Name of the student: Léa SENGHOR	Name of your Level 1 Selvina GOVINDEN
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The paper discusses the impact of artificial intelligence (AI) on business process transformation, highlighting the crucial roles of AI in process automation, cognitive understanding and cognitive interaction. The first definition of artificial intelligence appeared in 1955, when John McCarthy first used the term "artificial intelligence". It can be defined as the science and set of technologies that enable the creation of intelligent machines, in particular intelligent computer programmes. More specifically, it deals with the modelling of intelligent computer behaviour reproducing human behaviour. Artificial intelligence uses technology to perform tasks similar to human cognitive functions.

AI is recognised for its potential to improve the quality of customer service, increase operational efficiency, and create value in various sectors, including marketing and sales as well as supply chain management and production. In this sense, it can be defined as a driver of digital transition within companies in the face of ever-increasing competition. By digitalising companies, it is helping to transform the face of business as we know it today. In this sense, there are several forms of artificial intelligence, such as semantic understanding, statistical clustering and classification algorithms such as SVM, Bayes and Neural-Ne, and others that show how AI is helping to solve the problem of information and voluminous data.

What's more, robots are playing an increasingly important role in the digital economy. While today they play the dual role of agent initiating a transaction (supplier, seller) and agent accepting a transaction (buyer), resulting in productivity gains as they are more efficient than humans, in the coming years future robots are expected to be capable of purchasing goods on behalf of their owners.

Within business processes, AI applications include the automation of administrative and financial processes, data analysis to predict purchasing behaviour, fraud detection, personalised marketing, and automated interactions with customers and employees. They therefore enable employees within companies to become more efficient, but also more flexible. By automating tasks, they can devote more time to creative, interpersonal and intuitive activities where human intervention is necessary. For example, artificial

intelligence or cognitive computing systems can help companies establish a closer link with customers by better understanding what they want, by automating huge amounts of information.

In addition, AI is helping to foster communication, interaction and empathy in tasks previously carried out by humans, highlighting the potential of intelligent chatbots as a concrete example of this evolution. Indeed, applied to a customer service department, a chatbot using artificial intelligence helps with responses to simple customer queries where employees can concentrate on more complex tasks requiring human action.

The paper also highlights the importance of trust in the context of AI, highlighting the psychological and sociological dimensions of trust. It is mentioned that trust is a key element in human relationships, at both personal and social levels. Indeed, trust is seen as a factor in social cohesion and the smooth running of societies. With this in mind, recent years have seen the development of thinking around healthy collaboration between humans and artificial agents. While compatibility is currently low, a project to create a socio-emotional AI is the subject of a great deal of work based on neural networks and cognitive modelling. However, given the ever-increasing possibilities offered by artificial intelligence, we also need to talk about the new challenges in terms of ethics, economic security and social stability. Some vital tasks, particularly in the medical eld, require manual control that cannot be performed by a human being.

In short, the article highlights the various applications of AI, its potential to foster trust and social cohesion, but also the challenges linked to ethics and the place of humans in interactions with AI.