Based on the dataset three KPI is defined below:

**Geographical Metrics**:

It represents the distribution of loans across countries, regions.

As [Kiva.org](https://www.kaggle.com/kiva) is an online crowdfunding platform to extend financial services to poor and financially excluded people around the world, this is an important metrics.

Pros: Targeted interventions, strategic planning, performance evaluation, risk management.

Cons: Data limitations, oversimplification, bias, interpretation challenges.

**Loan Performance Metrics**:

Loan performance metrics are indicators used to evaluate the effectiveness and efficiency of loans provided by financial institutions or lending platforms. These metrics help assess the quality of loan portfolios, monitor repayment behaviour, and measure the overall success of lending activities.

Pros:Performance Evaluation, Risk Management, Decision Making, Investor Confidence

Cons:

Limited Scope: Loan performance metrics focus primarily on quantitative indicators related to loan repayment and portfolio management. They may not capture qualitative factors such as borrower relationships, customer satisfaction, or market dynamics, which are also important for assessing overall performance.

Data Accuracy, Lagging Indicators, Benchmarking Challenges:

**The Multidimensional Poverty Index (MPI)**

The Multidimensional Poverty Index (MPI) is a comprehensive measure used to assess poverty levels by considering multiple dimensions of well-being simultaneously. It goes beyond traditional income-based measures of poverty and incorporates indicators related to health, education, and standard of living. The MPI identifies individuals or households as "multidimensionally poor" if they are deprived in at least one-third of the weighted indicators. This index provides a more holistic understanding of poverty and helps policymakers target interventions more effectively.

Higher MPI refers to higher poverty.

In order to understand financial condition of borrower, we need the metrics.

Pros: Holistic poverty assessment, considers multiple dimensions of well-being, identifies deprived individuals or households, aids targeted interventions.

Cons: Data complexity, interpretation challenges, potential for oversimplification, may not capture all aspects of poverty.

**Analysis**

1. Gender Distribution:
   * There are a total of 1,071,308 female borrowers and 274,904 male borrowers.
   * The maximum number of female borrowers for a loan is 50, while the maximum number of male borrowers is 44.
   * Majority of loans have female-only borrowers, followed by loans with male-only borrowers.
2. Sector-wise Analysis:
   * The average number of female borrowers per loan is highest in the Clothing sector (2.7), followed by Personal Use (2.6) and Food (2.4).
   * For male borrowers, the average number per loan is close to 1.75 across sectors like Food, Agriculture, Clothing, and Personal Use.
3. Maximum Borrowers per Loan:
   * The sectors with the maximum number of female borrowers per loan are Clothing, Food, and Retail.
   * For male borrowers, the sectors with the maximum number of borrowers per loan are Personal Use and Agriculture.
4. Loan Repayment Interval:
   * Loans with female-only borrowers have a similar distribution between monthly and irregular repayment intervals, with a small percentage of bullet repayment intervals.
   * Loans with male-only borrowers primarily have monthly repayment intervals, with a higher percentage of bullet repayment intervals compared to irregular intervals.

**The Multidimensional Poverty Index (MPI)** provides a comprehensive perspective on poverty by considering multiple dimensions such as health, education, and living standards. Here's a summary of the average MPI values for Sub-Saharan Africa, South Asia, and East Asia & Pacific:

1. Sub-Saharan Africa: The average MPI for Sub-Saharan Africa is approximately 0.337.
2. South Asia: The average MPI for South Asia is approximately 0.219.
3. East Asia & Pacific: The average MPI for East Asia & Pacific is approximately 0.136.

These average MPI values reflect the multidimensional nature of poverty in these regions and can serve as important indicators for understanding and addressing poverty-related challenges.

**Recommendation:**

Based on these insights, it's evident that there is a significant gender disparity in borrower demographics, with a larger proportion of female borrowers compared to male borrowers.

Additionally, the repayment behaviour varies between loans with female-only, male-only, and mixed-gender borrowers, indicating potential differences in economic activities and financial capabilities among these groups.

We observe that most of the Sectors have small repayment period, with around 12 month average (with Food and Retail with lowest averages). The largest average values are for Entertainment, Education and Housing.we can leverage 12 month repayment mode.