

# Determining Information System Requirements



# GUIDE **2**

OF INFORMATION SYSTEMS PLANNING FOR MICROFINANCE

**MICROFINANCE**



Information Systems Planning  
for Microfinance

**Determining  
Information System  
Requirements**

**Shirley A. Lunde**

**Catholic Relief Services  
MICROFINANCE UNIT  
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Published By

**Catholic Relief Services**

209 W. Fayette Street

Baltimore, MD 21201-3443

USA

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Ace Bldg., Rada and Dela Rosa Streets

Legaspi Village 1229 Makati, Metro Manila

Philippines



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ISBN: 0-945356-17-X

Printed in May 2005

Cover photograph: Cambodian snack vendor in Don Yoy by Ann von Lossberg.

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# Acknowledgments

*Determining Information System Requirements* is Guide 2 of the two-part *Information Systems Planning for Microfinance*. Guide 1 is the companion book, *Understanding Information Needs for MFIs*. The guides were published by **LINKS**, the Catholic Relief Services (CRS) Southeast Asia, East Asia, and the Pacific (SEAPRO) Regional Learning Center for Microfinance. LINKS is dedicated to strengthening organizational capacities of partner and affiliated microfinance institutions to achieve their own visions for increased financial services for the poor, expanded client outreach and institutional sustainability. LINKS promotes organizational learning as a core internal capacity for creating, acquiring, sharing, transferring and utilizing knowledge to strengthen and sustain high-performance organizations serving the poor and disenfranchised.

Jim Hudock managed the project for the CRS-funded guides, performed the final edits, and provided invaluable insight and support. He worked closely with CRS' in-country microfinance staff and partner organizations to evaluate and enhance the preliminary outlines and drafts.

Jennine Carmichael, Kim Wilson and Patrick McAllister of CRS, and members of the CRS Microfinance Unit in Baltimore, reviewed the CRS-funded guides and/or contributed their expertise. Mike Spingler and the CRS SEAPRO Regional Learning Center for Microfinance provided valuable management support to finalize and distribute this guide. Jim Doyle of Doyle Graphics developed the guide's overall graphic design. Marc Crowe managed the final editing, formatting and publication.

**Catholic Relief Services** and the SEAPRO LINKS gratefully acknowledge the support of the USAID BHR/PVC in the publication and distribution of these guides under CRS/USAID Matching Grant FAO-A-00-99-00054-00. The author provided funding for the templates and companion tools. The views expressed in the guides are those of the author and do not necessarily represent the views of CRS or USAID.



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# Introduction

**I**t has been said that, if you don't know where you are going, any road will get you there. However, careful planning is required to arrive at the *right* destination — or the right information system (IS).

Whether you ultimately decide to purchase an off-the-shelf IS, develop your own custom software or even maintain a manual system, the selection process begins with a thorough analysis of your IS requirements. This activity is commonly referred to as a *needs analysis*.

This guide, which is the companion to *Understanding Information Needs for MFIs*, is designed to help you conduct such an analysis. It introduces the concept of an IS needs analysis, which prioritizes your needs and wants and establishes a framework against which to evaluate your software options. Through this guide, you also will learn how to select members of the analysis team to ensure that a wide range of perspectives is represented in the process.

Further, this guide will help you understand how to plan the needs analysis. Like any project, it begins with establishing goals and objectives and defining the scope of the work. You will learn to create a project plan that includes a list the major tasks, work templates to guide team members, time and staffing budgets, a schedule, and work packets containing a description of the desired deliverable.

Finally, this guide will assist you in conducting and managing the needs analysis and documenting the results. Sample work templates that guide you through each step of the process are provided in the appendixes. The guide also describes how the companion Needs Analysis tool can help you organize and document your institution's analysis.

## **Preparation**

Before you begin to implement the procedures described in this guide, you already should have prepared your institution for the analysis.<sup>1</sup> As a result of your preparation, you should have clearly defined your goals and objectives for the new IS. You also should have the following elements in place (or concrete plans to establish them) before you select and install a new computerized system:

- Current business plan.
- Annual operating budget, including expenditures for IS.
- Preliminary cash flow analyses to determine the financial feasibility of the new system.

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<sup>1</sup> For additional information, refer to Guide 1, *Understanding Information Needs for MFIs*.

- Formalized policies and practices, updated as appropriate.
- Comprehensive system of internal controls, with plans to adapt it to the new information system.
- Complete and accurate historical records.
- Adequate infrastructure, or plans to upgrade the infrastructure.
- Computer-literate personnel, or plans to enhance staff capabilities.

The manner and extent to which you have implemented each element depends, in part, on the size of your institution and the resources that are available to you — but hopefully you have not ignored any of them. The work you do to enhance these aspects of your operations lays the vital groundwork for your needs analysis.

## Structure and Purpose

Preparing your institution for a computerized IS is a challenging and complex task, which only begins with the needs analysis. A financial institution's information assets require a sizeable initial investment plus significant, ongoing expenditures, and they provide the majority of an institution's financial and operating data. Given their strategic importance, managing them requires a comprehensive approach to information-asset planning, acquisition, operations and disposal — and an approach that coordinates information-management objectives with the overall goals and objectives of the institution. To further complicate matters, it involves different activities throughout the life of the institution and the information system.

Fortunately, even the most daunting challenges become manageable when the concepts are familiar and the component tasks are clearly defined. The guides that comprise *Information Systems Planning for Microfinance* break the discussion into two easily digestible components.

