Title: Artificial intelligence as a driver of business process transformation (Science Direct)

The article focuses on the general perspective of artificial intelligence (AI) and its implications for business processes. The text highlights recent advances in AI, such as its application to the control of nuclear fusion reactions, and explores various definitions and perspectives of AI, highlighting its role as a driver of digital transformation across all business sectors.

In addition, the article discusses concepts such as digital transformation, highlighting its multifaceted nature beyond mere technological advances. It also discusses the emergence of robotics as an integral component of the digital economy, envisioning a future where intelligent robots autonomously participate in economic transactions while prioritizing the satisfaction of basic human needs.

The theoretical analysis discussed relates the widespread adoption of AI technologies by major technology companies and organizations to improve business processes, increase revenues, reduce costs and enhance customer service. It traces the evolution of AI technology from its beginnings in the 1940s to its current proliferation, driven by factors such as low-cost computing power, large datasets and open-source algorithms.
Data, algorithms and human feedback are seen as essential elements of AI applications, with data playing a crucial role in the learning and success of these applications. The text highlights the importance of robust datasets for meaningful AI results, and examines various AI algorithms, including semantic understanding and statistical clustering, used to solve complex information and big data problems.

The results of this study demonstrate the transformative impact of AI technologies on business processes, highlighting the potential for innovation, revenue growth and strategic leadership. It discusses the role of AI in enhancing customer satisfaction and loyalty through personalized approaches, optimizing supply chain management and improving production processes. By analyzing data and leveraging AI reports, managers can make more informed decisions and allocate resources efficiently.

The section also explores the benefits of AI in automating tasks, reducing human error and enhancing information security by detecting fraud and inconsistencies in structured and unstructured data. It also examines the emergence of sharing economy platforms such as Airbnb and Uber and their impact on business models, discussing the factors influencing user intentions and the correlation between the various components of the sharing economy.

The McKinsey Global Institute findings highlight the potential value of AI adoption in marketing, sales, supply chain management and production across a range of industries. Overall, the findings highlight the transformative potential of AI technologies to drive business efficiency, innovation and strategic growth.

The transformative potential of AI is recognized, and AI and robots are expected to become more human-like and capable of performing tasks traditionally done by humans. The discussion highlights the importance of trust in human-AI interactions and the need for further research to understand the dynamics of trust in the context of AI and robotics.