BLACKBIRD FOR TRAINING

Artificial Intelligence Applications in Microfinance Credit Scoring

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Introduction

The Artificial Intelligence Applications in Microfinance Credit Scoring course is a specialized one-week program designed to equip financial professionals with a practical and strategic understanding of how artificial intelligence is transforming credit assessment in microfinance institutions. As the use of alternative data expands and regulatory scrutiny increases, microfinance institutions must adopt advanced, ethical, and compliant AI-driven credit scoring models to enhance financial inclusion while managing credit risk responsibly.

This course combines conceptual foundations with applied case studies, focusing on alternative data utilization, bias detection and mitigation, model governance, and regulatory implications. Participants gain hands-on insights into deploying AI responsibly in credit decision-making while ensuring transparency, fairness, and compliance with local and international regulations.

Course Objectives

By the end of this course, participants will be able to:

- Understand the role of artificial intelligence and machine learning in microfinance credit scoring.
- Identify and evaluate alternative data sources for credit assessment.
- Design AI-based credit scoring frameworks suitable for underbanked populations.
- Recognize, measure, and mitigate bias and discrimination in AI models.
- Apply ethical AI principles to credit decision systems.
- Interpret regulatory expectations related to AI-driven lending and consumer protection.
- Strengthen governance and transparency and explainability of credit scoring models.
- Assess risks and opportunities associated with AI adoption in microfinance institutions.

Course Outlines

The course is delivered over five structured training days, with each day focusing on a critical component of AI-enabled credit scoring.

Day 1: Foundations of AI in Microfinance Credit Scoring

- Overview of microfinance lending models and credit challenges.
- Introduction to artificial intelligence and machine learning concepts.
- Comparison of traditional and AI-driven credit scoring approaches.
- Key algorithms used in credit risk assessment.
- Data requirements and infrastructure considerations for microfinance institutions.
- AI use cases in microfinance across emerging markets.

Day 2: Alternative Data for Credit Assessment

- Understanding alternative data and its role in financial inclusion.
- Sources of alternative data, including mobile usage, transaction behavior, and utility payments.
- Data quality, privacy, and customer consent considerations.
- Feature engineering techniques for alternative data.
- Benefits and risks of using alternative data in microfinance.
- Case studies of alternative data-driven credit scoring models.

Day 3: Bias, Fairness, and Ethical AI

- Types of bias in credit scoring models.
- Sources of discrimination in data and algorithms.
- Methods for measuring bias and fairness in AI systems.
- Techniques for bias mitigation and model correction.
- Ethical AI principles in financial services.
- Ensuring transparency and explainability of AI-driven credit decisions.

Day 4: Model Governance, Risk Management, and Compliance

- AI model lifecycle management and governance frameworks.
- Model validation, monitoring, and performance management.
- Managing operational, reputational, and compliance risks.
- Consumer protection considerations in AI-based lending.
- Data security and cybersecurity risk implications.
- Internal controls and accountability in automated decision systems.

Day 5: Regulatory Implications and Practical Implementation

- Overview of global and regional regulatory trends in AI and financial technology.
- Impact of AI regulation on credit scoring practices.
- Compliance expectations for microfinance institutions using AI.
- Regulatory reporting and audit readiness.
- Designing an AI-based credit scoring roadmap for microfinance institutions.
- Practical workshop on building a responsible AI credit scoring framework.
- Final review and key implementation success factors.

Why Attend This Course? Wins & Losses!

- Gain practical knowledge of AI-driven credit scoring tailored to microfinance institutions.
- Learn how to responsibly use alternative data to expand financial inclusion.
- Understand and mitigate bias and ethical risks in AI models.
- Strengthen regulatory compliance and consumer protection practices.
- Enhance institutional risk management and governance frameworks.
- Acquire actionable insights from real-world microfinance use cases.

Conclusion

The Artificial Intelligence Applications in Microfinance Credit Scoring course provides a comprehensive and practical roadmap for leveraging AI responsibly in lending decisions. Over one week, participants explore the full lifecycle of AI-enabled credit scoring, from data sourcing and model design to ethics, governance, and regulatory compliance.

This program is ideal for microfinance professionals seeking to balance innovation with responsibility, enabling smarter credit decisions, improved financial inclusion, and sustainable growth in an increasingly regulated financial environment.