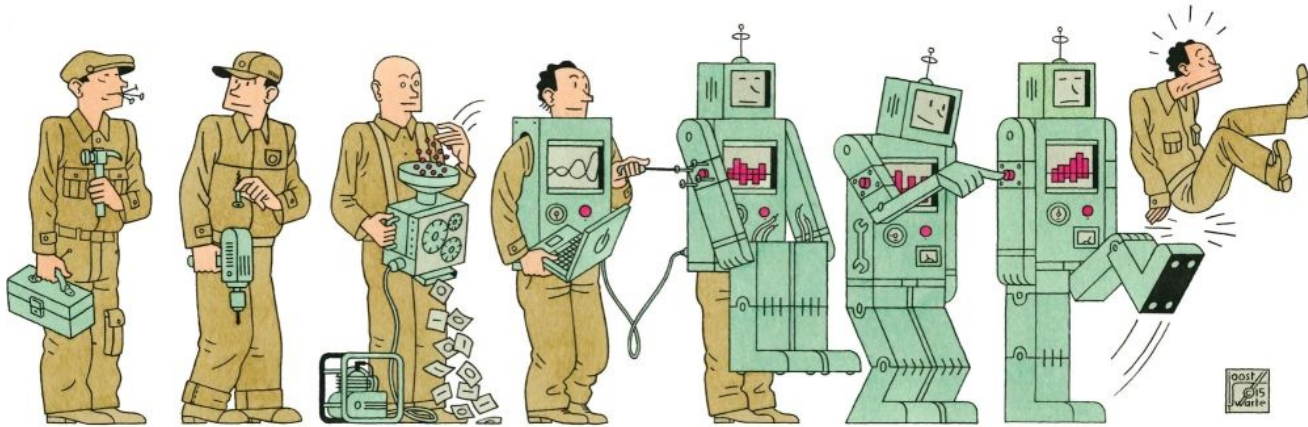


Robotics in life and business



ME10-21B Nikolay Kopytov

- What is Robotics?
 - History
- Advantages of robots
- Robotics in business
- Not much statistics

What is Robotics?

- Robotics is a sector of science and engineering
- A robot is a programmable machine that can complete a task
- Robotics is an interdisciplinary branch of computer science and engineering.



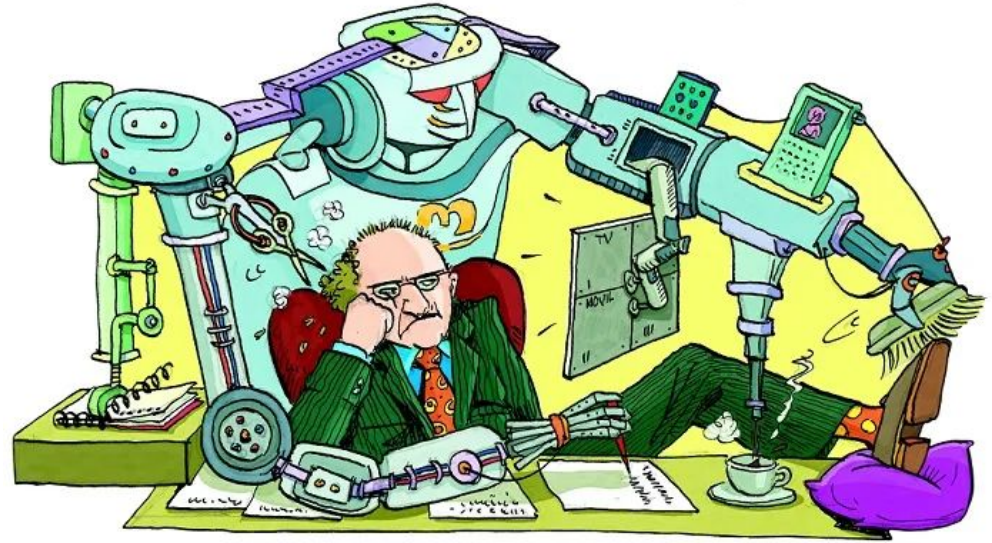
History

- In 1948, Norbert Wiener formulated the principles of cybernetics, the basis of practical robotics.
- One of the earliest descriptions of automata appears in the Lie Zi text, on a much earlier encounter between King Mu of Zhou (1023–957 BC) and a mechanical engineer known as Yan Shi, an 'artificer'. The latter allegedly presented the king with a life-size, human-shaped figure of his mechanical handiwork.

