The Duality of AI in Funding Strategies and Decision-Making – Insights into AI Governance and Policymaking for Sustainable FinTech Success

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The Duality of AI in Funding Strategies and Decision-Making – Insights into AI Governance and Policymaking for Sustainable FinTech Success

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The primary purpose of this paper is to investigate and comprehend the phenomenon of FinTech startup failures through examining the intricacies of their funding strategies and financial planning.

Addressing algorithmic bias and transparency issues, this research intends to shed light on the dual role of artificial intelligence (AI) tools in the financial technology (FinTech) landscape focusing on their contribution to pattern recognition, risk detection, and insights into feasibility. Thus, the objectives of the paper are to (1) understand specific challenges in the funding strategy and financial planning of FinTech startups, (2) elucidate the impact of AI tools on recognizing patterns and detecting risks, (3) explore challenges in AI-reliant funding, and (4) analyse how algorithmic bias influences success or failure.

The study seeks to investigate the following aspects:

1. Examining the dual role of AI in contributing to the recognition of patterns, detecting potential risks in both Funding Strategies and Decision-Making, and its impact on AI-Driven Funding;

2. Investigating the manifestation of algorithmic bias and fairness issues in the funding of FinTech startups relying on AI. Additionally, evaluating how these issues shape the success or failure outcomes of these startups;

3. Identifying governance measures that policymakers can implement to address concerns related to algorithmic bias, fairness, transparency, and explainability in the context of funding FinTech startups relying on AI;

4. Assessing how policymakers can guarantee responsible and ethical integration of AI in the financial sector, with a focus on mitigating risks and promoting innovation in funding FinTech startups.

Financial regulations, exemplified by RegTech (Regulatory Technology), play a pivotal role in leveraging emerging technology to enhance regulatory compliance within the FinTech ecosystem. While their primary objective is to safeguard consumers and enforce accountability among businesses, RegTech ensures adherence to industry standards and best practices, contributing to cost reduction and risk mitigation associated with non-compliance. (Guo & Polak, 2021) .

In parallel, AI-Driven Funding Strategies and Decision-Making within the fintech industry, leveraging AI for pattern recognition and risk detection, significantly influence the success or failure of startups. A significant gap in the existing literature pertains to assuring the responsible and ethical integration of AI in the financial sector, specifically to address risks and stimulate innovation in funding FinTech startups. The imperative for AI governance in funding fintech startups is evident. This article stands as a pioneering endeavour to contribute valuable insights to policymakers, shedding light on the governance of AI-driven funding decisions within the fintech industry.

The paper will utilise case studies of AI-driven startups that have encountered both success and failure post-funding. The focus will be on examining their funding approaches, financial planning strategies, and the incorporation of AI tools into their operational structures. In-depth interviews with FinTech investors and managers will provide qualitative insights into unique challenges, the effectiveness of AI tools, and the impact of policymakers.

The findings indicate that a significant portion (70%-75%, around $1.3 million) of funding for FinTech startups, which successfully navigated challenging stages and met rigorous criteria, typically results in failure approximately 20 months after securing funding from venture capitalists. The perplexing aspect of this issue lies in the fact that securing funding typically implies that startups have successfully met criteria, gained investor approval, demonstrated originality and innovation in their ideas, crafted effective business plans to achieve missions and objectives, meticulously developed financial essentials, and comprehensively understood customer behaviours, resulting in an expanding customer base. Therefore, if a FinTech venture faces failure, it raises significant concerns about the soundness of their funding strategy and financial planning, reaching a level of intricacy that even banks and venture capitalists may not readily discern (Mag, 2021).

While venture capitalists may encounter challenges in uncovering nuanced details about the financial health and strategic planning of FinTech start-ups, AI tools demonstrate proficiency in recognizing patterns, detecting potential risks, and offering valuable insights into the feasibility of these ventures (see, (Frederiks et al., 2022; Mardanghom & Sandal, 2019) as an example). However, reliance on AI for the funding of FinTech start-ups and its integration into the decision-making processes of investors and funders introduce challenges, including issues such as Algorithmic Bias and Fairness (Koefer et al., 2023), Transparency and Explainability (Prastyanti et al., 2023). Effectively addressing these challenges necessitates meticulous governance by policymakers. The absence of intentional and thoughtful oversight from policymakers may lead to persistent or exacerbated problems related to algorithmic bias, fairness, transparency, and explainability in the funding of FinTech start-ups reliant on AI. In essence, the active engagement of policymakers is crucial to ensure the responsible incorporation of AI in the financial sector, aligning with ethical considerations and societal values and expectations.

The theoretical implications will involve a deeper understanding of the complexities surrounding FinTech startup failures, contributing to academic discourse. On a practical level, the research provides insights that can inform industry practices, emphasizing the importance of responsible AI integration and governance.

The study relies on a specific set of case studies potentially limiting the generalizability of findings to a broader FinTech landscape. Different startups with distinct characteristics may exhibit varying patterns and challenges.

In conclusion, this paper highlights the necessity for strong governance frameworks as AI tools become integral to FinTech operations. It urges proactive policymaking, supports the strategic integration of AI tools, and lays the groundwork for morally and responsibly guided AI governance procedures, contributing to the advancement of knowledge in both academic and practical domains.

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