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CIRCLE

# STRENGTHENING PROGRAM IMPLEMENTATION THROUGH DATA & MONITORING SYSTEMS

CIRCLE Women Association is a non-profit dedicated to empowering women by providing them with essential skills, knowledge, and resources through digital and financial literacy. It aims to support the long-term success of women entrepreneurs by providing ongoing business coaching and monitoring. One of CIRCLE's biggest initiatives is the Digital Literacy Program (DLP), which trains low-income women entrepreneurs to equip them with digital, financial literacy, and entrepreneurial skills across Pakistan.

# PROBLEM

The CIRCLE Women's Digital Literacy Program (DLP) faced challenges in systematically collecting, tracking, monitoring, and analysing data. This limited the organisation's ability to generate actionable insights, conduct objective assessments, and ensure transparency. The lack of a structured framework and intuitive data visualisation hindered the leadership team's ability to effectively evaluate and improve the program, demonstrate its impact, and make informed decisions about program design and implementation.

# SOLUTION

To address this gap, CERP developed comprehensive Monitoring & Data frameworks tailored to the specific needs of the CIRCLE Women's Digital Literacy Program (DLP) using the following four-step approach. By integrating this approach, CERP aimed to optimize the DLP operations and implementation through a continuous cycle of improvement.




### DESIGN

Set M&E framework with clear objectives and KPIs. Develop tracking tools for monitoring screenings, trainings, and check-ins.




### EXECUTE

Implement M&E framework across program activities. Conduct spotchecks and backchecks; capture real-time data on selection, quality, and engagement




### ANALYSE

Use Power BI to analyze and visualize program performance. Share insights and address challenges on a regular basis.




### OPTIMIZE

Refine processes and adjust protocols for program improvement. Update SOPs and strategies for better outcomes and participant success.

*Comprehensive monitoring and data framework*



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# DATA FRAMEWORK

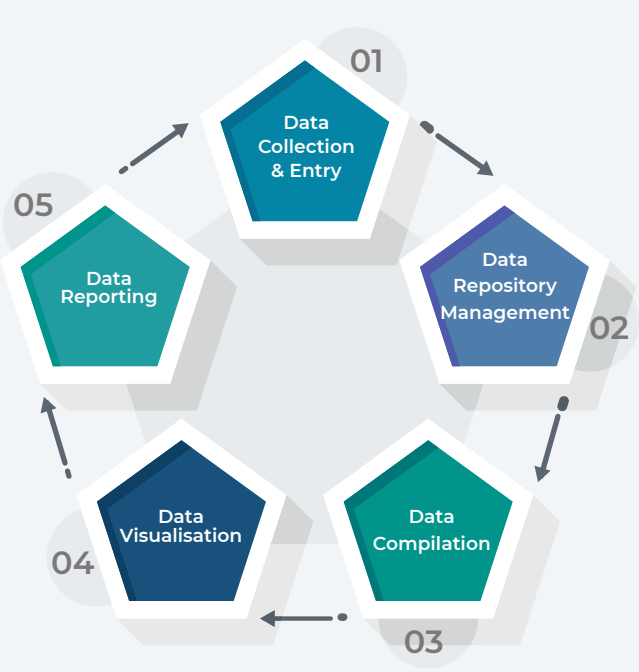
Data Framework provides a blueprint for how data is collected, stored, processed, analysed, and interpreted. CERP worked with CIRCLE to streamline the following five-step data framework process by iteratively refining each step to improve efficiency and effectiveness.

## 1. Data Collection & Entry

- Standardised data collection by revising all forms and implementing a single template across all regions.
- Established robust data validations by using the built-in features of the data collection application.

## 2. Data Repository Management

- Established centralised data storage for data security.
- Restricted access to data is granted to only select personnel, who are authorised to make changes to maintain data integrity.




*Data Framework*

## 3. Data Compilation

- Established standard timelines to ensure data from various sources is received timely.
- Defined roles and responsibilities to disaggregate multiple functions to further optimise the data compilation process.

## 4. Data Visualisation

- Created interactive Power BI dashboards and tailored visualisations of key performance indicators (KPIs) and trends as per the specific needs and knowledge level of the target audience.
- Empowered employees with data literacy skills to enable them to leverage data effectively.

## 5. Data Reporting

- Categorised KPIs into specific program objectives to enable data-driven decision-making.
- Provided real-time data access at all program team levels through interactive dashboards.