Guide 1, *Understanding Information Needs for MFIs*, introduces the crucial elements of manual and computer-based information systems, discusses the advantages and potential disadvantages of each, and provides guidance to help you prepare your institution for a computer-based system. It includes a companion tool — the Cash Flow-NPV Calculator — to help you analyze the financial implications of your current information system and potential alternatives. This volume, Guide 2, provides a detailed description of the analysis process. Taken together, these guides provide an achievable framework for understanding your institution's information management needs, as an aid to selecting a computerized IS.

Implement the elements of this framework as comprehensively or as minimally as you find appropriate for your situation, but do give careful consideration to the strategies and tactics in each guide. While there is an understandable tendency to immediately begin reviewing commercially available software systems, or to simply turn the entire project over to a consultant, you are much less likely to achieve your objectives if you take either approach.

You do not have to become an expert in information technology (IT) to implement this framework. But it *is* vital that you understand the concepts in order to communicate effectively with IT staff, consultants and vendors — and to lay the proper institutional foundation for your new system. It is equally vital that you and your staff participate fully in the process.

This work might add to your implementation schedule at the outset, but it can save both time and financial resources over the life of your IS. It is an important part of your institution's capacity-building agenda.

## **The Audience**

These guides are written from a business, not a technology, perspective, and are intended primarily for senior managers of microfinance institutions — particularly those who lead the business planning process and those involved in accounting, lending/savings and information systems functions. They can also serve as a resource for board members and advisers, software vendors, funding agencies and other stakeholders.

The information in these guides is appropriate for most microfinance institutions that are considering a new computerized information system — regardless of their institutional form, stage of development, methodology or breadth of services. A possible exception is the very small, slow-growth institution best served by a manual information system, although its managers can certainly benefit from the material in these guides.

While these guides and their companion tools are designed to be easy to read and simple to use, they do assume that you have a basic understanding of microfinance, including lending/savings methodologies and financial management practices. They also assume you have a very general familiarity with nontechnical, user-oriented computer concepts and terms. To use the tools, general experience using Windows-based computers and Microsoft Excel and Word software would be helpful.

You may choose to begin with Guide 1 and, over time, read through to the end of Guide 2. On the other hand, if you have a background in IT, you can use this handbook as a reference guide to refresh your memory on specific topics.

# What is a Needs Analysis?

*If you purchase an IS, your needs analysis provides a framework — or benchmark — for evaluating the features of your software options.*

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erhaps surprisingly, the right IS for your institution isn't necessarily the one that offers the most features — or even the one that offers the most features at the lowest cost. Instead, it is the system that offers the features that you need and want — now and in the foreseeable future — at a justifiable cost.

Of course, this definition implies that you have a comprehensive and detailed understanding of your needs and wants, and the ability to distinguish between the two. (From the perspective of your institution, needs are essential attributes in any new system; wants are desired-but-not-absolutely-necessary features.) The process required to develop and document this understanding is referred to as a needs analysis. The needs analysis process generates a comprehensive list or report of your needs and wants, with a priority assigned to each item.

Inevitably, as with any other asset acquisition, you will have to make tradeoffs in designing your IS. Given unlimited time and funds, you could create an IS that matches all of your needs and wants exactly. But most institutions do not have unlimited resources. Instead, they must assemble and prioritize their requirements.

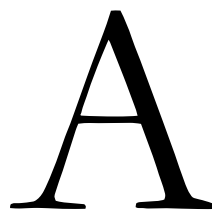
Your needs analysis report assists you in making such tradeoffs by providing a framework for evaluating possible systems and for a cost-benefit analysis. A needs analysis also provides the software selection process with important transparency. Alternatively, if you decide to develop custom software, it is the basis for creating functional specifications.

Equally important, the needs analysis helps you to establish realistic expectations for your new system, and enhances your communications with potential consultants, service providers, software vendors and software developers.

The preparation of the needs analysis often gives managers important new insights into the dynamics of the institution's operations. As an additional benefit, the process affords your IS implementation staff an opportunity to develop a positive working relationship with the new system's users, thereby helping to cultivate a broad endorsement for the new system as well as a sense of common ownership.

# Who Conducts the Needs Analysis?

*To reflect the participatory nature of the needs analysis process, you should create a broad-based needs analysis team and appoint a team leader/ champion.*



needs analysis is a participatory process — one that functions best when it draws upon the knowledge and experience of key management and of staff throughout the institution.

By incorporating a broad range of perspectives into the process, you ensure that your analysis is comprehensive and accurate, thereby increasing the likelihood that you will achieve your information-management objectives. If your analysis is simply assigned to a consultant or a few staff members, the chance of achieving your goals for the new IS decreases dramatically.

Reflecting the participatory nature of the process, you should create a needs analysis team and appoint a team leader. Often, these same people also will participate in the selection and implementation of the new system (through a longer-term IS team or IS task force). In other cases, the composition of the team varies somewhat over time — for example, you might emphasize operations people during the needs analysis and include more technical people for selection and implementation. Such variations in team composition can reduce the workload for team members.

Ultimately, the role of the needs analysis team is advisory. The team provides critical information for the decision-making process and, generally, a final recommendation. It does not, however, make the final information-system decision. That decision is made (or ratified) by the institution's top management and board of directors.

## **Selecting Team Members**

Before you begin to develop the project plan for your needs analysis, an initial team must be assembled from among your institution's staff. The team should represent all major stakeholders.

