Measuring Social Impact in Microfinance
New insights from client monitoring databases

The cases of Fundación Paraguaya, IDEPRO and Fundación Génesis Empresarial

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EXECUTIVE SUMMARY

In the last few years, many microfinance institutions have made the leap to track changes in their clients’ wellbeing over time. In the fall of 2013, Triple Jump partnered with EA Consultants to investigate whether the resulting client databases could be tapped to better understand the impact of microfinance on end clients. Working closely with three Latin American MFIs– Fundación Paraguaya in Paraguay, IDEPRO in Bolivia and Fundación Génesis Empresarial in Guatemala–the team analyzed each institution’s impact monitoring databases, assessed their data management processes, and made recommendations on their end uses of the results. Their findings are summarized below.

- Taken together, we see that it is possible to glean useful impact information from existing monitoring databases. Not only can these databases illustrate whether clients are progressing over time, they also offers helpful insights into typical timing and patterns of progress, informing each MFI’s benchmarking and targeting strategies.

- Clients at all three institutions experienced significant improvements along each MFI’s defined impact indicators. In the case of Fundación Paraguaya, we were able to show that clients’ progress outpaced trends in the general population. Each institution also revealed interesting patterns of progress: for instance, IDEPRO data showed that increased revenues and assets are more common than expansion of staff, and Génesis data revealed that it may take longer than one year for socioeconomic changes to become evident.

- An MFI’s motivations for measuring impact fall into three general categories: to improve accountability to clients and other stakeholders, to achieve financial sustainability by securing funding and improving retention, and to promote learning and innovation within the organization and in the sector. It follows that an MFI’s impact measurement strategy should be tailored to these motivations and goals.

- Any effective impact tracking strategy must have six crucial elements: institution-wide commitment, a theory of change with a corresponding set of indicators, an efficient data collection process, an effective and flexible storage system, capacity for basic before-after analysis and an established process for sharing and responding to results.

- Impact data collection represents a substantial investment. However, few organizations reap the full benefits from this investment, as only small proportion of data collected is analyzed or utilized to its full potential. Reflecting on the common challenges and bottlenecks of the three institutions in this study, the team identified the following best practices at each stage to maximize the benefits of impact measurement:

  **DEFINE:** The list of impact indicators should be short, and it should closely mirror the MFI’s mission, theory of change, and motivation for impact measurement.
  **COLLECT:** Improved data collection technology has the potential to reduce cost, time burden and error, as does careful consideration of loan officer incentives.
  **STORE:** Databases should allow for easy linkages between datasets and simple exports.
  **ANALYZE:** Good analysis requires appropriate software and human resources, as well as effective communication between analysts and decision makers.
  **UTILIZE:** MFIs should be encouraged to utilize their results for internal program improvement as well as external promotion and accountability.
INTRODUCTION

Seeking new insights into the impact of microfinance on the wellbeing of its clients, Triple Jump has prioritized initiatives to measure social outcomes. However, impact measurement has long been an elusive goal for microfinance institutions. While randomized controlled trials may be the only way to prove whether microfinance causes changes in wellbeing, they can be expensive, logistically difficult, and out of reach for most MFIs. Nevertheless, this should not discourage the microfinance industry from approaching questions of impact; rather, it should encourage them to consider alternative strategies. Triple Jump sought to understand whether it was possible to gain insight into an MFI’s social impact using the client data collected during day-to-day processes.

Triple Jump has identified a number of MFIs that have begun to gather social performance data on a regular basis, tracking changes in their clients’ wellbeing over time with a variety of poverty measurement tools (PMTs). Although the resulting databases are extremely rich, very little of this data has been mined to its fullest extent. This led Triple Jump to contemplate how MFIs might make better use of this data, whether it is possible to turn this data into valuable impact information, and what processes this effort would entail.

To answer these questions, Triple Jump commissioned a study with three leading MFIs in Latin America: Fundación Paraguaya in Paraguay, IDEPRO in Bolivia and Fundación Génesis Empresarial in Guatemala. Triple Jump Advisory Services has invited EA Consultants to lead this study, which aimed to achieve three major objectives:

1. To assess the impact of each MFI’s activities using existing tools and databases, gaining insight into the changes in the wellbeing of end clients
2. To make recommendations to each MFI to improve its impact measurement tools and processes
3. To make recommendations to each MFI to improve its use of its impact results

For Triple Jump, the ultimate goal of this study is to support the selected MFIs in their efforts to measure social impact while learning how MFIs may, through adjustments in data-gathering and management techniques, get the most out of their data.

