

L2 : DIAW Aïssata

L1 : CHAGNEAU Angélique, LAINE Elliott, GORIBE Ndeye, PEREIRA ALMEIDA Amalia

Business Process Analysis

The various articles unanimously highlight **the key role** that artificial intelligence has played in the transformation of operational processes and business models, underlining its growing importance for operational efficiency and process automation.

Firstly, the abstracts highlight how AI is being integrated into business process management, highlighting its **crucial role** in automation, advanced data analysis and semantic modeling requiring a common understanding of meaning between business and IT departments to ensure operational efficiency and to ensure process consistency and adaptability. AI is revolutionizing business processes and has become an ever-evolving strategic tool for companies. **Predictive analytics, deep learning**, these approaches enrich Business Process Management (BPM) by offering advanced analytical tools to predict, adjust and understand business processes - they bring significant value to organizational hierarchies and decision-making domains, enhancing business potential. They also promote proactive management, the ability to adapt to change and continuous optimisation, reinforcing the positive impact of digital transformation in the field of BPM.

We can see from these summaries **the significant impact of AI on business processes** in different areas, improving customer management, marketing and sales, for example, and facilitating business decisions thanks to advanced analyses. AI is completely transforming business processes, improving competitiveness and efficiency through, for example, the automation of robotic processes, which results in a reduction in costs, particularly in repetitive processes such as machine translation.

In addition, employees are empowered to make responsible decisions with integrity. AI plays a role in promoting transparency, accountability and fairness within organizations. AI also has a societal impact. Indeed, it offers solutions to various societal challenges such as the environment, with, for example, the prediction of natural disasters contributing to positive societal change.

L2 : DIAW Aïssata

AI is having a positive impact in a variety of areas, and has great potential to drive innovation, efficiency and ethical practices in business.

The abstracts highlight the **need to make AI models understandable** in the context of business process management (BPM) to ensure their effective adoption and strategic use. They emphasize the importance of transparency and explicability of AI models, proposing methods such as **LIME and SHAP** to provide understandable explanations of AI models thus bridging a possible gap between the complexity of algorithms and the need for human understanding.

However, **challenges in integrating AI into BPM remain**. Indeed, the adoption of AI in BPM can be hampered, with many companies struggling to effectively integrate AI into their operations and business models due to various factors such as: poor governance in analytics systems, risks associated with data quality such as noisy data which can consequently converge into a flawed use of AI reducing operational efficiency. It is therefore necessary to have high data quality and close collaboration between the business and IT departments and to adapt in this flexible environment.

As such, businesses need to remain open to innovation and be able to integrate new technologies to remain competitive in their markets.

In summary, all of this provides a comprehensive overview of the impact, integration, challenges and future vision of AI as a key enabler in business process management, highlighting its essential role in transforming and optimizing business operations.