Summary Business Process Mining

The article by Evangelos Katsamakas from Fordham University and Oleg Pavlov from Worcester Polytechnic Institute discusses how AI can enhance strategic feedback loops to improve business models. Business model innovation is crucial for a business's viability, and AI is expected to transform the economy and society. Key concepts include causal loop diagrams (CLD), which represent business models when two variables increase each other. Feedback loops, focusing on platform business models, are driven by the premise that more content, apps, and services attract users, leading to a feedback loop. This loop also includes advertisers, who are attracted by user rates, which raises revenues and profits, leading to better efficiency and processes. AI can enhance, accelerate, or reinforce current feedback loops, influencing behavior and business performance. Two overarching AI-related procedures can be applied to every business model: data accumulation and data exploitation. Data accumulation involves aggregating information from customer interactions and business processes, while data exploitation utilizes AI to enhance platform services, optimize business processes, and elevate the overall quality of the business model. The interdependence of data accumulation and exploitation is crucial, as platforms accumulate more data, leading to a continuous cycle of data accumulation.

This paper, written by scholars from Chaoyang University of Technology, Jindal Global University, and the Indian Institute of Management Kozhikode, explores the potential benefits of ChatGPT in improving customer service, handling multiple inquiries, and saving operational costs. ChatGPT, OpenAI's Generative Pre-Trained Transformer (GPT) language model, is trained to simulate human-like user dialogues, allowing human employees to focus on more complex and strategic responsibilities. However, the software relies on specific training data tailored to the business domain, which can produce inaccurate or ambiguous results. The study uses PSI and CORPRAS techniques to demonstrate how ChatGPT could be used in a business setting. Key takeaways include enhanced customer experience, efficient meeting of customer demands, and personalized customer interactions. The study concludes that ChatGPT can help firms meet customer expectations by offering rapid, informative, and natural solutions to customer inquiries or problems. However, the research emphasizes the importance of a comprehensive examination before incorporating ChatGPT into business operations, considering key factors such as domain-specific training data and potential errors in outcomes.

Aleš Zebec, a scholar at the University of Ljubljana, School of Economics and Business, has written a paper on the impact of cognitive business process management (CBPM) and cognitive computing on business performance. The paper focuses on the role of automation and innovation in business processes and their correlation with corporate performance. The author aims to develop measurement scales for CBPM adoption and Business Process Automation (BPA) and explore the connection between CBPM and corporate performance. The research uses a mixed-method approach, including in-depth interviews, new measures for CBPM adoption and BPA, and a structured questionnaire for the main survey. The sample will consist of participants from EU companies using BPM/iBPM software with integrated AI technology. The study includes a systematic literature review, construct development, examination of AI techniques and algorithms in BPM context, and identification of open issues for resolution.

Chaitanya Krishna Suryadevara, a scholar at Wilmington University, discusses the growing importance of incorporating Artificial Intelligence (AI) and Machine Learning (ML) technologies in enterprises to gain a competitive advantage. The paper explores the integration of AI and ML across various industry sectors, highlighting their potential to improve process efficiency, decision-making, and innovation. AI and ML have vast capabilities, automating routine tasks and analyzing vast datasets. The article explores challenges faced by organizations when implementing AI and ML solutions, such as data privacy, ethics, and workforce reskilling. However, it also highlights the measurable benefits of AI and ML adoption, such as increased efficiency, cost reduction, and improved customer experiences. The study highlights the transformative impact of AI and ML on business operations, offering companies a competitive advantage through better efficiency, reduced costs, and improved customer experiences. It also highlights the need for a well-thought-out strategy and the continuously evolving landscape of AI and ML. The research identifies key areas for future exploration, including ethical AI, AI-enhanced decision-making, AI in sustainability, interdisciplinary research, and AI governance and regulation.