

Responsible Artificial Intelligence in Business Analytics: Addressing Explainability, Ethics, and Governance Challenges

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Abstract

Artificial intelligence has dramatically changed the way business analytics work since it allows organizations to work with vast and complicated datasets, detect patterns in data, automatize decisions, foretell future actions, and streamline processes. The use of AI-based technologies like machine learning, deep learning, natural language programming and generative AI has grown in such areas of business as marketing, finance, human resources, supply chain, customer relationship management, healthcare management, and strategic planning. Yet, AI reliance in information gathering presents a serious problem of explainability, fairness, privacy, accountability, transparency, security and governance.

The concept of Responsible Artificial Intelligence (Responsible AI) denotes a multidisciplinary approach to the implementation of artificial intelligence technologies in business operations with due regard for ethical and social principles. The article provides a detailed account of the main ethical and legibility issues concerning the use of AI-based analytics in business. There is also a suggestion of the need for a comprehensive policy framework for the successful use of responsible AI, in particular, an assessment of the impact of both legislation and public opinion on the development of this important scientific area.

The paper proposes that Responsible AI should not be perceived just as a compliance activity but must be regarded as a strategic ability that is embedded throughout the AI lifecycle. The author proposes a governance framework built on organizational leadership, responsible data handling, interpretable models, ethical impact evaluation, human intervention, risk management, and constant auditing. The proposed framework would assist organizations in achieving a balance between innovation and business performance on one hand and social responsibility, stakeholder trust, and sustainable digital transformation on the other one.

Keywords: Responsible AI, Business Analytics, Explainable AI, Artificial Intelligence Ethics, AI Governance, Algorithmic Bias, Data Privacy, Digital Transformation, AI Risk Management, Sustainable Business