ARTIFICIAL INTELLIGENCE

The new risk engine

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ABSTRACT

Purpose: Artificial narrow intelligence is the ability of a computer to mimic and perform tasks that are normally performed by or require human intelligence (Russell et al., 2021). It processes datasets against sophisticated mathematical algorithms within advanced computing hardware and generates outputs at a far greater pace than the human brain can process. In the specialised field of risk management, Artificial Intelligence (AI) has the potential to revolutionize risk management across various industries by enabling faster and more accurate risk assessments, identifying emerging risks in advance, supporting analytical modelling and creating a multidisciplinary focus that achieves forecasting and predictability (Aziz et al., 2018; Bozic, 2024) . Whilst AI presents an undeniable set of opportunities for risk management, it equally presents some challenges such as a lack of transparency, bias, issues with explainability, security concerns and a lack of clear set guardrails which heighten the call for the implementation of best practice and regulatory rigor around AI development to ensure that organisations implement AI ethically, cautiously and safely (Floridi et al.,2019). The purpose, therefore, of this study is to provide risk professionals and executive leaders with a practical understanding of the role AI plays in transforming and advancing risk management across multiple disciplines whilst highlighting the role that data and governance play in supporting the effective execution of AI. This working paper positions artificial intelligence as the new risk engine with data as the fuel and governance as the driver affirming that the future of risk management is a fully AI driven discipline.

Research Questions: The key research questions framing the study ask:

a) What is the role data plays to support AI in its delivery as a risk management predictive tool?

b) What are the governance considerations risk professionals and executive leaders should prioritize in the safe implementation of AI in their organisations as it pertains to risk management?

Methodology: A qualitative approach studying 15 case studies and 5 regulatory frameworks was adopted to identify common attributes, limitations and governance adaptation of AI across multiple disciplines.

Implications: The findings affirm that to steer the risk engine effectively, risk professionals and executive leaders must establish data stewardship, AI oversight frameworks and elevate governance competency whilst also ensuring a human element remains firmly rooted in place (ISO,2023; COSO, 2017). The findings highlight, however, that because there is a plethora of information in the public domain on AI, risk professionals and executive leaders find themselves overwhelmed with information and that they would benefit from a cohesive framework that sources and curates the key findings into a functional working document and learning tool to create common language, understanding and application.

Keywords: Artificial Narrow Intelligence, Artificial Intelligence, Risk Engine, Data, Risk Fuel, Governance, Risk Driver

Paper Type: Extended Abstract of a Research Study

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SUPPLEMENTARY INFORMATION

The full paper, covering the literature review, methodology, analysis, findings and implications can be requested directly from the author.

AUTHOR

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