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І. Р. Плавущька, к.ф.н.; Сас Д. В.

(Тернопільський національний технічний університет імені Івана Пулюя, Україна)

**ВИКОРИСТАННЯ ШТУЧНОГО ІНТЕЛЕКТУ ЯК ІННОВАЦІЇ
У СФЕРІ АВТОМАТИЗАЦІЇ ТА
КОМП'ЮТЕРНО-ІНТЕГРОВАНИХ ТЕХНОЛОГІЙ**

I. R. Plavutska, Ph.D.; Sas D. V.

**THE USE OF ARTIFICIAL INTELLIGENCE AS AN INNOVATION IN THE FIELD
OF AUTOMATION AND COMPUTER-INTEGRATED TRANSLATION
TECHNOLOGIES**

Artificial intelligence (AI) is one of the most promising technologies of our time. It has a wide range of applications, including automation and computer-integrated technologies (CIT). AI can be used for automation and CIT in many different industries, including:

- Manufacturing. AI is being used to automate tasks such as assembly, quality control, and inventory management. This can lead to increased productivity and efficiency, as well as improved quality and safety.
- Service. AI is being used to automate tasks such as answering questions, resolving issues, and providing support. This can lead to improved customer satisfaction and reduced costs.
- Healthcare. AI can be used to automate tasks in healthcare, such as diagnosis, treatment, and research. This can lead to improved quality of care and accessibility.

Key trends in the use of AI for automation and CIT

- The increasing prevalence of machine learning: Machine learning is one of the foundational AI technologies used for automation and CIT. Machine learning allows computers to learn from data and perform tasks without explicit programming.
- The growth of deep learning: Deep learning is a type of machine learning that uses multilayer neural networks to learn from data. Deep learning has a wide range of applications in automation and CIT, including image recognition, speech recognition, and natural language processing.
- The development of autonomous systems: Autonomous systems are systems that can operate independently without human intervention. AI is used to develop autonomous systems, such as drones, self-driving cars, and robot assistants.

The impact of AI on automation and CIT

AI has the potential to revolutionize the fields of automation and CIT. The adoption of AI can lead to increased efficiency, productivity, and quality in these fields. AI can also lead to a change in the role of humans in automation and CIT. Humans will increasingly focus on tasks that require creativity, intuition, and social skills, while AI will perform more routine and labor-intensive tasks. The adoption of AI in the field of automation and CIT is a complex process that requires collaboration between technical experts, business leaders, and workers. However, the potential benefits of AI are significant, and this technology is likely to continue to develop and spread in this field. Overall, the use of AI for automation and CIT offers a number of potential benefits, including improved accuracy, increased efficiency, and reduced costs. As AI technology continues to develop, we can expect to see even more innovative applications of AI in these areas.

Examples of the growth of AI efficiency in the field of automation

- Tesla uses AI to develop robots that can assemble cars. These robots can perform complex tasks such as welding, painting, and assembly with greater accuracy and efficiency than

humans.- Amazon uses AI to develop computer vision systems that can detect defects in products.

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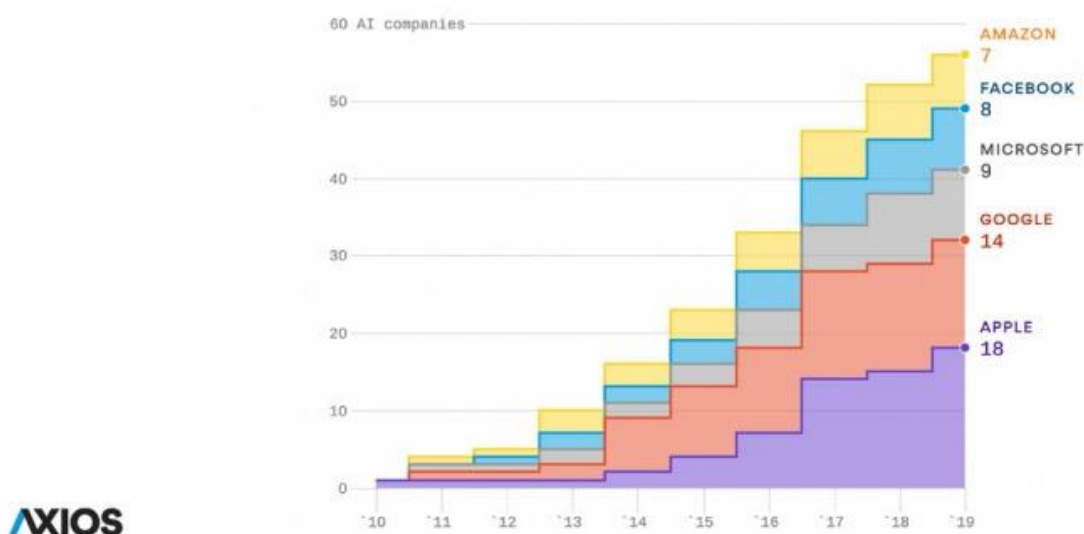
These systems can detect defects that the human eye cannot see, helping Amazon improve the quality of its products.

- Walmart uses AI to optimize delivery and storage processes. AI helps Walmart optimize delivery routes, product placement in warehouses, and demand forecasting, helping the company save money and improve efficiency.

These examples demonstrate that AI has the potential to significantly increase the efficiency of automation. AI can help companies automate tasks that were previously performed by humans, which can lead to increased productivity, quality, and efficiency.

Big tech companies continue to gobble up AI-first startups

► GAFAM have completed a cumulative sum of 60 acquisitions of AI-first startups since 2010.



Dynamic of acquisitions of AI-startups by big tech companies

In conclusion we can say that artificial intelligence (AI) is a powerful tool with significant potential for innovation in the field of automation and computer-integrated technologies (CIT). AI can be used to automate tasks that were previously performed by humans, which can lead to increased efficiency, productivity, and quality. Despite these challenges, the potential benefits of using AI in automation and CIT are significant. AI has the potential to transform these fields, making them more efficient, productive, and quality.

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