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1 In the following section, we offer a definition of “impact” as it is used for the remainder of this publication.
For years, MFIs’ monitoring activities were limited to tracking of business inputs (the amount of capital distributed), outputs (the number and mix of clients reached) and outcomes (client repayment and retention). Measuring impact – that is, the long-term changes in microfinance clients’ wellbeing – was either left to outside evaluators or never measured at all.

That trend is changing. More MFIs have taken the next step to incorporate impact measurement into their day-to-day monitoring activities. Fundación Paraguaya in Paraguay, IDEPRO in Bolivia and Fundación Génesis Empresarial in Guatemala are three such MFIs that have designed and implemented innovative tools and processes for long-term impact monitoring. Each MFI made an institution-wide commitment to monitor impact, defined a set of impact indicators to track, and made significant investments in the necessary resources for data collection, storage and analysis.

This report represents a synthesis of the lessons learned from the early stages of these three organizations’ efforts to measure impact. We begin by sharing our methodology and select high-level findings from each case study, describing each organization’s processes, challenges and analysis results. We follow by making a case for impact measurement for all MFIs, stressing that its strategy must be closely tied to its impact tracking objectives. We then offer recommendations to maximize efficiency and quality at each stage of the data management process.

**What do we mean by impact?**

The word *impact* can refer to a variety of concepts in monitoring and evaluation. For the purposes of this report, impact refers to any **long-term improvements in wellbeing** to which the program has plausibly contributed. We use it specifically to distinguish measurement of long-term social changes (for instance, in income, health, or education) from inputs (e.g. the amount of loans distributed), outputs (e.g. the number of clients served), and outcomes (e.g. repayment and retention). We are not using impact to mean the scientific testing of the causal relationship between a program and the changes experienced by participants, although we will refer to those methodologies in the paper. Neither do we use impact to refer to the precise proportion of change that can be attributed to the project. In short, we use impact to refer to a category of indicators, not a methodology for measuring these indicators. This emphasis coincides with definitions used by OECD-DAC and CARE International.

**PART I: A SNAPSHOT OF OUR FINDINGS**

In the fall of 2013, EA visited Fundación Paraguaya, IDEPRO and Fundación Génesis Empresarial to learn about each organization’s vision and methodology for measuring impact and to observe its processes of collecting, storing, analyzing and utilizing impact data. These visits consisted of meetings with directors, database managers, branch managers, loan officers and clients. They also included direct observations of data management processes at the branch level. After the visits, EA conducted three longitudinal analyses using historical client monitoring data.

Below, we highlight select findings from each case study. The full reports, with detailed methodologies, results and recommendations, may be shared with interested parties at the discretion of each microfinance institution.
Fundación Paraguaya is a non-profit foundation in Paraguay serving 55,000 individual and group microfinance clients. Fundación Paraguaya defines its mission as the **elimination of poverty**, using a multidimensional rather than a simple income-based definition. Its interventions target the client’s family and champion clients’ agency as the driver of impact. This vision enjoys widespread buy-in from the organization’s directors to its loan agents.

In 2012, Fundación Paraguaya introduced the Semáforo, or “Stoplight,” a tool that measures its group clients’ progress on six dimensions of poverty. The tool contains 50 questions with three answer options: red (extreme poverty), yellow (moderate poverty) and green (not in poverty). Using a touch-screen tablet, clients rate themselves on the three-point scale for each indicator. Since the tool’s scale-up in August 2013, all group clients take the Semáforo upon receiving their first loan and every six months thereafter.

### Data Analysis

We analyzed 409 clients’ Semáforo results for two cohorts (2012 and 2013) at baseline and 4-8 months later. We calculated changes in the average number of self-ranked “greens” across all complete Semáforos and found that clients in both cohorts improved significantly over the study period. Figure 1 illustrates the increase in greens (from 37.9 to 48.0 out of a possible 50) and the corresponding reduction in yellows and reds for the 2012 cohort. We also found that this increase outpaced trends in the general population (not shown) by a factor of nine for the 2012 cohort and a factor of five for the 2013 cohort.

### Process

Fundación Paraguaya’s 50-question Semáforo tool is innovative, comprehensive and participatory, giving both the client and the loan officer the opportunity to visualize and plan a way forward. From a cost and efficiency perspective, however, the lengthy and time-consuming tool may strain resources and place data quality at risk. To balance the desire for detail and efficiency, Fundación Paraguaya may consider streamlining the instrument, conserving only those indicators that most directly connect to its programs and that are best calibrated to the economic realities of their client base (for instance, phasing out indicators that are “green” for nearly all clients at baseline). This would allow more room for clients to progress and for Fundación Paraguaya to more directly respond to results through its programs. An additional challenge is data storage: because an outside company manages Fundación Paraguaya’s impact database, data extraction for analysis is a slow and complicated process.

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2 The data from this analysis was drawn from the period before the institution-wide scale-up of the Semáforo tool; as a result, this represents a small and non-representative sample of group clients.

