

# AI can bridge gap in human-machine interaction

In the realm of automation and robotics, the adoption of emerging trends and automated solutions is a key driver of innovation. Artificial intelligence (AI) has surfaced as a transformative force in numerous sectors, including transportation, healthcare, finance, and agriculture. Within the sphere of robotics, AI is reshaping the landscape and the interaction between humans and machines.



Human-machine interaction is ready for AI disruption.

The rapid integration of AI into our swiftly evolving digital world necessitates its acceptance across all industries, particularly in robotics. AI equips robots with unparalleled precision and efficiency, optimising actions through machine learning algorithms for improved productivity and accuracy.

It enhances safety standards as its integration allows robots to navigate intricate environments, identify potential hazards, and carry out tasks with a focus on risk reduction, thereby promoting the safety of human workers.



Google celebrates girl children with Cape Town Science Centre partnership

12 Oct 2023



"AI also empowers robots to make instantaneous decisions based on data analysis – a crucial capability in dynamic environments like manufacturing floors or autonomous vehicles operating along the production line," explains Andrew Crackett, MD of Yaskawa.

## Potential limitations

However, it is equally vital to recognise the potential limitations of AI. As AI becomes a standard in robotics, ethical concerns may surface, necessitating careful consideration and regulation regarding the ethical use and accountability of AI-driven robots.

Overcoming challenges and addressing any limitations in current AI models is essential for the continued advancement of AI-driven robotics.

A harmonious collaboration between AI-driven robots and human workers is necessary, as the integration of robots, specifically collaborative robots (cobots), does not imply the elimination of manual labour jobs.

Cobots are designed to work alongside humans, undertaking more labour-intensive tasks, thereby freeing up capacity for upskilling and career development.

## **Bright future**

The future appears bright for AI and machine learning. Robots are capable of adapting, learning, and executing increasingly complex tasks.

“Synergy between humans and robots is key, with AI facilitating seamless collaboration, complementing human skills and augmenting workforce capabilities,” concludes Crackett.

A focus on ethical development is crucial for the future of AI in robotics, ensuring transparent and ethical AI practices to build trust and ensure responsible deployment across industries.

For more, visit: <https://www.bizcommunity.com>