Ideally, each member of your team should possess one or more of the following skills and capabilities:

- General background in microfinance operations, including lending, savings and microinsurance activities.
- General background in accounting and internal auditing.
- General background in information technology.
- Detailed understanding of your own organization's specific practices at even the most hands-on levels, with each major function represented.
- Oral and written communications skills.
- Interpersonal and listening skills.
- Project management skills.



Taken together, the team should possess all of the above skill sets, which means it should consist of at least four or five members. If necessary, you can include consultants to supplement your in-house expertise — in computer hardware and software, for example. However, you generally should not include more than 10 or 12 members, as the size of the team becomes unwieldy and difficult to manage.

This needs analysis team develops the work plan, and then conducts the needs analysis after the plan is approved. Depending on the details of the plan you develop, you might find it necessary to supplement the team's initial membership with additional members with specific skill sets or new skills.

Although team members can complete specific needs analysis tasks individually or in small groups — reflecting each member's specific area of expertise — the entire team should hold regular meetings throughout the analysis process. These meetings might extend from weeks up to several months, if necessary, culminating in the production of a final needs analysis report.

To operate effectively, team members must be given access to the resources and key personnel necessary to complete their assignments. To accommodate the new workload borne by the team members, it is generally necessary to temporarily reduce their regular duties, change performance criteria, and/or delay deadlines.

Often, team members also are provided with positive incentives to complete their needs analysis responsibilities in a comprehensive and timely fashion.

*Selection of the right team leader is critical, as are regular team meetings, and access to the resources and personnel necessary to complete the process.*

## **Selecting a Team Leader**

Selection of the right team leader — sometimes also referred to as a project champion — is critical. Change can be a frightening thing, but managing it well is necessary for the future of any institution.

Ultimately, the team leader manages change. She (or he) champions the IS project within and outside of the institution, provides guidance and encouragement, updates management and generates their buy-in, resolves conflicts, and creates consensus.

The leader also wields considerable power and authority to marshal resources and resolve administrative roadblocks.

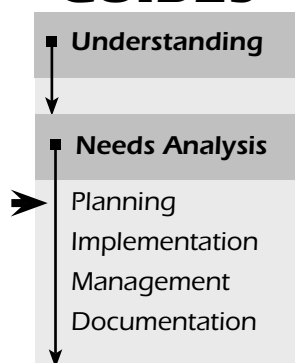
The person assigned to this leadership role should be a creative thinker with good people skills and a vision for the future. The team leader also should possess basic management and project management skills, although many of the ongoing project management tasks can be assigned to other team members.

The leader's specific technical knowledge, such as microfinance or accounting, is often less important to the team's success; it can be supplemented or provided by other members of the team.



# How Do You Plan Your Needs Analysis?

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t its core, your needs analysis is a project in the traditional sense of the word.<sup>2</sup> Therefore, it can be conducted according to established best practices for project management. By adopting such an approach, you significantly increase your chances of achieving your objectives, while enhancing the efficiency and quality of your analysis process. In fact, research demonstrates that, for every hour you spend planning a project, you save at least 20 hours in its implementation.<sup>3</sup>

Using a typical project management framework, you approach a project in terms of stages, or phases, similar to the following:

- The *launch phase* seeks authorization for the project, in part by creating feasibility and cost-benefit analyses. (Relevant elements of the launch phase were discussed in the companion guide, *Understanding Information Needs for MFIs*.)

- The *planning phase* establishes the project's overall goals and objectives, scope, deliverables, and required resources, (e.g., team members, consultants, and anticipated expenditures), as well as the initial plan and schedule.

- The *implementation/performance phase* conducts the work necessary to create the desired product or service, including all defined deliverables

- The *monitoring/controlling phase* guides the work during the performance phase, and is generally implemented simultaneously with this phase

- The *wrap-up phase* verifies deliverables, pays final expenses and considers lessons learned

For the most part, this guide describes the needs analysis process in the context of these project management phases, with an emphasis on planning and implementation. It also describes and provides examples of basic project management tools and techniques.

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<sup>2</sup> By definition, a project is temporary and intended to produce a unique product or service.

<sup>3</sup> Nancy Mingus, *Teach Yourself Project Management in 24 Hours* (Indianapolis: Alpha Books, 2002)

Because your needs analysis is a relatively simple project by project management standards, the guide does not include an extensive discussion of project management activities that might be more appropriate for larger and more complex projects.<sup>4</sup> You should not lose your focus on the needs analysis itself by overcomplicating the project management aspects.

As described in this guide, the planning process for your needs analysis includes the following steps:

- Establish the project's goal and objectives [page 14].
- Define the scope by creating an outline of the main elements of the project — sometimes referred to as a work breakdown structure, or WBS [page 17].<sup>5</sup>
- Create the project plan [page 21], including:
  - List of the major tasks required [page 23].
  - Templates, or scripts, to guide the work for these tasks [page 24].
  - Time and staffing budgets [page 26].
  - Initial schedule or time line [page 29].
  - Work packets for the team [page 32].
- Define the project deliverables. [page 36].

If you lack experience in developing and managing project plans, even these basic project management activities can be a bit time-consuming. To minimize the time and effort required, this guide provides samples, optional templates and other tools that you can use or customize as you find appropriate.