3 We tested differences for statistical significance using the Wilcoxon sign-rank test.

4 We determined this by comparing the progress of the two cohorts against trends in new clients’ baseline data – a proxy for the general population. Although not a scientific control group, new client data can indicate general economic trends in the population targeted by Fundación Paraguaya.
IDEPRO

IDEPRO is a Bolivian NGO and development finance institution serving over 11,000 microfinance clients. IDEPRO defines its mission as the improvement of the productivity, income and employment levels of its clients' businesses.

IDEPRO operates under two lending models: ProCadenas and ProMicro. ProCadenas offers loans specialized to a particular value chain and bundled with technical assistance and advising, while ProMicro loans are not specialized and include no additional advising. IDEPRO only has a formal impact measurement strategy for ProCadenas clients, focusing its analysis on revenues, profits, net worth and employment. Although this business-level economic data is collected for all clients at each new credit evaluation, it is only systematically entered, validated and analyzed for ProCadenas clients.

Data Analysis

We calculated the change in business revenues, profits, net worth and number of employees at baseline and at 10-14 months for 572 ProCadenas clients. We repeated a similar analysis for 950 ProMicro clients, to explore the potential of using this non-vetted data to observe patterns. We segmented both analyses by cohort year, geography, gender and business size. We found that on average, both ProCadenas and ProMicro clients showed significant improvement along these measures (see Table 1), with some variation in progress by cohort year and geography (not shown). Table 1 also illustrates that most businesses improved along measures of revenues, profits and net worth, while most did not increase the size of their staff.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Mean Before</th>
<th>Mean After</th>
<th>Avg. Change</th>
<th>% increased</th>
<th>% decreased</th>
<th>% no change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>592</td>
<td>689</td>
<td>97</td>
<td>88%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Profits</td>
<td>238</td>
<td>276</td>
<td>38</td>
<td>73%</td>
<td>26%</td>
<td>1%</td>
</tr>
<tr>
<td>Net Worth</td>
<td>21,118</td>
<td>24,731</td>
<td>3,614</td>
<td>77%</td>
<td>15%</td>
<td>8%</td>
</tr>
<tr>
<td>Employees</td>
<td>2.4</td>
<td>2.8</td>
<td>0.4</td>
<td>30%</td>
<td>3%</td>
<td>67%</td>
</tr>
</tbody>
</table>

Table shows average figures in USD across all cohorts, excluding outliers.

Process

IDEPRO’s impact measurement strategy for ProCadenas clients is thorough and systematic, with follow-up measurements taking place on a strict 12-month schedule and undergoing extensive data cleaning. ProCadenas data analysis is also sophisticated, incorporating statistical tests, segmentation by value chain and services received, and an attribution analysis comparing clients’ progress to trends in the general population. It is well positioned to advance to even more rigorous techniques for measuring impact.

IDEPRO’s main challenge lies in the merging and extraction of data: its current impact database does not easily merge with banking data or export into a user-friendly file for analysis, leading to a cumbersome and time-consuming process. While it faces many hurdles in expanding its measurement strategy to include ProMicro clients, IDEPRO has taken the first step by updating its information system to track and analyze impact for all clients.

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5 We tested for statistically significant changes using the Wilcoxon sign-rank test.
6 As ProMicro results are less reliable and serve a more exploratory purpose, we have omitted them from this publication.
7 Using new client data as a proxy
FUNDACIÓN GÉNESIS EMPRESARIAL

Fundación Génesis Empresarial is a non-profit foundation in Guatemala serving over 169,000 clients. Génesis’s theory of change states that through credit and business training, clients increase their income, which they in turn invest in their home and in the nutrition, health and education of their family members.

In concordance with this theory, Génesis will begin collecting detailed impact information on all clients’ housing, nutrition, health and education in late 2014 or early 2015. Currently, they track business-level financial indicators as part of the loan approval process, but they only enter this data for a small subset of clients: microenterprise clients with loans over USD 1015. This data has never been previously analyzed to observe trends over time.

Data Analysis

In our study, we calculated the change in revenues, profits, net worth, working capital and household expenditures at baseline and 10-14 months for 5927 microenterprise clients with loans over USD 1015. We find significant improvements across all measures, with around 40% of clients improving for any given indicator (Table 2). We also conducted a separate, multi-year analysis for 2087 of those clients to assess whether the rate of progress changed from year to year (not shown). We found that asset growth continued at a steady pace from year to year while growth in revenues and expenses tapered in the second year. This multi-year analysis also revealed that although 60% of clients tend to progress on a given indicator at least once over the two year period, only 14% progress in both years. This underscores the importance of taking a long view of client progress.

