



Management Information Systems for Microfinance: An Evaluation Framework

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Over the past 5 to 10 years, microfinance institutions (MFIs) have been paying increasing attention to information systems, particularly management information systems (MIS). As both practitioners and donors have become aware of the great need for formal and informal financial institutions to manage large amounts of data, the drive to improve the manipulation and understanding of these data has grown.

Information lies at the very heart of microfinance. Whether by hand or by computer, microfinance institutions maintain large amounts of critical business data, from basic client information to detailed analyses of portfolio statistics. These data must be stored, manipulated, and, most important, presented coherently to system users so that they can make sound management decisions.

A good information system should do just that: It should act as a conduit through which raw data becomes useful and useable information. A good information system is a necessary tool for managing an institution successfully. This assertion, however, begs two questions: What is a good information system? And how does one determine whether a system is good?

The easy answer to both questions is any system that meets an organization's needs cost-effectively and allows the organization to grow without creating problems or inefficiencies is a good system. Obviously, this simple answer is not terribly helpful. For this reason, the need for an evaluation framework has

become imperative, especially considering the microfinance field's relative lack of knowledge about information systems and software development.

Purpose. The primary purpose of this paper is to present a mechanism for analyzing information systems, both those bought off-the-shelf and those developed internally. This MIS Evaluation Framework offers the industry a tool to determine the quality of an information system. The framework is very flexible and can be used by MFIs, donors, and other external stakeholders, as well as systems developers, to address different objectives:

- MFIs can use it to evaluate off-the-shelf systems in their search for an appropriate solution.
- MFIs can use it to appraise the quality of their existing system (off-the-shelf or internally developed) to help identify improvements.
- External entities can use it to evaluate off-the-shelf or internally developed systems to assist an MFI, identify alternatives, or include as part of an institutional appraisal.
- Software developers and information system planners can use it to build better systems.

A certain level of generality was used in constructing the framework to meet the needs of a diverse audience. Consequently, factors specific to



the organization or vendor in question (for example, stage of development, growth prospects, and number and complexity of products) should be added on a case-by-case basis. Because the framework is a tool, the evaluator needs to understand the situation and apply the framework in the most logical and effective way.

The MIS Evaluation Framework matrix is organized by category. The category describes, at a high level, the areas in which an information system should be evaluated. Categories represent logical groupings of different subject areas that indicate the fundamental quality of a system. Each category, along with a listing of the corresponding topics and subtopics, is provided in the box.

Rating Method. The matrix outlines each topic within a category using three columns: topic (or subtopic), definition, and measurement criteria. An additional column is provided for the evaluator's rating or comments. Each topic or subtopic will receive a rating of 1 to 5, with 5 being the highest. The rating for each topic or subtopic is determined by using the corresponding definition and measurement criteria as guidelines.

Because this framework is an analytical tool, the evaluators are responsible for determining the best method for applying the framework to any given situation. For instance, in some cases it may not be necessary to rate the software on certain topics or sub-topics because they may not be relevant to the MFI (i.e., multiple currencies, different languages).

Before completing the rating, the appraisal team should prioritize the criteria and then assign weights accordingly. For instance, many MFIs feel that the availability and quality of technical support is a critical issue. Many MFIs have fallen into the trap of buying a feature-rich system that has poor technical support or no local technical support. This situation can be worse than having no system at all.

Functionality and Expandability

- Functional completeness, appropriateness, and integration
 - Accounting package
 - Portfolio tracking
 - Deposit monitoring
 - Customer information system
- Expandability and institutional growth
- Flexibility
 - Customer-centric vs. account-centric
 - Institutional types
 - Lending methodologies
 - Loan interest types
 - Savings and deposit account types
 - Deposit interest types
 - Payment types
 - Payment frequencies
 - Multiple branches or regions
 - Multiple languages
 - Multiple currencies

Usability

- Ease of use and user-friendliness
- User interface

Reporting

- Reports
- Report generation

Standards and Compliance

- Accounting soundness and standards
- Governmental and supervisory adherence

Administration and Support

- Security
- Backup and recovery
- Fault tolerance and robustness
- End-of-period processing
- Support infrastructure and maintenance
- Version control and upgrade strategy

Technical Specifications and Correctness

- Technology and architecture
- Performance
- Number and date handling

Cost

- Pricing and costs

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