L2: Coline Dekeyser

L1: Edson Semedo Brito

Big data analysis: Business process modeling

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## Introduction:

The emergence of artificial intelligence (AI) and data modeling has grown in transformation era, reshaping business operations and research methodologies across various sectors. This summary talks about implications of these technologies, exploring their growing impact and the challenges and developments they cause.

## The Growing Impact of AI and Data Modeling:

The first part of the summary focus on expanding influence of Al across sectors like recruitment, finance, and marketing. Al optimization in recruitment processes, leverages extensive data sources to make it more efficient and reduce discrimination. In the FinTech industry, Al and data science are driving innovations in financial services, translated by the concept of "Smart FinTech." Furthermore, Al helps in direct marketing by enabling segmentation and sales prediction through predictive customer profiles. Despite challenges like substantial investment and extended development cycles, Al contributes to revenue growth, innovation acceleration, and customer satisfaction, making it a trend for companies looking to stay competitive.

## Issues and Developments in Data Modeling and Methodological Analysis:

The second part focuses on the complexities surrounding data modeling and methodological analysis. Data modeling is presented as an ingenious means of organizing and storing information, emphasizing its importance in diverse fields like architecture and electricity. The evolution of databases since the 1960s underscores the continuing relevance of data modeling. Various data model languages, such as DDL/DML, are explored, along with a proposed classification of data models based on the database design process stages. Additionally, the summary goes into different data analysis methods, ranging from mixed evaluations to exploratory analysis in psychology. Each method underscores the significance of meticulous planning, execution, and ethical considerations to maximize the benefits of AI and data modeling in specific application domains.

## **Conclusion: The Profound Implications of AI and Data Modeling:**

In conclusion, the summary highlight the significant transformations done by AI and data modeling across key domains. These technologies offer substantial benefits, from developing operational efficiency to creating value for customers. However, addressing challenges related to data privacy, ethics, and contextual adaptation is imperative. By accepting these trends responsibly, companies and researchers can use efficiently the opportunities presented by AI and data modeling while ensuring ethical and judicious use of it. This shift promises to shape the commercial and scientific landscape, paving the way for a promising future.