<table>
<thead>
<tr>
<th>Table 2: Génesis Pre-Post Results (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Mean Before</td>
</tr>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Net Profits</td>
</tr>
<tr>
<td>Net Worth</td>
</tr>
<tr>
<td>Working Cap.</td>
</tr>
<tr>
<td>Family Exp.</td>
</tr>
</tbody>
</table>

We tested for statistically significant changes using the Wilcoxon sign-rank test. We were unable to use new client data as a proxy for the general population, as Génesis’s new client population changed dramatically over the last five years due to the organization’s expanded reach.

Process

Génesis is currently at a crossroads, as it will scale up a new impact measurement strategy later this year and begin to collect a large cache of impact data. Génesis has defined and piloted a set of indicators, and it has built a sophisticated IT infrastructure capable of meeting the demands of impact data gathering and analysis. Analyzing this data will be a challenge, as it will require sophisticated analysis capacity (both software and human resources) not yet in place. The breadth of interest in social impact measurement across different departments of the institution will determine the extent to which the results are used to the benefit of the organization.
These encouraging results represent early and pioneering efforts by three MFIs to collect and analyze impact information as part of their day-to-day operations. Taken together, we see that it is possible to glean useful impact information from existing monitoring databases. We saw that clients at all three institutions showed significant improvements along a variety of social measures, and in the case of Fundación Paraguaya, we were able to show that clients’ progress outpaced trends in the general population. We also took away lessons that will help MFIs to set expectations and benchmarks; for instance, IDEPRO data showed that more clients increased their revenues and assets than expanded their staff, and Génesis data revealed that it may take longer than one year for social changes to become evident. Although these pre-post results are not scientific and cannot prove causality on their own, they still reveal important patterns in client progress and can be used for a variety of purposes.

In all three cases, tracking impact indicators represented a sizeable investment. As the box to the right illustrates, it takes significant resources and adaptations to effectively collect, store, and analyze impact data. To varying degrees, these three MFIs have chosen to integrate impact measurement with their day-to-day processes rather than create supplemental, parallel systems. While more costly in the short-term, we find that integration leads to greater efficiency and cost savings in the long run. For example, MFIs with standalone impact databases struggle to cross reference social impact data with their core loan data, while MFIs that process impact and loan data within the same system can link the two with ease.

What must be in place to track impact?

☐ Broad, institution-wide commitment
Support should extend from directors to loan officers and across all departments.

☐ A theory of change describing how the MFI produces impact, and a corresponding set of indicators to track
The theory of change should be developed with contribution from many stakeholders, including clients.

☐ An efficient data collection system
Social impact data should be collected as part of normal operations but without undue burden on agents and administrators.

☐ Effective data storage that links to banking system
This data should be easily exported into a format useful for analysis.

☐ Basic capacity for pre-post analysis
The analyst should have the appropriate skill set, time and technology to effectively execute this analysis.

☐ Established processes for sharing and responding to results
Separate processes should be created for internal decision-making and external communication of results.

To further maximize the benefits of tracking impact indicators, an MFI should clearly identify the ultimate objectives of its impact measurement initiative: (1) promoting internal and external accountability, (2) maintaining the organization’s financial sustainability, and/or (3) enhancing learning and innovation for both the MFI and the wider microfinance industry. The framework on the following page expands on these benefits (Table 3). Once these goals are set, MFIs can tailor each step of the impact measurement process to maximize the benefits they aim to achieve.

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10 These monitoring efforts do not represent scientific experiments to prove that the MFI caused the change in a client’s wellbeing. They do not include a scientific comparison group of non-clients against which to compare the clients’ progress. In addition, most follow-up measurements are limited to those clients who return for additional loans, an arguably biased sample. In short, these results do not substitute a randomized control trial for the purpose of proving causality or measuring the exact proportion of impact that can be attributed to the MFI.
Table 3. The Case for Impact Measurement

