**Abstract**

To study promising areas of IT development is very important not only because it helps find competitive advantages for IT managers, but also because of the impact it makes on various aspects of economic activity, such as customers, clients, ecosystem, etc. The article in question is aimed at determining promising areas of IT development in the world by analyzing the current trends and predict researchers’ publication and patent activity. The methodological basis for the article is made up by the following: research review, analysis of general trends in the IT development, bibliometric and patent analysis, and graphic and statistical analysis. A general approach is suggested to identify promising areas of IT development in the world, the approach being comprehensive, unlike the already existing ones. The main trends in the IT development are studied by reviewing scientific literature and reports on the technological development of the industry. In particular, Gartner Hype Cycle for Emerging Technologies is analyzed. The world’s technological foresights, in particular those of the EU countries, the USA, South Korea, and Japan, were analyzed, which allowed us to identify the most probable trends in the IT development in the world. The dynamics and structure of scientists’ publishing activity on the topic of “Computer Science” are analyzed according to the bibliometric indicators of the SCImago Journal & Country Rank portal, and patent applications published in the field of information technology is analyzed according to the data of the World Intellectual Property Organization (WIPO). The changes in the structure and number of publications and patent applications for the period 1996–2020 are analyzed. The most promising areas of research in the IT sphere are determined. Due to grouping the obtained results we can determine such promising areas of IT development in the world: artificial intelligence, cloud technologies, blockchain technology, information and communication technologies, big data, computing memory, chatbots, cybersecurity, language recognition, digital communication, computer networks, and IT management methods. The obtained results of the research can serve as a basis to determine the priorities of developing IT research in Ukraine

promising перспективний

competitive конкурентоспроможний

advantages переваги

impact вплив

aimed спрямована

approach підхід

suggested запропоновано

comprehensive комплексний

foresights передбачення

particular особливий

allowed допустимий