

# **A New Type of Teams in Industry 4.0. Collaboration Between Humans and Robots.**

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## **Abstract**

Industry 4.0 is based on the implementation of smart technologies. Work teams consisting of humans and intelligent machines, such as robots, are becoming more common. Their cooperation is based on joint performance of tasks in order to achieve set goals. The aim of the article is to present the challenges associated with the functioning of new types of work teams in organizations: based on cooperation between people and intelligent machines (robots or artificial intelligence algorithms).

The article discusses the impact of factors such as trust, mental models, human personality, and machine reliability on the functioning of human-robot teams. It is shown how these areas can affect the performance of HRI - Human Robot Interaction Teams. The literature analysis indicates that before valuable human-robot interaction can occur, humans must first build trust in the machines. And the reliability of robots, and the human sense of control over them, increases trust. In addition, human personality and the attributes presented by a robot are also important for cooperation. For example, robots perceived as extroverted and socially intelligent have a high level of acceptance from humans.

**Keywords:** human robot team, HRI, Human Robot Interaction