<table>
<thead>
<tr>
<th>INTERNAL</th>
<th>EXTERNAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Accountability</strong></td>
<td><strong>Reporting to Donors and Investors</strong></td>
</tr>
<tr>
<td><strong>Adherence to Mission</strong></td>
<td>Many donors and investors have begun to demand increasingly rigorous</td>
</tr>
<tr>
<td>Impact tracking tests an MFI’s theory of change, ensures that it is</td>
<td>demonstrations of social impact. Many MFIs are motivated to measure</td>
</tr>
<tr>
<td>delivering on the promises made to clients and pushes it to innovate</td>
<td>impact in part to maintain these important relationships.</td>
</tr>
<tr>
<td>and adapt if it is not. The mere process of consistently measuring</td>
<td><strong>Avoiding Regulatory Controls and Damages to the Public Image</strong></td>
</tr>
<tr>
<td>results can help prevent mission drift.</td>
<td>Social impact tracking can help the microfinance industry maintain</td>
</tr>
<tr>
<td><strong>Branch Performance</strong></td>
<td>strong standards for consumer protection and avoid potential regulatory</td>
</tr>
<tr>
<td>MFIs can use impact data to identify underperforming branches or</td>
<td>restrictions, like interest rate caps. This can also promote a more</td>
</tr>
<tr>
<td>subprograms, improving their ability to hold all staff accountable to</td>
<td>positive public image of microfinance, preventing damaging backlash.</td>
</tr>
<tr>
<td>the organization's mission.</td>
<td></td>
</tr>
<tr>
<td><strong>2) Financial Sustainability</strong></td>
<td><strong>Impact Investing Dollars</strong></td>
</tr>
<tr>
<td><strong>Differentiation and Marketing</strong></td>
<td>Increasingly, microfinance investors and donors use MFIs’ impact</td>
</tr>
<tr>
<td>Many social MFIs operate in a highly competitive lending market. By</td>
<td>results to make funding decisions. Impact reporting not only maintains</td>
</tr>
<tr>
<td>measuring and promoting their social impact record, they may be able to</td>
<td>relationships with existing funders but also attracts the attention of</td>
</tr>
<tr>
<td>attract and retain clients who might otherwise turn to other lending</td>
<td>new ones.</td>
</tr>
<tr>
<td>sources.</td>
<td><strong>Technical Assistance</strong></td>
</tr>
<tr>
<td><strong>Credit Risk Management</strong></td>
<td>MFIs that can demonstrate impact may have access to scarce technical</td>
</tr>
<tr>
<td>As data becomes more abundant and analysis grows more sophisticated,</td>
<td>assistance funding. This technical assistance can be critical to NGOs</td>
</tr>
<tr>
<td>analysts may use impact information as alerts to predict the</td>
<td>or smaller MFIs competing in commercially focused markets, whose large</td>
</tr>
<tr>
<td>creditworthiness, retention or delinquency risk of an individual client</td>
<td>players have access to technology, resources and wide distribution</td>
</tr>
<tr>
<td>This data could contribute substantially to lending decisions at the</td>
<td>networks.</td>
</tr>
<tr>
<td>branch level.</td>
<td><strong>Fiscal Advantages</strong></td>
</tr>
<tr>
<td><strong>3) Learning and Innovation</strong></td>
<td>In some cases, demonstrating impact might also result in tax relief for</td>
</tr>
<tr>
<td><strong>Client-Centered Programming</strong></td>
<td>MFIs.</td>
</tr>
<tr>
<td>MFIs that incorporate impact results into their annual planning are</td>
<td><strong>Industry Leadership</strong></td>
</tr>
<tr>
<td>able to make informed decisions about the success of individual</td>
<td>The international conversation about impact is growing more complex</td>
</tr>
<tr>
<td>programs and the relative progress of different client segments.</td>
<td>each day, and the development sector is evolving rapidly in the</td>
</tr>
<tr>
<td>Institutions can alter or cut unsuccessful programs and design</td>
<td>direction of more sophisticated impact measurement. MFIs who take steps</td>
</tr>
<tr>
<td>interventions that target segments that are progressing more slowly.</td>
<td>to measure impact have the opportunity to be leaders and innovators in</td>
</tr>
<tr>
<td></td>
<td>this space. On the other hand, MFIs with no impact measurement strategy</td>
</tr>
<tr>
<td></td>
<td>are at the risk of being left behind as the sector evolves.</td>
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</tbody>
</table>


PART II: DATA MANAGEMENT RECOMMENDATIONS

THE DATA MANAGEMENT PROCESS

Once an MFI has settled on the key objectives of its impact measurement initiative, it must establish an effective data management process. In this report, we will use this model to highlight successful practices and identify potential challenges at each stage.

Our model begins with the definition of the indicators to be measured, to ensure that these are linked to the organization’s mission, programs and theory of change. It then considers how the data is collected, in terms of instruments, logistics, data quality and incentives at all levels of the institution. The reliability, accessibility and flexibility of how an institution stores data are essential for the institution to then be able to analyze data effectively and efficiently. The chosen tools and methodologies for analysis are critical, as is the capacity of the team to conduct these analyses. The final piece in the data management model is the way in which data is utilized once it is analyzed. To fully reap the benefits of social impact measurement, managers should actively and consistently use results to stay accountable, to make strategic decisions, and to promote successes to funders and clients.

Streamlining the Data Chain
Throughout our assessments, we observed the same overarching difficulty at all three institutions. Each MFI collects a veritable waterfall of data, but when it comes time to use this data for reporting or decision-making, it has reduced to a trickle.

