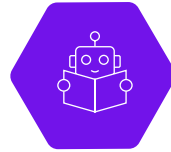


The power of the machine

Imagine if... robots had become ubiquitous

Robotics



Artificial
intelligence



“If machines had complete control, what do we lose? If you have beaten creativity, genius-ness and the adaptability of society, do we all become sheep?”

James Mabbott
KPMG Futures Partner,
KPMG in Australia

The second of our groups of “Imagine if” scenarios focuses on the development of robotics and artificial intelligence, and what this might mean for our society.

By 2071, patterns of labor have changed with many manual tasks now undertaken by robots, and many personal services professions have been reshaped as robots take on care roles. Maintenance and manufacturing have become robotic activities.

There are fundamental questions over the norms governing how such robots are used, and the limitations on their interactions with human beings. The potential for manipulation of robots has led to higher standards for the cyber security and safety of devices which directly interact with us or whose manipulation can have lethal consequences.

During the first and second industrial revolutions, machines merely coexisted with humans as basic tools or operated independently. The third industrial revolution marked a shift toward dynamic cooperation, where humans and machines temporarily shared workspace and resources. With the advent of Industry 4.0 and advanced information technology, the human-machine relationship is expected to evolve according to the 5C model: Coexistence, Cooperation, Collaboration, Compassion, and Coevolution.

The rapid advancement of technology has opened the possibility, either now or in the near future, for machines to attain a level of intelligence that allows them to perform tasks or missions without specific, predefined instructions. Consequently, the trajectory of human-machine interface technology is shifting from being primarily an informational system to automation and, ultimately, to autonomous agents.

