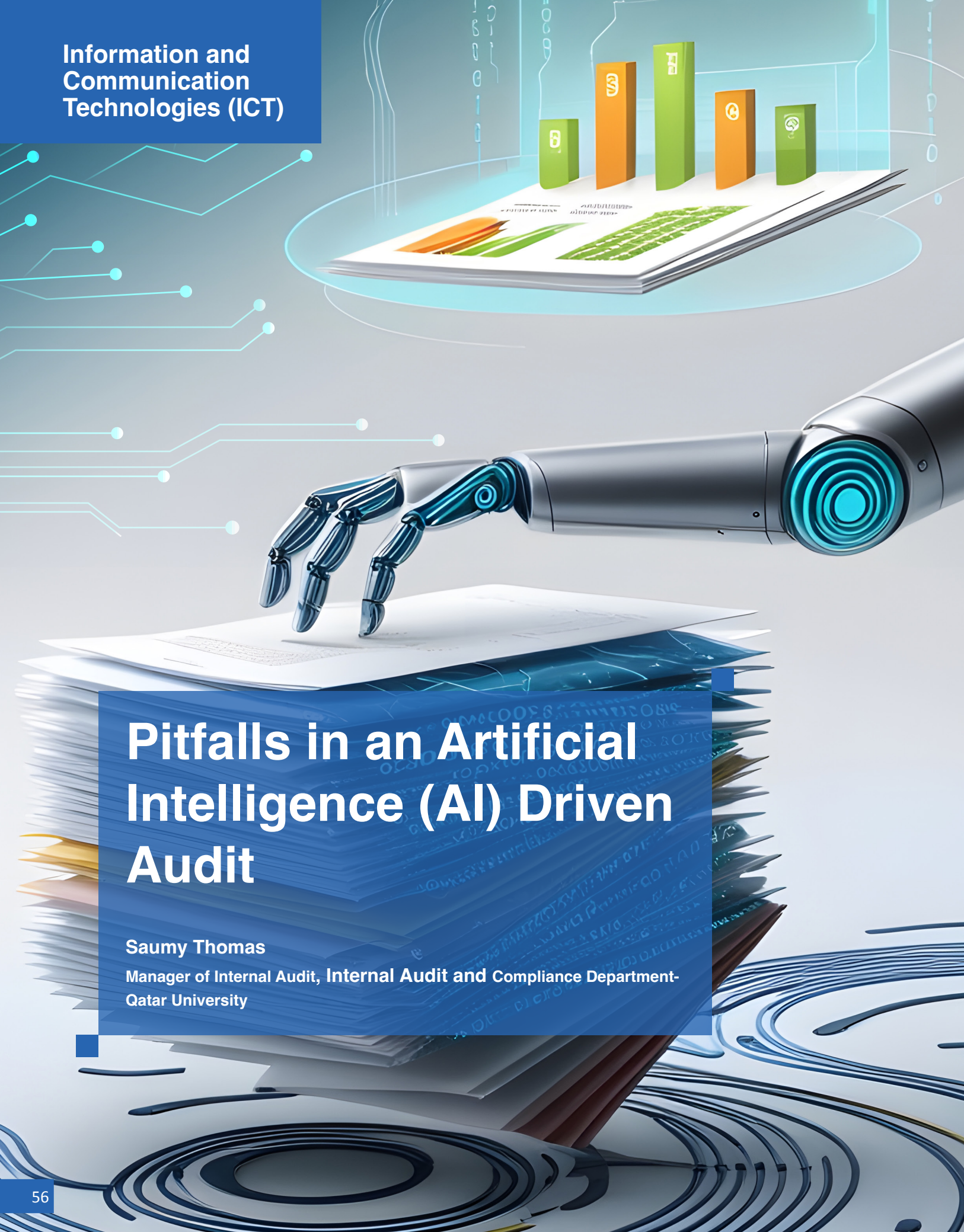

# Pitfalls in an Artificial Intelligence (AI) Driven Audit

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In 2023, Artificial Intelligence (AI) has made substantial progress in automating operational processes and procedures across a wide range of industries. While improving the operational efficiencies of the adopted organization, AI-driven operations have come with their own list of risks. While organizations are encouraged to adopt AI-driven audit methodologies to enhance operational efficiency, the use of machine learning (ML) and biased algorithms may negatively impact audit outcomes. In this article, we take a close look at the potential pitfalls in an AI-driven audit.