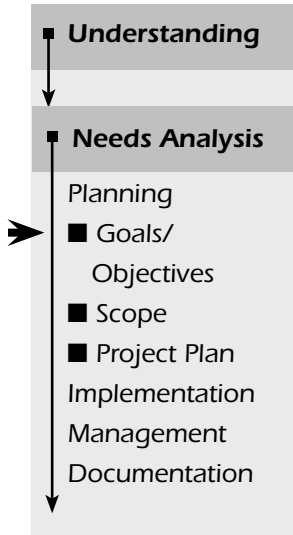
*Don't lose your focus on the needs analysis itself by over-complicating the project management aspects of the process.*

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<sup>4</sup> A detailed discussion of project management practices is beyond the scope of this guide. For additional information on project planning and management, refer to any number of commonly available books on the subject, such as *Teach Yourself Project Management in 24 Hours* by Nancy Mingus. Her book details many of the project-management techniques used in this guide.

<sup>5</sup> For additional information, refer to Nancy Mingus, *Teach Yourself Project Management in 24 Hours* (Indianapolis: Alpha Books, 2002).

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## Establishing Goals and Objectives

Your project goal is a relatively simple, brief mission statement that answers the question, What do you intend to accomplish by performing the needs analysis? It communicates your purpose. For example:

“To develop a comprehensive needs analysis that provides a framework for our transition from manual to computer-based information system.”

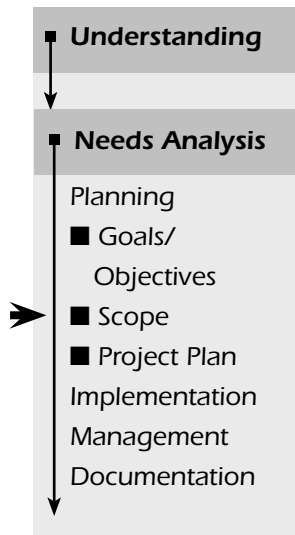
Your objectives supplement your stated goal, providing additional detail that is generally less abstract and often quantifiable. For example:

“Complete the needs analysis project for our accounting, lending and savings functions within three months, commencing 15 May.”

“Control expenditures for consultant fees, travel and other project-related expenditures based on the amount allocated for these purposes in the current annual budget.”

In addition to the project goals and objectives, you should have determined the goal and the objectives for your new IS.

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## Determining the Project's Scope

The process for analyzing your IS needs is essentially a modular one. As described in this guide, it focuses on specific business-function modules.<sup>6</sup> This modular approach helps you organize and manage your analysis, and to assign specific duties to individual team members.

Before you can develop a project plan and then proceed with your analysis, you must first establish the scope of your project. This requires you to think strategically, and then make an initial determination as to the business functions that you actually intend to automate — as well as whether your need for each is immediate or future.

Often, this scope decision already has been made as a result of an MFI's business planning process. If not, make an initial determination for the purposes of the needs analysis — you can always refine your selections later.

<sup>6</sup> While the tools and illustrations in this guide are developed using business-function modules, you can substitute any categorization scheme you prefer, such as component business processes, deliverables or project phases.

The final decision regarding the business functions to be automated is usually made by top management and the board of directors, based at least in part on input from the needs analysis team. Budgetary constraints are also an important consideration.

## Business Functions

In conducting your needs analysis, you should only analyze the business functions that you intend to automate within a reasonable period of time, such as the next two or three years.

To help you make this determination, the list below describes a broad range of business functions based on the software applications that are used to automate them. Depending on the more unique aspects of your operations, you might find it necessary or appropriate to automate other business functions as well.

Function or Application	Description
General Ledger/ Accounting/ Financial Statements	Maintains your chart of accounts, accounting transactions and historical balances, and generates financial reports and indicators. Most general ledger (GL) applications also manage budgeting tasks; some include a banking facility.
Banking	Stores information on the bank accounts you maintain and assists you in reconciling your bank statement with your accounting records. Many systems place this facility in GL/Accounting or Accounts Payable, rather than in a separate application.
Lending	Manages data for your loan products and loan clients, processes portfolio-related transactions, and produces reports. Some lending applications also monitor savings for institutions that are not formalized.
Savings/Teller Operations	Manages data for your savings products and savings clients, processes savings-related transactions, and produces reports. (It is also sometimes referred to as Deposit Tracking.) Such an application is generally most appropriate for formalized institutions that capture and manage client savings.

*Within each business function, you define a variety of business activities that, taken together, describe its inputs, processes, and outputs as a basis for further analysis.*

<b>Function or Application</b>	<b>Description</b>
Client Impact/ Outcomes	Maintains a database of demographic and socioeconomic information on clients; might also track and report on outcomes. This application is often custom-developed, as a lack of standardized requirements makes it less economically attractive to off-the-shelf developers. It tends to be one of the more expensive applications as a result.
Microinsurance	Manages data for your insurance products and insurance clients, processes insurance-related transactions, and produces reports.
Nonfinancial Services	Manages data for your nonfinancial services products/services (such as education or health) and the clients of those services, processes related transactions, and produces reports.
Fixed Assets	Maintains a database of information on institutional assets and produces depreciation/amortization schedules.
Human Resources	Maintains a database of information on your staff and produces your payroll.
Accounts Payable	Manages data for your suppliers and vendors, processes invoices and related payments, and produces reports.
Inventory	Manages data for your financial and nonfinancial products and services, processes inventory-related transactions, and produces quantity and cost reports.
Accounts Receivable	Manages data for your customers, processes invoices and related receipts, and produces reports.
Report Writer	Allows end users and other nontechnical staff to generate custom reports and analyses using the data in the system's database.
System Administration	Establishes your security scheme, including user logins and/or passwords, and manages other basic tasks required to administer the system. Depending on the system, some of these capabilities might be built into each business application, as opposed to locating them in a separate application of their own.