This is perhaps the most common pitfall in impact measurement for MFIs and other development institutions: organizations make enormous investments to collect a large amount of impact data, but due to gaps and bottlenecks in the data management process, very little of this data is ever seen or used by decision-makers or external audiences.

In some cases, the data is collected on paper and stored in folders; it is never entered into the database. In others, it is difficult to extract or link the data from the databases for regular analysis. In still others, the organization does not have the analytical tools or capacity to be able to process the data. As a result, very few results are available to facilitate timely decision-making.

Effective infrastructure at every stage of the data management process is essential for MFIs to see a return on the investment of data collection.
Tailoring Processes to Objectives

Each stage of the data management process must also be tailored to the intended purpose of the impact results. For instance, results shared externally for accountability will require more rigorous sampling and analysis, results used for marketing should cross-reference impact results with qualitative feedback, and results used for risk management must be closely linked with the banking system. Below, we summarize how each step in the Data Management Process Model might be modified to meet an organization's particular impact data objectives. We then follow with details on the common challenges and best practices at each stage, based on our experiences with the three MFIs in the study.

<table>
<thead>
<tr>
<th>Table 4. Data Management Recommendations, by Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accountability</strong></td>
</tr>
<tr>
<td>Research Question</td>
</tr>
<tr>
<td>Goal</td>
</tr>
<tr>
<td>Indicator Type</td>
</tr>
<tr>
<td>Indicator Examples</td>
</tr>
<tr>
<td><strong>COLLECT</strong></td>
</tr>
<tr>
<td>Sampling</td>
</tr>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Control Group</td>
</tr>
<tr>
<td>Database Linkage</td>
</tr>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Techniques</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td>Automation</td>
</tr>
<tr>
<td>Audience</td>
</tr>
<tr>
<td>Format</td>
</tr>
</tbody>
</table>
**DEFINE: Key Questions**

What are the MFI's motivations for tracking impact? What will the results be used for?
What is the MFI's theory of change? How does it define impact?
What research questions does the MFI want to answer?
What indicators does the MFI measure?
What is the unit of analysis? (client, business, family, etc.)

Indicator definition depends on two factors: the MFI's **theory of change** and the intended **use for the impact results**. While impact indicators should relate directly to the goals defined in the program’s theory of change, impact data used for risk management should cross-reference this information with financial indicators, and impact data used for marketing should do the same with qualitative satisfaction data.

The list of impact indicators should be as **concise** as possible: the more indicators an organization defines, the more resources it will take to measure, store and process the information. MFIs often **define too many indicators**, particularly ones that do not relate directly to the organization's theory of change, mission or programs. These excess indicators are therefore unlikely to show change over time and will not be useful proxies for a program's success.

That said, a program's **theory of change may evolve over time** as new information is collected. In some cases, it may take a few years of tracking to recognize which indicators are the most useful. Using **qualitative methods** to learn clients' goals, definitions of impact and wellbeing, and perceived changes over time can help to refine the theory of change and the indicator list.
COLLECT

COLLECT: Key Questions
Is the full client base tracked, or just a subsample?
Which types of clients are tracked for impact? Which are not tracked?
Is any control group used?
Who collects the impact data?
When do measurements take place? How frequently?
What technology will be used to collect impact data?
How much of the collected data is entered into the database?
How is the data validated?

In most cases, loan officers collect clients’ impact data as part of the loan application, both at the first loan and at subsequent loan renewals. This process maximizes efficiency but also introduces methodological problems. For instance, there is no follow-up information for clients who do not renew, or clients may renew on a varied or inconsistent schedule. In some cases, social data is not systematically updated for subsequent loans. As a result, some institutions send data collectors for separate follow-up visits outside of the lending transaction. While this timely and consistent follow-up is methodologically sound, it can become time-consuming and expensive. Organizations should weigh this trade-off between methodological rigor and resources when planning their data collection strategy.

Data collection weighs most heavily on the loan officers, who conduct these surveys on top of a long task list but whose compensation is tied to portfolio, not impact. Minimizing the strain on their time is the primary argument for keeping the indicator list streamlined: a long survey often leads to rushed, error-prone data collection. Loan officers should also be actively engaged in the development of the instrument and process and in the sharing of results. Those agents who have been convinced of the usefulness of impact measurement or have directly made use of the results are more motivated to be thorough. In some cases, separate incentives for loan officers related to impact data collection may be considered.11

COLLECT

Common Challenges and Pitfalls
- Overloading loan agents with long data collection forms and extra visits without additional incentives
- Failing to engage loan agents in the design of the impact measurement strategy or the sharing of results
- Losing time, accuracy and data by relying on manual transcription of paper-based data into the system
- Failing to incorporate data quality checks

Best Practices and Recommendations
- Minimize the length of the instrument and the number of additional visits a loan officer makes.
- Engage and incorporate input from loan officers.
- Consider using representative subsamples as a cost-saving mechanism.
- Collect data on a control group for more rigorous, external demonstrations of impact.
- Incorporate a tablet-based collection system to avoid bottlenecks and errors in data entry.
- Consider a variety of methods for data quality control, including automatic checks, manual data verification and crosschecking, regular supervision, continuous training and incentives.

