

# Hackathon Mechanics

## 1. Challenge Overview

The challenges presented in this hackathon revolve around enhancing the growth and acquisition of Micro, Small, and Medium Enterprises (MSMEs), which are vital to economic development but often face hurdles in financial management and capital access. At the same time, the banking sector faces its own challenges in serving MSMEs optimally. This hackathon aims to address these dual concerns to create a stronger synergy between MSMEs and financial institutions like BPI.

- a. **MSME Challenge 1:** Addressing **unmanaged finances** and **bookkeeping** hurdles, which affect long-term viability and bankability.
- b. **MSME Challenge 2:** Unlocking **untapped capital opportunities** through innovative financing solutions.
- c. **MSME Challenge 3:** Streamlining and **simplifying transactions with banks** to make the experience frictionless.
- d. **FI Challenge 1:** Increasing visibility into **MSME needs** and financial health to deliver **better-targeted solutions**.
- e. **FI Challenge 2:** Enhancing the bank's competitive edge in offering MSMEs substantial opportunities for growth and financial empowerment.

## 2. Introduction

The Philippine economy is largely centered around big-ticket transactions, but MSMEs account for the majority of transactions in terms of volume. As the backbone of the economy, MSMEs play a vital role in job creation and enhancing economic resilience. Supporting these enterprises is essential for fostering long-term, sustainable economic growth.

However, many MSMEs are not fully leveraging available technologies, missing opportunities to scale and improve operational efficiency. In addition, a significant number of MSMEs operate using personal savings accounts instead of business banking accounts, limiting their ability to access financial services tailored to their needs. By utilizing technology, banks have the opportunity to offer more innovative, efficient, and scalable solutions that can help address the recurring challenges faced by MSMEs. This hackathon aims to bridge the gap between MSMEs and financial institutions, developing tech-driven solutions that improve access to capital, streamline transactions, and enhance MSME growth.

## 3. Required Outputs

- a. **Project Documentation (PDF or Short Research Paper, IMRAD format):**

- i. Introduction – Articulate the challenge faced by MSMEs and banks, with a focus on financial inclusion and digitization.
- ii. Methods – Outline the methodology used to address the MSME or bank challenges using data visualization, machine learning, generative AI, or other tech solutions.
- iii. Results – Present findings with an emphasis on the potential impact on MSMEs and banking relationships.
- iv. Discussion – Discuss how the proposed solution can enhance MSME growth and acquisition, while giving the bank a competitive edge.
- v. Project Prototype – Include a tangible prototype that demonstrates the feasibility of your solution.
- vi. References – Cite relevant studies, reports, or frameworks that guided your solution development.
- vii. Appendix – Include technical details such as code, additional analysis, and model enhancements.

**b. Presentation (PowerPoint):**

- i. Data Processing Pipeline – Demonstrate the workflow from raw data to actionable insights.
- ii. Exploratory Data Analysis (EDA) – Showcase initial findings, trends, and patterns in MSME data, with emphasis on pain points that banking solutions can address.
- iii. Data Storytelling/Visualization Track – Inspiring Action with Data:
  1. Focus on using data-driven narratives to highlight the significance of empowering MSMEs.
  2. Inspire banks, policymakers, and stakeholders to take action by showcasing data-backed stories of how financial inclusion can drive economic growth.
- iv. Machine Learning Track – Enabling Fair and Equitable Access:
  1. Develop AI models that ensure fairer, more accessible credit and banking services for MSMEs.
  2. Highlight how AI can help underserved communities tap into better financial opportunities.
- v. Generative AI Track – Empowering Business Growth & Financial Independence:
  1. Utilize generative AI to scrape data from sources like BPI's website, social media, ebooks, and open data related to MSMEs, generating valuable insights to support small businesses.
  2. Use pre-trained large language models (LLMs) or train new ones on relevant MSME data to develop AI-driven solutions that offer customized support for MSMEs and financial institutions.

3. Focus on leveraging text data to empower MSMEs by improving financial literacy, offering business growth strategies, and delivering actionable insights that strengthen their market presence.
- vi. Final Results
  1. Provide a summary of the proposed solution's expected impact on MSME growth and acquisition from a banking perspective.
- vii. Overall Narrative
  1. Present a cohesive narrative that ties together data insights, AI-driven solutions, and MSME-banking integration.
- c. **Video Presentation (10 mins max):**
  - i. Overview and Introduction – Provide a brief introduction covering the key challenges faced by MSMEs and the banking sector, along with the objectives of the proposed solution.
  - ii. Methodology Summary – Walk through the methods and technologies used to address the challenges, highlighting the data pipeline, machine learning models, or generative AI approaches utilized.
  - iii. Prototype Demonstration – Showcase the project prototype in action, explaining its features, functionalities, and how it solves the identified challenges.
  - iv. Results and Discussion – Present the solution's potential impact on MSMEs and the banking sector, backed by data-driven insights.
  - v. Call to Action – Conclude with a summary of the expected impact and a compelling call to action for financial institutions, MSMEs, or policymakers to adopt the proposed solution.
  - vi. Adherence to Special Instructions – Ensure the presentation adheres to the 10-minute time limit, focusing on concise and impactful delivery.

#### 4. Special Instructions

- a. The project documentation should be concise (3–5 pages for IMRAD). Ensure that your project prototype, references, and appendices are detailed yet to the point.
- b. Presentations should not exceed 15 slides. Points will be deducted for excessive slides.
- c. Focus on ideation and presentation, as you may present to BPI executives and group heads.
- d. Document the AI tools and methods used, including all prompts, tools, and flowcharts in your methodology.
- e. Ensure that your processes include all data elements, even if there are extra decimal places.
- f. Compile all your queries in a single file for ease of review and response.

- g. Following data privacy policies, delete all datasets after submission. Protect your team's data integrity in compliance with the Data Privacy Act of 2012.

## **5. Intellectual Property Rights Agreement**

By participating in this hackathon, participants acknowledge that all intellectual property rights related to their outputs are owned by the Bank of the Philippine Islands (BPI). Participants are granted an exclusive license to use their outputs for educational or personal purposes. Any other use or distribution is prohibited without permission. Participants agree to treat all related information as confidential, adhering to Republic Act 8293 (Intellectual Property Code of the Philippines).