**Impact of Data Quality**

AI-powered audit analytics are heavily dependent on the quality of the data provided for analysis. In the event of the presence of any incomplete, inaccurate, or outdated data, the results from the AI-driven analytics may be flawed. Based on the data input to the system during the development and testing phase, biased decisions can creep into the AI-driven audits and hence potentially missing the key data interpretations. The following business cases are a testimony of the aforementioned idea:

- In 2024, Air Canada had a court settlement with one of its passengers after the airline virtual assistant gave him incorrect information which passenger acted based on the incorrect information provided.
- In 2018, Amazon scrapped its project of the AI-driven recruiting software due to incomplete data analysis performed by the software. According to Amazon, the ML models were trained on 10 years' worth of resumes submitted to Amazon and it was mainly of male candidates. Hence, during the implementation phase of the software, the system disqualified resumes with terminologies such as "women" or "women's colleges." Hence, the Amazon recruiters ended up not using the software and eventually, Amazon scraped the project.
- In 2021, the real estate marketplace Zillow had an inventory overvalued at $ 304 million due to

unintentional purchase of homes at higher prices than its current estimates based on the faulty purchase recommendations by its operational AI "Zillow Offers."

**Inability to "Think out of the Box"**

The AI software is constrained to the parameters defined while developing the software. The AI fails to understand the implications of specific business decisions that appear to be within defined parameters but with distorted malicious intent. Most of the AI algorithms are not designed to decode unstructured and highly complex data such as complex legal contracts or financial agreements which influence multiple jurisdictions. Key organizational strategic directions such as organizational culture, tone at the top, management philosophy and stakeholder relationships are not quantifiable, consequently, not considered for decision-making by AI. In 2020, the Wirecard Scandal was a classic example of inaccurate financial reporting based on AI-driven software. Nevertheless, with a fair appearance of compliance with the established financial reporting standards, the German Payment Processor, Wirecard, was able to fraudulently report "ghost money" of USD 2.1 billion for several years. AI systems in place could not detect and identify such deep-rooted deceit and extensive manipulations of financial statements through the sophisticated nature of transactions, including fake documents and complex schemes. Another example would be the infamous 2018 Danske Bank Money Laundering controversy. Danske Bank was involved in a money-laundering scheme where USD 236 billion was laundered through its Estonian branch. Even after multiple flags from the internal audit team and other regulatory authorities, due to the dominating tone at the top and lack of proper governance communications, Danske Bank failed to report these irregularities adequately. Unlike audit decisions taken based on professional judgement such as experience and intuitions, AI cannot assess the interpersonal dynamics influencing organizational operations.

**Adaptability and Flexibility**

AI software must be continuously updated to keep pace with rapidly changing regulations and standards, or it may introduce compliance risks.

Further, understanding and accurately interpreting new regulations require human judgment and expertise. The NMC Health (United Arab Emirates) scandal in 2020 sheds light on how, even with the existence of an automated financial monitoring system, the healthcare provider, had succeeded in understating debts equivalent to USD 4 billion and was able to mislead its investors.

### Fraud Detection

AI softwares help to detect unusual transactions that could indicate potential fraud by analyzing and comparing them to known fraud patterns. However, in the event of sophisticated and innovative fraud schemes, AI may struggle to identify and flag such incidents. There are multiple examples that would demonstrate fraud detection. The Luckin Coffee Accounting fraud in 2020 is such an incident. As part of their expansion strategy, a hooping figure of USD 300 million was reported as revenue through fake documents and fabricated sales figures. Even with the presence of an AI-driven financial analytics tools, fraud needed to be flagged by an anonymous whistleblower.

**In conclusion**, AI software should be used as a tool to assist, rather than replace, human auditors. The interpersonal skills, expertise and auditor's presence of mind, are critical skills that cannot be compensated with the implementation of AI software. Nevertheless, AI software can help in some form of predictive analytics, a robust combination of technology and human expertise is what an effective auditing department needs for effective operations and the provision of independent assurance about organizational risk management, governance and internal controls.

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