

ROBOTIC INTEGRATION IN OUR LIVES

Yevhenii Lisniak

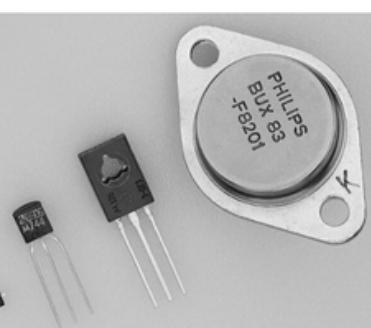
Faculty of Electrical Engineering and Automation,

National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”

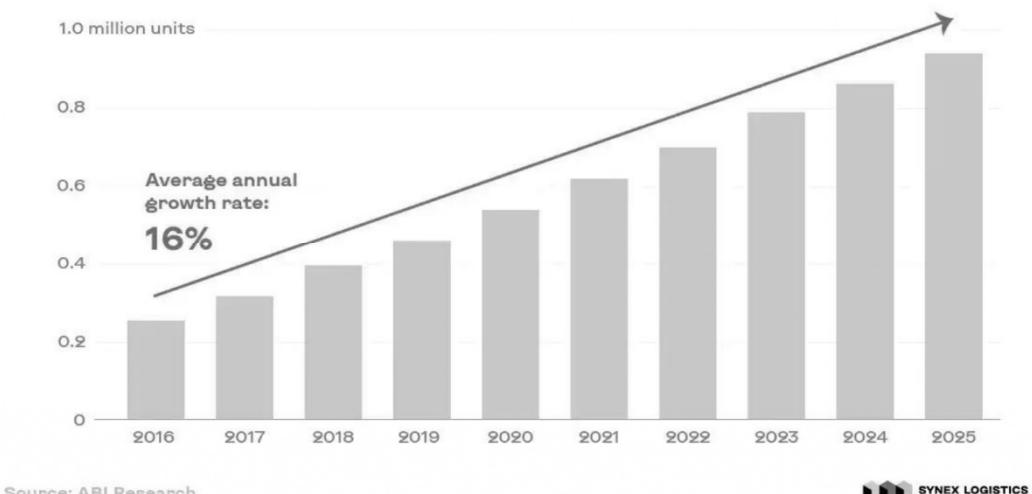
Nowadays robots and automated systems are closely integrated into every sphere of our lives: from the most primitive (cooking, cleaning, laundry) to much more complex ones that require extreme precision in actions (development of other automated systems, electronic devices, surgical operations).

Since ancient times, people have been thinking about ways to facilitate and optimise their work process, and manual labor has been gradually replaced by mechanical labor: grain was turned into flour by a windmill, and books became more accessible after the printing press's creation. Mechanical clocks made it possible to keep track of time accurately. Although it is difficult to identify these mechanisms as robots as they are currently understood, they can rightly be called the ancestors of modern robotic systems. Only after World War II did the trend towards the development of robotics and cybernetics gained momentum.

The second half of the twentieth century discovered: The first computers, which occupied large amounts of space, now look like modern PCs/laptops that occupy a small area of your workplace; the discovery of the transistor marked the transition of electronic devices from the vacuum tube era to the solid-state electronics era, which elements were smaller, lighter in weight, consumed less power and were more efficient and reliable than cathode ray tubes; manipulators, which are associated with the machine-building industry but can also reproduce the work of human limbs, etc.



Since a short time has passed these discoveries, have gone further. Every year, the number of transistors in integrated circuits (the basis of electronics) increases many times over, the computing power of computers increases accordingly, and thus the number, complexity, and speed of tasks increase exponentially. The Boston Consulting Group predicts that the share of robot tasks will increase from 8% today to 26% by 2025.



Today robots are directly or indirectly involved in all areas of our activity: production manipulators, couriers, dishwashers, demining robots, agricultural robots, indoor robots, medical robots, military robots, etc.



Despite the obvious benefits (freeing people from hard/hazardous labor, multitasking, efficiency of task performance, etc.), there is still a feeling of fear of being replaced by a technocratic culture.

As the classics used to say, ‘fear has big eyes’: modern robotic systems are at the stage of development when they are capable of making mistakes in the process of performing a task, despite their constant development, unlike a human being who can work efficiently for 8-12 hours a day; the main advantages of humanity are emotionality, empathy, improvisation and creativity, which robots have not yet adopted and are unlikely to adopt in the near future; do not forget that robots perform a clearly defined task, although it may carry a completely different context that the machine is unable to understand to the extent of the limitations inherent in its software.

In conclusion, you should not be afraid of tomorrow and a soulless machine will deprive you of your job, but to remain in demand, you need to work on yourself - develop soft-skills, skills in working with robotic systems and artificial intelligence in order to understand the algorithm of its work and be able to directly influence and control it.

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