Biasness in Access to Finance Arising from the Use of AI Models: The Case of Ngubande (PTY) LTD and the "FairCredit" Initiative

Ngubande (PTY) LTD is a South African fintech and risk analytics company established in 2019, specialising in Artificial Intelligence (AI)-driven credit scoring solutions for financial institutions. The organisation's strategic objective is to improve financial inclusion by expanding access to finance for underserved populations, including youth, women entrepreneurs, rural communities, and informal businesses. Through the use of machine learning models and alternative data sources such as mobile usage, transactional behaviour, and digital activity, Ngubande seeks to improve credit risk assessments while reducing reliance on traditional collateral and limited credit histories.

In early 2025, Ngubande launched the FairCredit Initiative, a strategic programme designed to improve equitable access to finance through AI-enabled lending models. Developed in partnership with financial institutions, youth development organisations, and provincial stakeholders, the initiative aimed to reduce human bias in lending decisions and create opportunities for individuals traditionally excluded from formal financial systems. However, concerns soon emerged regarding the fairness and effectiveness of the AI models. Internal reviews revealed that applicants from rural and historically disadvantaged communities experienced significantly lower approval rates than urban applicants, while female entrepreneurs and informal business owners were more likely to be classified as high-risk borrowers despite stable income patterns. Illustrative analysis showed that rural applicants experienced approval rates nearly 25% lower than urban applicants, highlighting growing concerns around exclusion and fairness.

Further investigation revealed that although the AI model excluded direct identifiers such as race and gender, it relied heavily on proxy variables including geographic location, transaction behaviour, and digital activity patterns. These variables were strongly linked to historical socio-economic inequalities and unintentionally introduced bias into the credit scoring process, amplifying exclusion rather than improving inclusion. This raised serious concerns regarding the broader implications of the model and the organisation's ability to ensure fair, transparent, and accountable outcomes. Civil society organisations and media platforms subsequently criticised the FairCredit Initiative for reinforcing financial exclusion, while regulators requested greater transparency regarding governance, fairness testing, and model oversight. A major financial institution temporarily suspended the use of Ngubande's model pending further investigation.

An independent internal review identified weaknesses in Ngubande's governance and risk management framework. The organisation had prioritised predictive accuracy and operational efficiency over fairness and ethical considerations, with limited bias testing, inadequate model validation, and insufficient monitoring of fairness indicators prior to deployment. In addition, the organisation lacked a formal AI governance structure responsible for ethical oversight and stakeholder engagement, while fairness was not explicitly incorporated into the organisation's risk appetite framework.

Case Study Question:

You have been appointed by the Board of Ngubande (PTY) LTD as a Risk Advisory Team to conduct a comprehensive review of the FairCredit Initiative. The Board seeks practical, innovative, and sustainable recommendations on how the organisation can expand financial inclusion for underserved communities, responsibly leverage Artificial Intelligence (AI) and proactively manage emerging risks, while maintaining trust, fairness, sustainability, and regulatory integrity.

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