standards and other innovative approaches should be embraced by the architectural and construction manager. As this industry is in a state of constant evolution and change, the manager must be aware of new trends and opportunities for the introduction of new technologies and innovations into the construction process. At the same time, the manager should be prepared for the introduction of green building standards, such as LEED (Leadership in Energy and Environmental Design) or BREEAM (Building Research Establishment Environmental Assessment Method) (http://rsabc.ru/ru/o-sovete/klassifikatsiva/). These standards aim to reduce the environmental impact of construction. The manager should be aware of green technologies, energy-efficient solutions and the use of renewable energy sources. The manager should also be prepared to implement other innovative approaches, such as using 3D modelling (Bryde et al., 2013) and virtual reality in design and construction, using Building Information Management (BIM) systems, introducing smart technologies in construction, and making effective use of data and analytics for decision making. All these skills and knowledge will help the architectural and construction Manager to be prepared to meet the challenges and introduce new technologies and innovative approaches to their work.

It is also important to bear in mind that the practical characteristics of an architectural and construction manager will vary depending on the specific sector in which he or she is working. For example, the skills and knowledge required for residential construction are different from those required for commercial or industrial projects. In the residential construction sector, for example, certain standards may be defined for residential developments, such as ergonomics, energy efficiency, and amenities for the residents. In the case of commercial property, the focus may be on the needs of the business and the fulfilment of specific customer requirements. Infrastructure or industrial projects may be concerned with safety, managing risk and environmental remediation. In particular, the introduction of resource-saving technologies in the construction process and the use of the architectural and economic concept of low-rise buildings (Yashchenko, Makatora and Kubanov, 2023) also have features in the economic activity of an architectural and construction company that require the attention of managers.

As a result of this diversity, a manager in the architectural and construction sector must have a deep understanding of the specifics of each sector. He or she must also be able to adapt his or her knowledge and skills to a particular project.

In addition, a key element of successful construction project management in a particular sector is knowledge of the laws and regulations of that sector. Consequently, managing construction projects varies from sector to sector and requires the manager to be flexible, to have a broad knowledge base and to be able to adapt to the specific conditions and requirements of the project.

Conclusions. A manager in the architectural and construction industry therefore plays a critical role in managing construction and development projects and, more generally, the activities of the organisation. This position requires a combination of theoretical knowledge of architectural and construction processes and practical project management skills.

A thorough understanding of architectural concepts, construction technologies, building codes and standards, and the fundamentals of engineering systems design are among the theoretical aspects of the manager's job. In addition, the manager will need to have an understanding of market trends, innovative technologies and modern approaches to project management in the construction industry.

The ability to manage construction processes, to plan and coordinate work, and to interact with clients, architects, engineers, contractors and workers are practical features of the manager's job. Balancing client requirements and expectations with the technical capabilities and budgetary constraints of the project, conflict resolution and management decision-making are also important. The ability to manage change and solve problems that may arise during the construction of a project is an important skill of a manager. A manager's responsibilities in the architecture and construction industry also include resource planning, budget control and ensuring that the project meets approved deadlines and requirements. It is also important to ensure workplace safety and compliance with relevant safety regulations. Developing plans and schedules, building effective teams, ensuring quality workmanship, and interacting with stakeholders during the construction process are best practices for an architecture and construction manager.

A manager in the architecture and construction industry should also focus on sustainable construction, energy efficiency and the use of environmentally friendly materials and technologies, especially in light of global challenges related to sustainability and environmental responsibility. Ukraine has significant potential for the development of the architecture and construction industry, and managers in this field have an important role to play in realising this potential. It will contribute to the sustainable and progressive development of the Ukrainian economy to ensure effective management of construction and development projects.

Prospects for further research in this area may include analysing current trends in the use of new technologies in construction and their impact on project

management, developing new methods of planning and resource management in the construction sector, studying the role of sustainable construction and green technologies in strategic management of the architecture and construction industry, the impact of digitalisation on management processes in the construction sector, researching quality and safety management systems in construction, and improving strategic management of the construction industry.

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