

12 - 14 March 2026

Berlin , Germany

Artificial Intelligence for Co-operative Credit Union Management: A Feasibility Perspective from a Ghanaian City

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Abstract

The growing application of artificial intelligence to contemporary strategizing in co-operative credit union management continues to attract scholarly attention from diverse perspectives. Some of these perspectives include financial management in the sphere of co-operative credit unions in much of the developing world, which remains under-researched. This study commits to the feasibility of applying AI-led solutions for meaningful credit union management in a Ghanaian city, with particular attention to operational effectiveness and efficient service delivery. The operations of credit unions are typically characterized by human activity systems, resource limitations and community-inspired control mechanisms. The human activity systems naturally orchestrate a fly in the ointment situations that undercut matters of transparency, speed, accountability, among other allied complicated scenarios. However, technologies driven by AI, such as automated decision support systems, predictive analytics, and natural language processing techniques, provide conditions for facilitating unbiased loan processing applications, member interactions, savings mobilization, as well as monitoring for fraud and detection. By applying a qualitative research philosophy, the study uses interviews and secondary data involving credit union senior managers and junior staff at a given Ghanaian city to explore the feasibility of implementing an AI-driven system of technology to determine the extent to which such a change would be accommodated in that context of operation. The centre of focus for this feasibility study would be the preparedness of management to embrace this shift in operational philosophy. Again, the availability of data, technology infrastructure, staff expertise, policy control framework, as well as members' thoughtful orientations would be scanned to understand how seemingly seamless this digital transformation would be welcomed by the relevant stakeholders. Potentially, this study should fit the corpus of the ever-increasing literature on the current conversation on financial technology use in the Global South. For it is likely to shed insights on the good stories and also account for the dark side of AI in credit and co-operative finance management. The study, therefore, stands to give a clue to

policymakers, system designers, credit union officers, etc., about how the mechanics for fostering sustainable AI-powered models can be designed to suit local exigencies.

Keywords: Artificial intelligence; Co-operative; Credit Union; Management