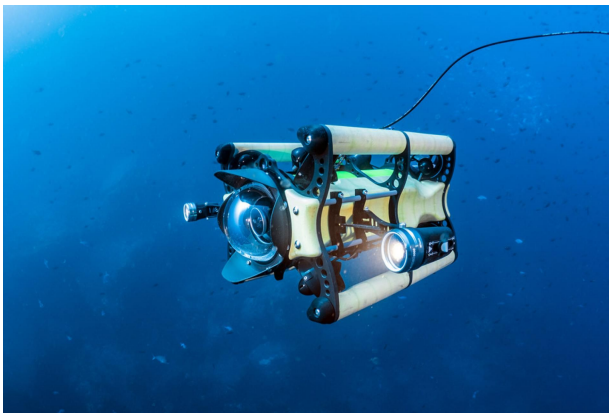
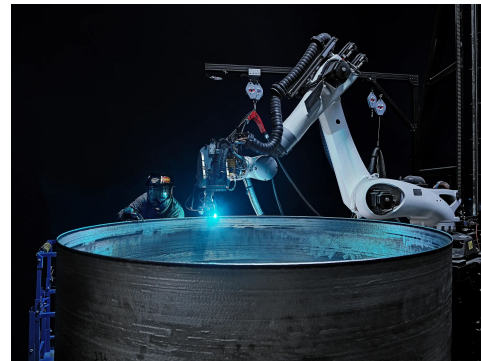


Advantages of robots

- Robots can go far down into unknown places where humans would be crushed
- Robots can perform tasks faster than humans and much more consistently and accurately
- ...



Robotics in business



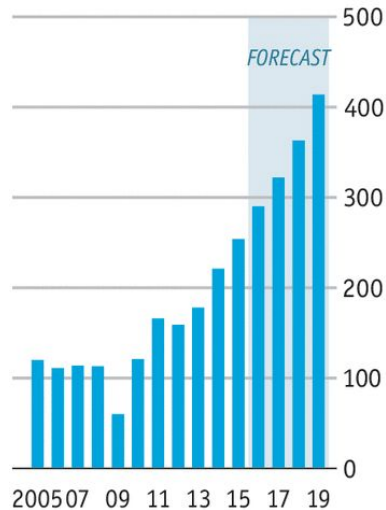
Not much statistics

The life robotic

Global industrial robots

Sales

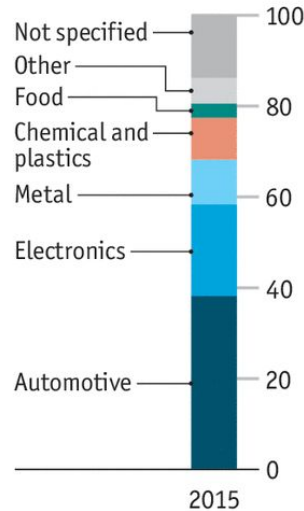
'000 units



Source: International Federation of Robotics

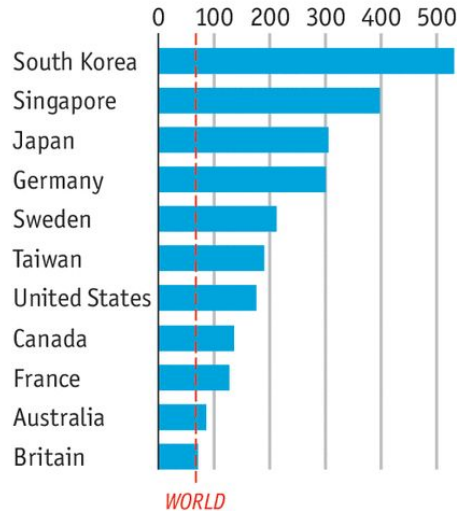
By industry

% of total



Number of robots

Per 10,000 manufacturing employees, 2015



Thank you for your attention