A core component of this framework was the development of a dynamic Power BI dashboard to visualize and track key performance indicators (KPIs). This involved defining indicators in close collaboration with CIRCLE based on their requirements, mapping them to the Theory of Change, pilot testing, automating data pipelines, and creating interactive dashboards.

The comprehensive set of measurable indicators was designed to track the DLP's progress toward program objectives, enabling continuous performance monitoring through structured data collection instruments and robust validation protocols. This dashboard leverages automated data pipelines to provide real-time insights, ensuring data integrity and supporting a robust, user-friendly approach to continuous improvement and informed decision-making.

# KEY STEPS IN POWER BI DASHBOARD DEVELOPMENT

## 1. Aligning Metrics with Program Objectives

Collaborated with CIRCLE Women to identify key performance indicators (KPIs) that align with the program's strategic vision and operational needs.

## 2. Field Testing and Indicator Validation

Conducted several on-site visits to refine and validate the KPIs, ensuring relevance and accurate reflection of program performance.

## 3. Defining Calculation Methods

Outlined in detail how each metric is calculated to ensure accuracy and consistency in data analysis. This included specifying formulas, aggregations, and other computational methods required to derive the indicators from raw data.

## 4. Optimising Data Flows

Identified data pipeline for each indicator, the data stakeholders, initial data sources, and final data storage. Automated data collection and processing wherever possible to improve efficiency and reduce manual effort. Leveraged Google Apps Script to automate repetitive tasks and ensure that data calculations were accurate and up-to-date.

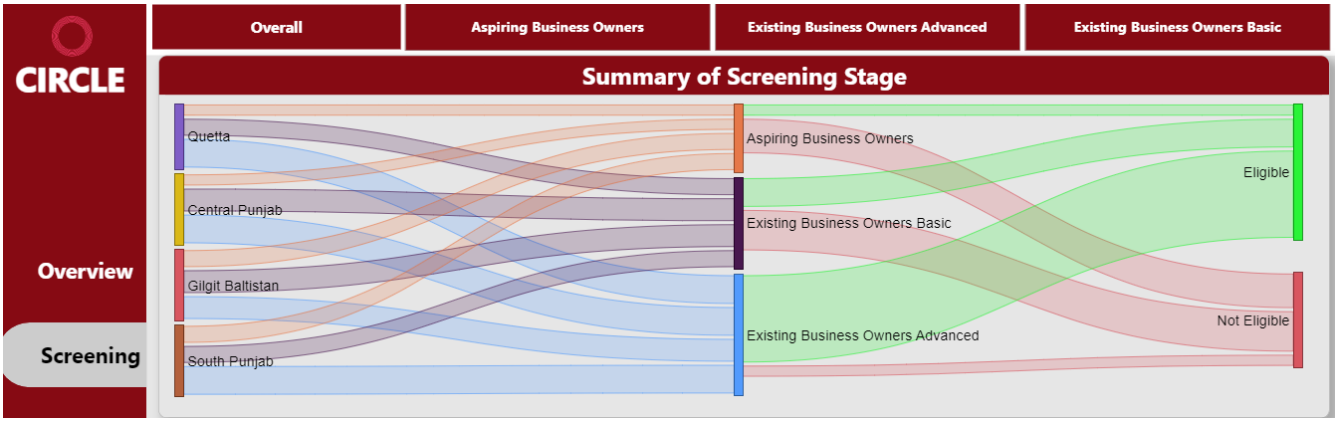
## 5. Creating Interactive Dashboards

Built a dynamic dashboard using Power BI linked with automated data sources (Google Sheets) to provide real-time updates and actionable insights. The dashboard had slicers to allow users to segment and view data based on specific criteria, such as geographic area or demographic group. This enabled users to refine and customize the data displayed on the dashboard according to their specific needs.