11 For the type of day-to-day impact monitoring discussed in this report, employing loan officers as data collectors is not only cost-effective, but it also inspires trust among clients. However, an external team of evaluators conducting a one-time impact evaluation may prefer to employ non-staff enumerators to avoid bias or conflicts of interest.
Data entry often represents another roadblock. In the case of Fundación Paraguaya, **tablet-based data collection** allows for automatic upload into the system, saving time and reducing transcription errors. Both IDEPRO and Génesis still depend on a paper-based system followed by a separate data entry step. This bottleneck is one of the reasons why data collected on paper is only entered for small subsets of clients at the latter two organizations: although they have made the investment to collect the information, they are not able to process it on a large scale.

**Data quality** is the final concern at the collection stage. Missing data and unrealistic outliers can severely impair the analysis process. Building automatic checks into the data entry interface (for instance, only accepting numbers within a certain range) is a first step to improve data quality. It is also advisable to assign the responsibility of data quality to a person at the branch level, placing them in a supervisory role.

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**STORE**

**STORE: Key Questions**

Where and how is the impact data stored?

Is impact data stored in the same system as loan data?

Who manages the impact database?

How easy is it to export impact data for analysis?

How easy is it to connect impact data to loan data?

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Data storage and extraction represent the main roadblocks preventing institutions from effectively accessing and using their impact data. **Exporting data in a useful format** first requires an understanding of how the data will be used in later analysis. Once an organization has determined the most useful structure, it should be able to export the data in a **single file** in the **desired format**.

In most cases, the **impact database is separate from the banking database**. As banking systems typically are not suited to impact tracking, this is not necessarily a bad thing. However, when the two are **not easily linked**, this prevents any analysis that requires variables from more than one database. The most obvious case of this is if impact data is to be used for credit analysis, which would require comparisons of social progress with loan information. However, many organizations also store basic demographic data on gender, age and region in the banking database only; thus, the databases must be connected if they are to be incorporated in impact analysis.
ANALYZE

ANALYZE: Key Questions
What research questions or hypotheses are tested?
Who is charged with data analysis?
How often does analysis take place?
What data analysis techniques are used?
What software is available for analysis?
Is any analysis automated?

As with all previous steps, the analysis methods and frequency should match the purpose, the research question and the audience. At minimum, institutions should (1) calculate the average difference between first and second measurements and (2) calculate the percent of clients that improved, declined or stayed the same. This is typically sufficient for promotion and marketing as well as for internal benchmarking and tracking of trends. A further step would be to segment this analysis by demographic and programmatic groups, to determine whether certain types of clients are progressing at different rates. If the statistical tools and capacity are available for a more rigorous study, the institutions may then consider performing more scientific techniques, such as tests of statistical significance and pre-post analyses with control groups.

Analytical capacity is a challenge for many institutions. Although most institutions have in-house data expertise (usually on the financial team), the task of impact analysis generally falls to planning departments. These staff members may or may not have the statistical training to develop or execute an analysis plan, and even if they do, they may not have the time to take on this analysis task among their many other tasks.

Once the desired processes are in place, institutions should consider automating some of the simpler analyses, especially those taking place more frequently than once per year. Especially relevant for risk management, automation allows for real time response to data on specific clients or subgroups of clients.

Common Challenges and Pitfalls
- There is no research question or strategy in place for analyzing impact data.
- The impact analyst lacks statistical training, usually performing analysis in addition to many other programmatic functions.
- The existing analysis is not segmented by demographic group or program.
- There is no automatic report for simple analytics at the branch level: all impact analysis is time consuming and performed at the highest level.
- The available statistical software may be insufficient for more advanced tests and methods.

Best Practices and Recommendations
- Develop an impact analysis strategy, including research questions, indicators, subgroups, timeframe and schedule. Engage the planning team in this process.
- For each indicator, calculate the average difference between first and second measurements. In addition, calculate the percent that improved, declined or stayed the same.
- Segment the analysis by demographic, business and programmatic factors (e.g. gender, size, loan type).
- Produce an automatic report that allows branch managers to quickly react to patterns of progress.
- Consider investing in a more sophisticated statistical package for future analytics.
- Consider investing in a short-term statistical consultancy to develop a strategy and train analysts.
UTILIZE: Key Questions

How are results used in internal planning?
With whom are results shared? How and for what purpose?
Are there any missed opportunities to use impact data?