## Work Breakdown Structure

When planning your project, developing a visual or hierarchical representation of the tasks involved is helpful. In the language of project management, such a representation is often referred to as a *work breakdown structure*, or WBS.

Essentially an outline of the tasks necessary to conduct your needs analysis, the WBS tool provides a road map for conducting and managing your project. It breaks the work to be done into small units, or modules, that can be tracked and managed easily. As previously noted, these modules can be determined based on any relevant categorization you prefer. The tools and illustrations in this guide are developed using business-function modules. Nothing about this approach is sacrosanct. You could substitute another categorization, although you would then have to adapt the tools.

In creating a function-based WBS, your business information and business practices can be categorized in many valid ways. If you choose not to use the sample WBS from this guide — perhaps substituting one stemming from your own analysis of institutional work flows and processes — devise a categorization that makes sense to you and your analysis team, but not one that is so detailed that it is difficult to manage. Before you begin, review the examples that follow in this section of the guide. Also, review the templates in annexes 2–8. Although the annexes are more detailed than your WBS, you can use the main headings as a starting point.

Finally, keep in mind that your IS is comprised of building blocks representing inputs, processes, outputs and storage/relationships. The WBS must address all of these building blocks.<sup>7</sup>

*A work breakdown structure provides a useful graphical or text-based representation of the work required to complete the project.*

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<sup>7</sup> For additional information on the components of an IS, refer to the companion guide, *Understanding Information Needs for MFIs*.

*While adding more levels to a WBS can enhance your ability to monitor and control your project, much more time and effort are required to maintain it.*

## **Levels in the WBS**

Each WBS includes a user-determined number of levels, each of which outlines the project in greater detail than the previous level. The lowest, most detailed level of this hierarchy defines the various tasks to be performed and managed. Each higher level is a summary of the associated tasks.

The WBS illustrations in this guide — and the tools in annexes — establish two levels for your needs analysis project: business functions and major activities or processes within each function. For example, in the GL/Accounting function, the activities include such things as journal entries, reports/financial statements, budgets, and banking. This two-level approach to the project requires a reasonable project management effort, but should not be overly taxing.

If you have significant project management experience and software available to automate the process, you can consider adding another level of detail to the project plan or developing an alternative approach to the WBS. In determining the number of levels you need for your project, weigh the possible benefits of additional levels — such as better monitoring and control — against the time and effort required to maintain them.

The final determination is somewhat subjective, but you should recognize that too many levels can be as problematical as too few. Ultimately, each task in the WBS will be assigned to a member of your analysis team as part of a work packet that explains the task and includes a time budget and description of the activity and/or deliverable.

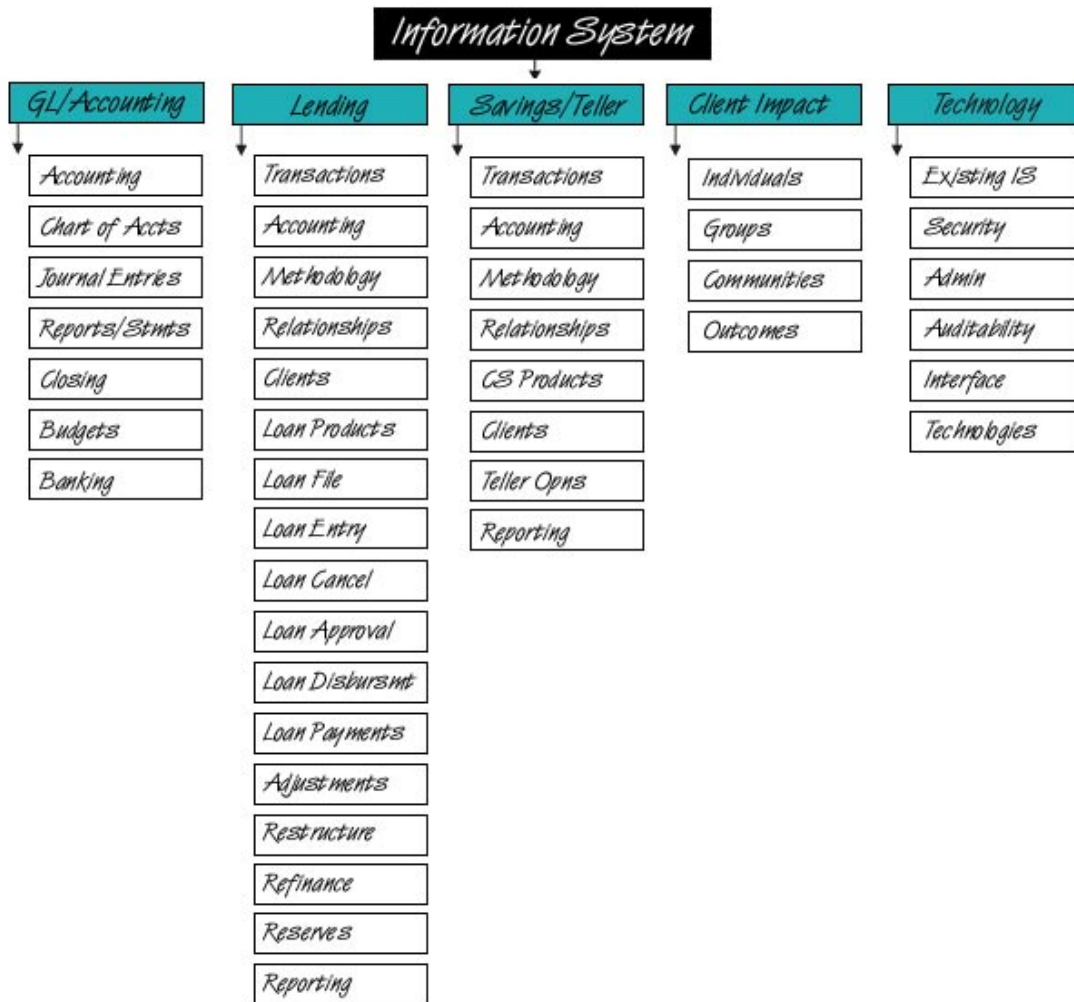
If you do not have the experience or software to develop your own WBS, you can still customize the WBS and planning tools by making small changes to the samples provided in this guide.<sup>10</sup> For example, you can add or delete business functions and activities as necessary to reflect your institution's operations.

