Name: Edson SEMEDO BRITO L2: Coline DEKEYSER

L0:

- Naoumi ABDILLAH
- AliceCARDORELLE
- Ryan SIMEU KEMMOE FOKOU
- AnisDJEGHABA

L1 Synthesis: Data modeling and ai

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Global summary:

The advent of artificial intelligence and data modelling has dramatically redefined the way businesses operate and researchers conduct research. These technologies are having an impact on a wide range of sectors, from finance and recruitment to healthcare and methodological research. This summary aims to explore in depth two major facets of this revolution: the growing impact of AI and data modelling, followed by the challenges and developments in these areas.

The Growing Impact of AI and Data Modelling

In this first part, the focus is on the growing impact of AI in areas such as recruitment, financial services and direct marketing. AI optimises the recruitment process using extensive data sources, reducing discrimination while improving efficiency. In the FinTech sector, AI and data science are proving crucial to innovating financial services, illustrated by the concept of "Smart FinTech". In direct marketing, AI facilitates segmentation and sales prediction, creating predictive customer profiles based on buying behaviour. Despite certain challenges, such as significant investment and extended development cycles, AI is contributing to revenue growth, accelerated innovation and customer satisfaction. It therefore represents a compelling trend for companies seeking to remain competitive in a constantly changing environment.

Issues and Developments in Data Modelling and Methodological Analysis

The second part looks at the issues surrounding data modelling and methodological analysis. Data modelling is explored as an ingenious way of organising and storing information, with particular emphasis on the structure and essential components of data models. The evolution of databases since the 1960s is presented, highlighting the continuing importance of data modelling in diverse fields such as architecture and electricity. Various types of languages, such as DDL/DML, are

discussed, and a classification of data models according to the stages of the database design process is proposed.

At the same time, different methods of data analysis are discussed, ranging from mixed evaluations to exploratory analysis in psychology. Each document highlights the importance of thoughtful planning and careful execution in data analysis, while emphasising the need for ethical considerations. Particular emphasis is placed on the need for contextual adaptation to reap the full benefits of AI and data modelling in each specific application domain. Conclusion: The Profound Implications of AI and Data Modelling

These summaries highlights the major transformations brought about by AI and data modelling in key areas. From improving operational efficiency to creating value for customers, these technologies offer significant benefits. However, it is crucial to address the challenges, including those related to data privacy, ethics and the need for contextual adaptation. By staying at the forefront of these trends, companies and researchers can capitalise on the opportunities while ensuring responsible and ethical use of these powerful technological tools. This shift towards the judicious use of AI and data modelling promises to shape the commercial and scientific landscape, offering promising prospects for the future.