

№	Статья и ссылка	Аннотация
1.	Bielienkova, O., Izmailova, K., Zapiechna, Y., & Loktionova, Y. (2021). DEPENDENCE OF COMPETITIVENESS ON THE LEVEL OF BUSINESS CONFIDENCE OF THE ENTERPRISE. <i>Scientific Journal of Astana IT University</i> , (7), 4-14. https://doi.org/10.37943/AITU.2021.81.66.001	The article deals with the issue of ensuring the competitiveness of construction contractors depending on the level of business confidence, which is esteemed as the amount paid on schedule construction contracts. To improve the competitiveness of enterprises the authors propose indicators to identify the existing potential for efficiency enhancement and ensuring competitiveness depending on the level of business confidence of the enterprise. Indicators of competitiveness of construction companies are determined by fuzzy sets, including pricing policy, the efficiency of fixed assets and the level of diversification. The main direct and indirect factors of competitiveness of the contracting enterprise are outlined.
2.	Biloshchytskyi, A., Omirbayev, S., & Mukhatayev, A. (2021). METHODS OF PROJECT-VECTOR MANAGEMENT OF EDUCATIONAL ENVIRONMENTS. <i>Scientific Journal of Astana IT University</i> , (7), 15-31. https://doi.org/10.37943/AITU.2021.38.59.002	Based on the developed mathematical model of the project-vector space, the methods of determining the endpoints of the objects of the project-vector space (PVS) and the calculation of the trajectory of the movement to these points are proposed. It is shown that the problem of developing these methods is related to the definition of such projects (project integration), which will correspond to the maximum expansion of “Universal Projects” educational environment. Calculation of the trajectory of the movement in the project-vector space ensures the achievement of the objectives of the project with minimal time and financial resources. It is proposed to use the Monte Carlo method to calculate the options for the trajectory of PVS subjects. This distribution of probabilities when choosing the displacement of objects and subjects of PVS corresponds to the priority of subjects and the impact of objects on the displacement of these subjects. For the assessment of the magnitude of the impact on the movement of PVS subjects it was developed the structure of the expert table and the model of the calculation of the average expert assessment of such an impact. Implementation of the given methods will allow to dynamically evaluate the most important goals for all interested parties of the project, as well as to develop ways to achieve them in real terms. In this case, the real conditions of the projects are described in the system of impact on the movement of objects and subjects of PVS in the expanding “Universal Projects”.
3.	Bushuyev, S., Bushuieva, V., & Tanaka, H. (2021). MODELLING AGILE-TRANSFORMATION ORGANIZATIONAL DEVELOPMENT PROJECT PORTFOLIO. <i>Scientific Journal of Astana IT University</i> , (7), 32-41. https://doi.org/10.37943/AITU.2021.81.99.003	Agile transformation is a necessary process for companies in various fields of activity to ensure their competitiveness in modern business conditions when the uniformity of production processes and the growth of the level of customer (client) demands reduce the impact of traditional ones that remain competitive. Modern business is a «customer-oriented» business, in which instead or in addition to technological or marketing advantages comes the highest value of human resources and teamwork. That means Agile transformation provides companies with a transition to another level, and those who have not moved to this level remain outside of competitiveness, if not in the near term, then in a strategic perspective. Agile transformation is comparable to the need to introduce new technologies into production processes to replace obsolete ones since, without new technological solutions, the products created do not meet modern quality requirements or do not have a competitive cost price. Thus, Agile transformation ensures the introduction of new technology not only into the production process but into the management system and product creation processes within the framework of the project or project-oriented activities.
4.	Chupryna, Y., Tormosov, R., Chupryna, K., Mironov, O., & Plys, N. (2021). SYSTEMATIZATION OF INTERNATIONAL AND DOMESTIC EXPERIENCE IN PROJECT MANAGEMENT AIMED AT ADAPTING PUBLIC-PRIVATE PARTNERSHIPS TO THE IMPLEMENTATION OF SUSTAINABLE ENERGY DEVELOPMENT PROGRAMS. <i>Scientific Journal of Astana IT University</i> , (7), 42-54. https://doi.org/10.37943/AITU.2021.51.51.004	European countries are recognized leaders in the use of public-private partnerships in project management for large-scale infrastructure projects, including those that contribute to energy efficiency in various sectors of the economy. Their experience is a useful example for Ukraine in its quest for energy independence and economic stability. Establishing partnerships with business will increase the resources of the state and promote the involvement of the private sector in the implementation of profitable and image projects for both stakeholders. The development of mechanisms and recommendations for the development of public-private partnership (PPP) should be preceded by an analysis of international experience in creating a favorable and attractive environment in which public-private partnerships can be intensified. Since energy efficiency is the key to the successful functioning of the economy of any state, it is necessary, creating the conditions for the successful functioning of public-private partnership, to develop programs and projects to improve energy efficiency, which will be implemented under the PPP on a priority basis.