## **Graphical WBS Implementation**

The following graphical WBS portrays a needs analysis project for a sample, small IS. It uses a business-function approach with a scope limited to GL/Accounting, Lending, Savings/Teller, Client Impact, and Technology, and employs a two-level hierarchy.

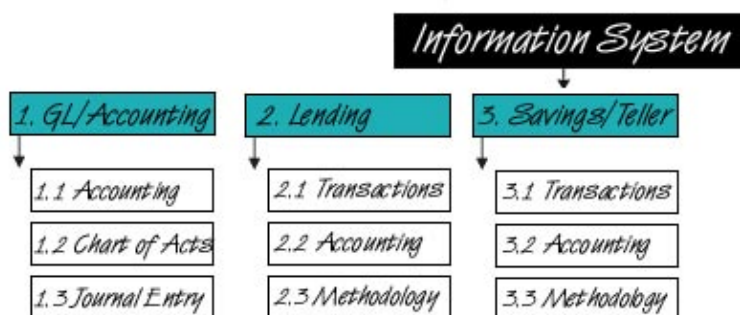
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<sup>8</sup> For a more comprehensive, text-based WBS tool that you can customize to suit your requirements, refer to Annex 1, *WBS for an MFI's Needs Analysis Project*.



*Sample, two-level graphical WBS for an IS needs analysis project.*

Often — particularly if you use project management software — you assign numbers to each summary and task box to provide a form of reference notation. For example:



*Text-based equivalent for the previous, graphical WBS.*

## **Text-Based WBS Implementation**

A text-based WBS provides the same project management information as does a graphical WBS; only the presentation differs. If you do not have project management software, you can readily create a text-based WBS using Word or Excel.

For example, the illustration that follows represents the same project as portrayed in the previous graphics.

<b>1. GL/Accounting Module</b>
1.1 Accounting
1.2 Chart of Accounts
1.3 Journal Entries
1.4 Reports and Financial Statements
1.5 Closing
1.6 Budgets
1.7 Banking
<b>2. Lending Module</b>
2.1 Transaction Volumes
2.2 Accounting
2.3 Methodology
2.4 Relationships
2.5 Clients/Customers
2.6 Loan Products
2.7 Loan File
2.8 Loan Entry
2.9 Loan Cancellation
2.10 Loan Approval
2.11 Loan Disbursement
2.12 Loan Payments
2.13 Transaction Adjustments
2.14 Restructure/Reschedule the Loan
2.15 Refinancing the Loan
2.16 Loss Reserves and Write-Offs
2.17 Reporting

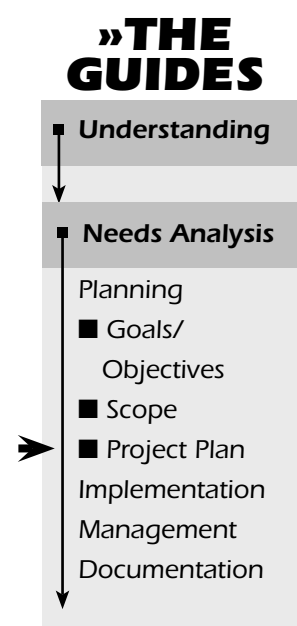
<b>3. Savings/Teller Operations Module</b>
3.1 Transaction Volumes
3.2 Accounting
3.3 Methodology
3.4 Relationships
3.5 Compulsory Savings Products
3.6 Clients/Customers
3.7 Teller Operations
3.8 Reporting
<b>4. Client Impact/Outcomes Module</b>
4.1 Individuals/Members
4.2 Groups
4.3 Communities
4.4 Outcomes
<b>5. Technology Module</b>
5.1 Existing Information System
5.2 Security
5.3 Administration and Maintenance
5.4 Auditability
5.5 User Interface
5.6 Integrated Technologies

If you do not have your own project management software, the text-based approach is probably more appropriate for you, as you can develop your WBS using software that you have readily available.

## Creating an Initial Project Plan

Armed with your WBS — essentially, an outline of the tasks necessary to conduct your needs analysis — you can develop an initial project plan. By formalizing the project management for your needs analysis in this fashion, you enhance the chance of completing the project successfully.

At its most basic, your project plan identifies all of the tasks required to complete the needs analysis as well as the resources that are available to perform them. It allocates resources to those tasks, and then projects a time line for completing the process.



*Your project plan identifies required tasks as well as the resources available to perform them. It also projects a time line for completing the project.*

As a result, your project plan clearly documents expectations for members of the team and provides a mechanism to monitor progress. If specific tasks are completed faster or slower than expected, you revise the time line accordingly. Your team leader — or someone assigned by the team leader — should maintain the time line on a regular basis.