When the entire data management process is framed around one or more particular goals – accountability, financial sustainability, or learning and innovation – the last step is to ensure that the information is shared and used effectively towards these purposes. Depending on the audience, this sharing may take many formats, including regular internal and external impact reports, automated alerts, promotional materials, and special reports and presentations.

One common challenge at this stage is a timing problem. In many cases, impact results are not ready in time for annual strategic planning and budgeting. This may be due to delays in extraction or processing, or it may simply come from disconnect between the schedules of the impact and planning teams. This is complicated by the fact that external information demands from funders often supersede internal needs.

The mismatch between impact and planning or risk management teams can extend beyond timing to substance and engagement. Planners’ questions may not be sufficiently answered by the analysis, perhaps because they were not involved in the process of defining research questions. In other cases, planners may not explicitly address impact results as part of their normal processes. This reiterates the need for strong support for impact measurement in all departments: if the decision makers and managers are not engaged or interested in using the results, then the effort to produce them is wasted.

Reporting to partners can be a very effective way to demonstrate impact and attract funds, and sharing information with clients can also be a powerful way to promote retention and draw in new business. On the learning side, baseline measurements help organizations identify needs in their client base. Discrepancies in the progress between different types of clients can inform interventions that target those who are progressing more slowly. In addition, these results can help institutions identify programs that are not yielding the desired results and seek ways to refine them. Finally, the decision to share impact tools and results with the larger microfinance community is a powerful step toward collectively discovering what works in socially minded microfinance.

UTILIZE: Common Challenges and Pitfalls

- Results are not ready in time for strategic planning.
- Outside reporting demands supersede internal information needs.
- Analysts and data users do not communicate sufficiently: decision makers’ questions are not answered in analysis.
- There is no process in place to incorporate impact results into annual planning and budgeting.
- Results are shared internally and externally with partners and the development community, but not with clients.

UTILIZE: Best Practices and Recommendations

- Establish a schedule whereby analysis is completed prior to strategic planning.
- Implement a policy whereby impact results must be addressed in strategic planning efforts.
- Identify indicators that are chronically low at baseline. Design more focused responses around these particular indicators.
- Identify groups that are progressing more slowly and develop strategies to better target them.
- Identify programs that are not yielding the desired impact, and seek ways to refine them.
- Benchmark “typical” progress for a range of client profiles and use this for year-to-year comparison.
- Consider sharing results with clients for transparency, retention and marketing.
CONCLUSIONS

Many microfinance institutions recognize a compelling case for tracking social impact. In particular, mission-driven MFIs with a commitment to clients’ wellbeing seek to measure and track this promise. The motivations for measuring impact fall into three general categories: to improve accountability to clients and other stakeholders, to achieve financial sustainability by securing funding and improving retention, and to promote learning and innovation within the organization and in the wider field. It follows that an organization’s impact measurement strategy should be tailored to these motivations and goals.

We have presented a model for measuring social impact that encompasses the steps of defining, collecting, storing, analyzing and utilizing impact data. Reflecting on the common challenges of the three institutions in this study, we identify gaps and opportunities for microfinance institutions and their partners to make improvements. Some of these improvements require internal shifting of processes, but many would benefit from external financial support and technical assistance.

- When defining impact indicators, less is more. Indicators should closely match an institution’s mission and theory of change as well as the end goal for impact measurement.
- Improved data collection technology has the potential to reduce cost, time burden and error, as does careful consideration of loan officer incentives and motivators.
- Data storage should allow for simple data export and smooth linkages of data sets.
- Good data requires good analysis and should be supported with appropriate software and human resources. MFIs should foster effective communication between analysts and decision-makers.
- Finally, organizations should be encouraged to utilize their results for internal program improvement as well as external promotion and accountability.

Fundación Paraguaya, IDEPRO and Fundación Génesis Empresarial have each made impressive commitments to measure changes in their clients’ wellbeing over time. Their impact measurement strategies suggest that tracking client wellbeing can indeed offer interesting insights about the linkages between microcredit and social performance. Their results are promising: clients of all three institutions experienced significant social improvements during their tenure. The detailed results also offer helpful insights into the typical timing and patterns of progress, informing each MFI’s benchmarking and targeting strategies.

The pioneering efforts of these three MFIs have offered the industry a nuanced look at the motivations to measure impact, the necessary infrastructure that must be in place, and the common difficulties and opportunities to be found at each stage. Having identified these motivations and needs, Triple Jump can more effectively support these and other MFI partners’ efforts.
We are grateful for the generosity, attention, time and effort of the directors and staff of the three microfinance institutions who collaborated with us to produce this report.

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