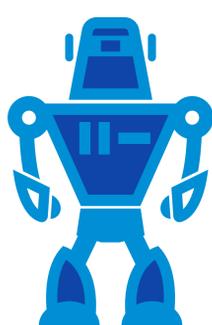


As robotics, automation, and artificial intelligence become increasingly capable of taking on more complex tasks, many workers will lose their jobs. However, new forms of human-machine interaction could emerge to compensate, causing the structure of both industry and society to evolve to accommodate a more symbiotic relationship.

## Many more robots in our future

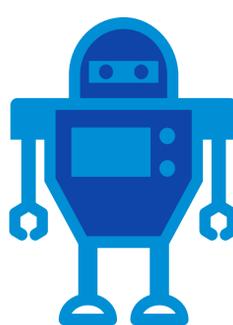
In 2010, the military and industrial market for robots

**US\$10.9 billion**

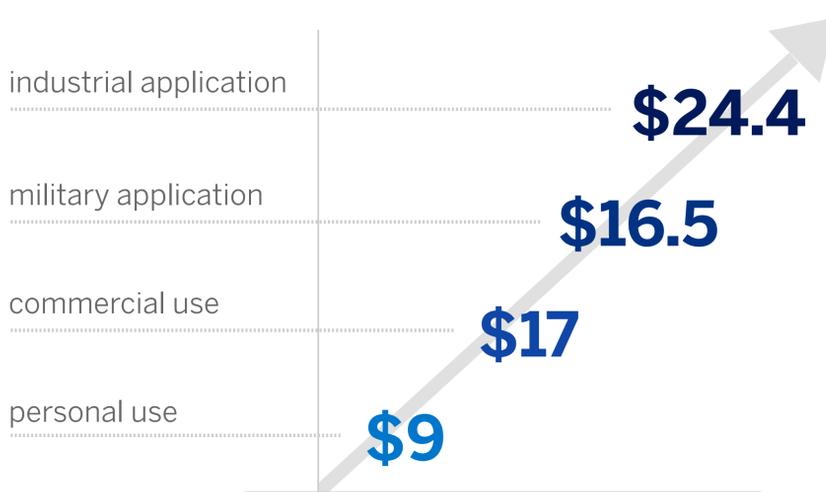


far outweighed the market for personal and commercial uses

**US\$3.2 billion**



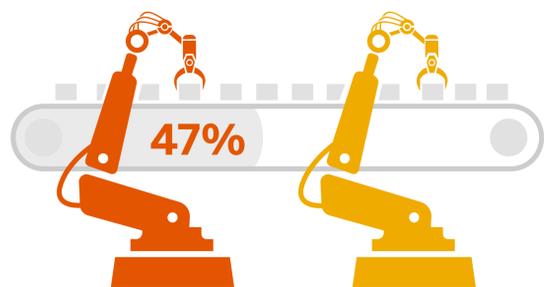
According to analysis performed by the Boston Consulting Group. By 2025, military and industrial applications will grow to **US\$16.5 billion** & **US\$24.4 billion**, respectively, while commercial and personal use will skyrocket to **US\$17 billion** & **US\$9 billion**.



Source: "Takeoff in Robotics Will Power the Next Productivity Surge in Manufacturing" (Boston Consulting Group, February 10, 2015)

## Significant numbers of jobs are at risk

University of Oxford researchers in 2013 concluded that **47% of total U.S. employees are already at a high risk of being displaced.**



Source: "The Future of Employment: How Susceptible Are Jobs to Computerisation?" (Oxford Martin School, University of Oxford, September 17, 2013)

## Deep division on the ultimate impact

**48% of technology experts** canvassed by the Pew Research Center said significant numbers of blue- and white-collar jobs will be displaced by 2025, leading to income inequality, large groups of unemployable people, and breakdowns in the social order. **52% believe that** while many jobs will be displaced, **many more will be created to take their place.**



Source: "AI, Robotics, and the Future of Jobs" (Pew Research Center, August 6, 2014)

## Robots are evolving beyond mere replacements

While some robots are intended to replace workers, many more are evolving to become collaborators and extensions of human capabilities. Here are three strains of robot species that are evolving to help:

1

**ROBOTS AS HELPERS.** Some robotic machines with limited intelligence will act as manual laborers, performing work that is too difficult or undesirable for the rest of us.

2

**AUTONOMOUS ROBOTS.** Other robots are being developed with increasing levels of autonomy, with varying levels of human involvement and independent decision-making capabilities.

3

**ROBOTS AS HUMAN EXTENSIONS.** Many robots serve as a robotic extension of the human form, such as exoskeletons, bodysuits, or bionic limbs that extend human capabilities.

↓ To learn more about the future evolution of the human-machine relationship, read the in-depth report [Bring Your Robot to Work](#).