If you have experience in project management, you might already own software that automates the creation of charts, graphs, time lines and project schedules. Such software is available readily for a minimal cost,<sup>9</sup> but is not absolutely necessary. You can develop your own project tools using tables or charts that you create in Microsoft Word or Excel, as was done for the illustrations in this guide. You can even use a large, blotter-style calendar to manage a very small, simple project — as long as you use a pencil and the calendar provides plenty of room for your notes.

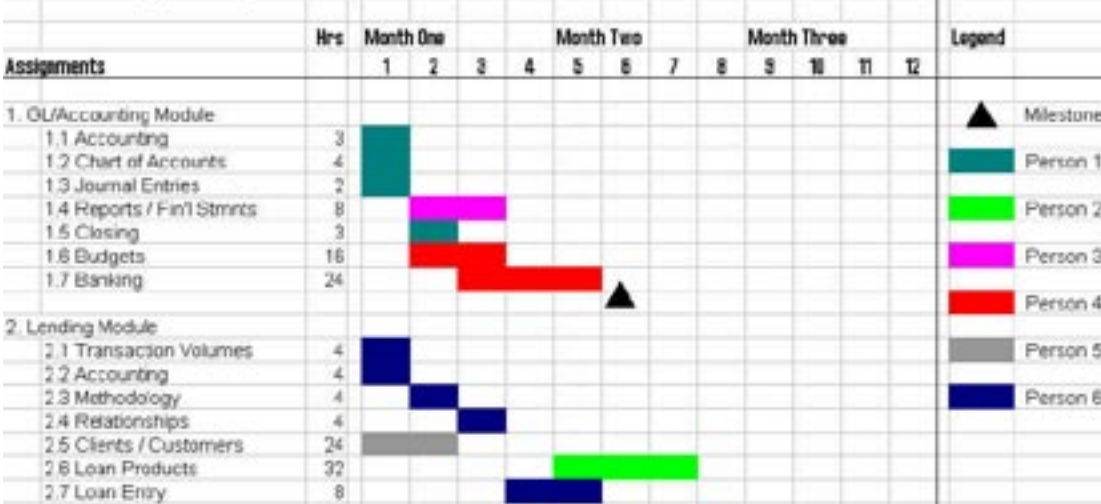
Whatever tools you use, do not lose your focus on the needs analysis itself by overcomplicating the project management aspects of the process. You just need some form of time line or schedule that identifies all of the component tasks for the project, the personnel assigned to or responsible for each task, and the expected duration. And, because project planning and management is an iterative process, be sure that whatever you use can be modified easily whenever necessary.<sup>10</sup>

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<sup>9</sup> With a little searching, you can find shareware and trial products available for download from the Web. If you intend to purchase Windows-based software, one of the more feature-rich and moderately (not low) priced products is Microsoft Project.

<sup>10</sup> The sample Needs Analysis Project Schedule was developed in Microsoft Excel. It assumes a 12-week project. The smallest unit of time you can manage using this tool is one week, as this equates to the weekly project management meetings established for this project. You could create your own schedule tool with daily or even monthly time periods.

## Needs Analysis Project Schedule



*Sample of a simple project planning and scheduling tool, developed in Excel.*

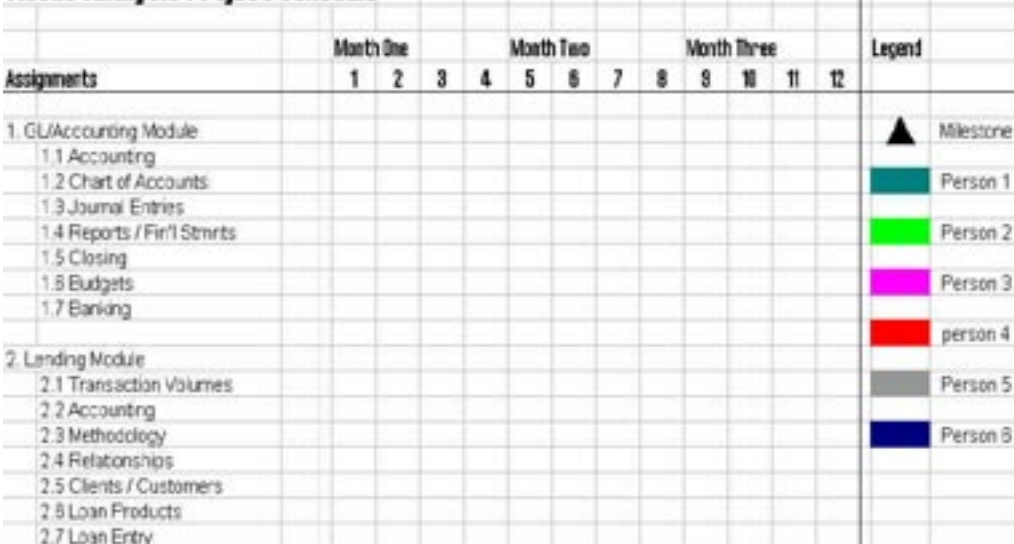
If scheduled tasks require actions that can only be undertaken during certain limited times — monitoring a village bank payment meeting, for example — clearly identify the times on the schedule.

Your schedule can identify important milestones, such as the one in the previous illustration that marks completion of work on the GL/Accounting function. It can also include budgeted costs, projected start and end dates, actual completion dates, and the interrelationships and interdependencies among tasks.