## 6. User Training and Documentation

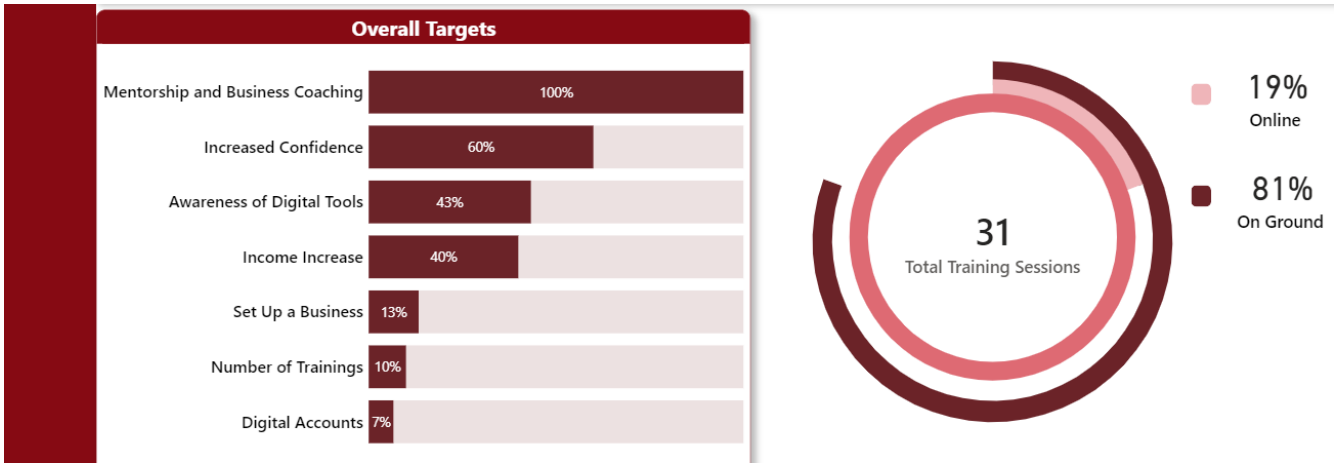
Provided training sessions to ensure that end-users understood how to use the dashboard effectively. Created comprehensive documentation that explained the purpose of each indicator, how to interpret the data, and how to use the various features of the dashboard.

By following this systematic approach, CERP ensured that the Power BI dashboard was not only effective and data-rich but also intuitive and adaptable to the evolving needs of the CIRCLE Women's DLP program. Some screenshots from the dashboard are added below:






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*Metrics and analysis results on Power BI Dashboard*

# MONITORING SYSTEMS

While streamlining the data pipeline is essential, robust data governance practices are equally important to maintain data quality and consistency. To improve implementation efficiency and data reliability, CERP established the following monitoring protocols and systems.

| CATEGORY | OBJECTIVE | PROTOCOLS/ACTIONS | FREQUENCY/ RESPONSIBILITY |
|---|---|---|---|
| **Monitoring Tracker** | A comprehensive tracking system to ensure the quality of screenings and training sessions during program implementation | **Screenings Spotchecks:** Track the number of screenings conducted and on-site logistics.<br>**Backcheck Calls:** Verify selected participants' eligibility for quality assurance.<br>**Training Spotchecks:** Ensure training venue standards and preparedness. | Weekly |
| **Backcheck Calls** | Ensure the quality of the candidate pool and confirm selected participants' eligibility. | **Before Call:** Candidates are selected through random sampling for data verification.<br>**After Call:** Record-keeping and update reporting sheets with new information. | Within 3-5 business days post-screening session (M&E Officer) |

| CATEGORY | OBJECTIVE | PROTOCOLS/ACTIONS | FREQUENCY/ RESPONSIBILITY |
|---|---|---|---|
| **Spotcheck Protocols** | To ensure adherence to screening and training protocols and quality standards without prior notice. | **Screening Spotchecks:** Monitor protocols, SOPs, and data entry during screening sessions.<br>**Training Spotchecks:** Confirm venue readiness, instructor preparation, and protocol adherence during training sessions. | Monthly Targets (M&E Officer) |
| **Feedback and Reporting System** | Capture real-time insights and incorporate feedback for program improvement. | **Weekly Meetings:** Area Coordinators and Assistant Project Coordinator to get pulse from the field.<br>**Monthly Meeting:** Program Manager with DLP Core Team, including field, data and M&E teams.<br>***Quarterly Meeting***: CEO with senior management for strategic updates. | Weekly, Monthly, Quarterly (Project Coordinator & Program Manager) |

# OUTCOMES

CERP conducted a knowledge transfer session to train the CIRCLE DLP project team, M&E team, and data team on the implementation of the monitoring systems and the Power BI dashboard. These sessions facilitated an in-depth discussion of each component, including the rationale behind its design, execution, protocols, and optimisation strategies. The training emphasised adapting the monitoring framework and dashboard to other processes, ensuring that the system could automate data analysis and support ongoing program evaluation.

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# ACKNOWLEDGMENTS

*We would like to extend our sincere gratitude to everyone who contributed to the successful execution of this project.*

**Project Sponsor**
CIRCLE Women Association

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