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Role: L1

Sub theme: the integration of artificial intelligence into business processes

All 16 articles reveal a convergence towards a unified vision of the integration of artificial intelligence (AI) into business processes, marking a significant transformation in the way operational activities are conceptualized, executed and optimized. The A is emerging as an essential driver, propelling operational efficiency, business model modernisation, and business process automation. At the heart of this evolution, project management stands out as a central element, highlighting the crucial need for careful planning and strategic design when integrating these advanced technologies.

A recurring theme within the articles is the comprehensibility of the models, a key feature to ensure effective adoption. Innovative approaches, including the use of machine learning, are being explored to evaluate and improve the clarity of models, offering new perspectives on how companies can understand and take advantage of emerging technologies. The interpretability of AI models in the context of Business Process Management (BPM) is also highlighted, with methods such as LIME proposed to explain model predictions, thus bridging the gap between the complexity of algorithms and the need for human understanding.

Digital transformation is a common thread in these reflections, highlighting the growing importance of AI in targeted automation to increase productivity and meet the changing requirements of companies. The articles highlight the strategic role of AI in decision-making, process management, and the creation of more agile and adapted models. The formal representation of knowledge also finds its place, demonstrating how AI can be deployed to describe organisations and their processes in a structured way, providing a solid basis for more informed and strategic management.

Event logs are emerging as a crucial resource, providing a concrete overview of the discrepancies between idealized models and operational realities. This reinforces the idea that AI, when informed by this concrete data, can contribute to more realistic models aligned with the real needs of companies. Finally, a strategic vision is emerging, calling for a symbiosis between AI, process analysis tools, and

semantic technologies. This convergence is perceived as a significant way to shape the business process landscape, emphasizing the need for mature tools, advanced methodologies, and harmonious integration to maximise the benefits of this evolution. Overall, these articles provide a perspective on the opportunities and challenges of AI integration in business processes, covering technical, managerial, and conceptual aspects.

The integration of artificial intelligence into business processes represents a profound transformation that redefines the way companies conceptualise, execute and optimise their operational activities. These articles emphasize in a unified way that AI is not just a tool, but an essential catalyst for operational efficiency, business model modernisation and process automation. At the heart of this revolution, project management is emerging as a fundamental pillar, highlighting the crucial need for careful planning and strategic design to take full advantage of these advanced technologies.

In conclusion, these articles provide a vision of the opportunities and challenges of integrating AI into business processes, covering technical, managerial and conceptual aspects. They highlight the need for tool maturity, advanced methodologies and harmonious integration to maximise the benefits of this evolution, placing AI at the heart of a transformation that transcends the traditional boundaries of business activities. Convergence towards an integrated vision of AI as an essential catalyst for the evolution of business processes resonates as an invitation to rethink and reinvent the very foundations of operational management in the era of advanced technologies.