5.	Mukasheva, A. (2021). TASKS AND METHODS OF TEXT SENTIMENT ANALYSIS. <i>Scientific Journal of Astana IT University</i> , (7), 55-62. https://doi.org/10.37943/AITU.2021.57.68.005	The purpose of this article is to study one of the methods of social networks analysis – text sentiment analysis. Today, social media has become a big data base that social network analysis is used for various purposes – from setting up targeted advertising for a cosmetics store to preventing riots at the state level. There are various methods for analyzing social networks such as graph method, text sentiment analysis, audio, and video object analysis. Among

		<p>them, sentiment analysis is widely used for political, social, consumer research, and also for cybersecurity. Since the analysis of the sentiment of the text involves the analysis of the emotional opinions expressed in the text, the first step is to define the term opinion. An opinion can be simple, that is, a positive, negative or neutral emotion towards a particular object or its aspect. Comparison is also an opinion, but devoid of emotional connotation. To work with simple opinions, the first task of text sentiment analysis is to classify the text. There are three levels of classifications: classification at the text level, at the level of a sentence, and at the aspect level of the object. After classifying the text at the desired level, the next task is to extract structured data from unstructured information. The problem can be solved using the five-tuple method. One of the important elements of a tuple is the aspect in which an opinion is usually expressed. Next, aspect-based sentiment analysis is applied, which involves identifying aspects of the desired object and assessing the polarity of mood for each aspect. This task is divided into two sub-tasks such as aspect extraction and aspect classification. Sentiment analysis has limitations such as the definition of sarcasm and difficulty of working with abbreviated words.</p>
6.	<p>Stetsenko, S., Tsyfra, T., Vahovich, I., Sichnyi, S., & Lytvynenko, O. (2021). INFORMATION AND ANALYTICAL TOOLS FOR MONITORING THE PRICES OF MATERIAL AND TECHNICAL RESOURCES (MTR) POF CONSTRUCTION. <i>Scientific Journal of Astana IT University</i>, (7), 63-76. https://doi.org/10.37943/AITU.2021.40.39.006</p>	<p>The article deals with features and principles of the price monitoring system for material and technical resources operating now in the road industry. To improve the process of information collection, processing, and analysis concerning the cost of building materials, products, and structures, as well as other types of resources, it is proposed to reinforce a centralized single database of material and technical resources on the basis of regional data. Minimization of costs for data collection, storage, processing and use is possible only with the maximum automation of electronic data collection and exchange, which is realized during the implementation of elements of the centralized monitoring system (CMS) in practice. The architecture, algorithm, and regulations for the formation of a CMS are proposed.</p>
7.	<p>Sultanov, Z. (2021). ANALYSIS OF METHODS FOR DETECTING FACES IN AN IMAGE. <i>Scientific Journal of Astana IT University</i>, (7), 77-88. Available: https://doi.org/10.37943/AITU.2021.48.48.007</p>	<p>In this article, computer vision is considered as modern technology of automatic processing of graphic images, and the relationship between the terms “computer vision” and “machine vision” is investigated. A diagram of a typical computer vision system is given and the possibility of using a system based on an artificial neural network for image analysis is considered. The article analyses the current situation with the use of computer vision systems and the possibility of its application. This article presents face recognition algorithms for existing categories, including: empirical method; feature method – invariant feature; use the template specified by the developer for identification; study the method of detecting the system by external signs. The empirical method of “top-down knowledge-based methods” involves creating an algorithm that implements a set of rules that image segments must satisfy in order to be recognized as faces. Feature-invariant approaches (Feature-invariant approaches) based on bottom-up knowledge constitute the second group of face detection methods. The methods of this group have the ability to recognize faces in different places as an advantage. Use the template set by the developer for identification (template matching method). Templates define specific standard images of face images, for example, describing the attributes of different areas of the face and their possible mutual positions. A method for detecting faces by external signs (a method for performing the training stage of the system by processing test images). The image (or its fragments) is somehow assigned a calculated feature vector, which is used to classify the image into two categories – human face/non-human face.</p>