## Task List

Begin your project plan by creating a task list, based on the elements in your WBS. Include all of the business functions and activities that you reasonably expect to automate. Taken together, these elements of the task list provide a road map to guide your needs analysis.

## Needs Analysis Project Schedule



*Sample task list tool.*

*Develop work templates, or scripts, to guide your team members in conducting the tasks in the needs analysis.*

## **Work Templates**

While a WBS is sufficient to manage a project, it is generally not sufficiently detailed to guide the work of your analysis team or to accurately estimate the amount of time required to complete each task.

Before you continue developing your project plan, your team should create (and agree on) some form of template or script for each task, similar to the one illustrated later in this section. To assist you, annexes 2–8 of this guide contain sample work templates. You will find one template for each major element in the sample WBS (Annex 1):

■ *Institutional Issues Template* analyzes your organizational structure and requirements that apply to your institution as a whole or to more than a single application. For a detailed description of the items in this template, refer to Annex 2, Institutional Issues Module.

■ *Lending Template* examines your requirements for your lending program. For a detailed description of the items in this template, refer to Annex 3, Lending Module.

■ *Savings Template* analyzes the requirements for your savings program. For a detailed description of the items in this template, refer to Annex 4, Savings Module.

■ *GL/Accounting Template* analyzes your requirements for your accounting function. For a detailed description of the items in this template, refer to Annex 5, GL/Accounting Module.

■ *Client Impact/Outcomes Template* examines your requirements for analyzing the impact of your institution's programs on its clients, their families and their communities. For a detailed description of the items in this template, refer to Annex 6, Client Impact/Outcomes Module.

■ *Other Applications Template* analyzes your requirements for a variety of less-common applications, such as microinsurance, nonfinancial services, fixed assets, human resources/payroll, inventory, accounts receivable, contact/schedule manager, and report writer/analysis. For a detailed description of the items in this template, refer to Annex 7, Other Applications Module.

■ *Technology Template* examines technical aspects of your IS, such as the computer language in which it is developed. For a detailed description of the items in this template, refer to Annex 8, Technology Module.

Use the templates as is, or add and delete elements as appropriate to reflect your institution's unique operations.



Preferably, team members review the sample work templates related to their own areas of expertise, and then recommend changes for approval at a planning meeting. It is important to note that, while these templates help to guide the analysis process, they are not meant to restrict team members from making any necessary modifications during the analysis process.

<b>1. GL/Accounting Module</b>	
<b>1.2 Chart of Accounts</b>	
<b>Feature</b>	<b>Description</b>
Basis	Are you required to implement a chart of accounts created by another entity, such as a regulatory authority, donor organization or other association? If so, please describe.
Segments	How many separately distinguishable segments (one or more) do you include in your account number? For example, accounting activity, fund, project, branch/office. (Many of the terms in this and the following accounting charts are rather specific for accounts. While many seem redundant, we probably should leave most in—for the accountants.)
Segment length	What is the length (i.e., total number of characters) for each segment?
Segment characters	For each segment, do you allow the range of possible entries to include letters, or do you restrict these values to numbers only?
Separator	Do you use a separator character to visually separate the segments within your account number? If yes, which character?
Total length	What is the total number of characters in your account number, including all segments and separator characters?
Detail options	Do you need the ability to maintain detailed historical transactions for some accounts, but only monthly summary postings for other accounts?

*Sample work template for one task in the WBS.*

The templates become part of the work packets that you assign to each member of your analysis team.<sup>11</sup>

<sup>11</sup> For additional information on developing these packets, refer to *Work Packets* later in this section of the guide.

## Time Budget

Make an initial determination as to the time required (in hours) for each task in the plan, using the work template as a guide. You should recognize that these are, in fact, estimates. Expect the actual time requirements to vary as you proceed with your analysis.

*Once you know your project's scope and the details of the tasks required to complete it, you can begin to consider budgets for time, staffing and any other necessary expenditures.*

Needs Analysis Project Schedule													Legend	
Assignments	Month One			Month Two				Month Three					Milestone	Person
	1	2	3	4	5	6	7	8	9	10	11	12		
1. GI/Accounting Module													▲	Milestone
1.1 Accounting	3													Person 1
1.2 Chart of Accounts	4													Person 2
1.3 Journal Entries	2													Person 3
1.4 Reports / Fin'l Stmt's	8													person 4
1.5 Closing	3													Person 5
1.6 Budgets	16													Person 6
1.7 Banking	24													
2. Lending Module														
2.1 Transaction Volumes	4													
2.2 Accounting	4													
2.3 Methodology	4													
2.4 Relationships	4													
2.5 Clients / Customers	24													
2.6 Loan Products	32													
2.7 Loan Entry	8													

You can use a variety of methods to develop these time budgets, including expert opinions and weighted averages based on estimates from team members.

Regardless of how you develop your budget numbers, be sure to factor in a contingency. Review the resulting time budget at an initial team meeting to develop a consensus.

## Staffing Budget

You made a preliminary allocation of staff resources when you assembled the members of your needs analysis team. These team members participated in developing your WBS and elements of your project plan, such as the time budget.

Now that you have a better understanding of the scope and requirements of your project, your team can refine the staffing plan as follows:

- For each task or summary, note the associated skill set or expertise required.
- For each task or summary, note the projected time required to complete it, according to your task list.
- Determine your available resources. For each member of your needs analysis team, develop a conservative estimate of the amount of time (in hours) that the person has available to work on the analysis project during a typical week. Be sure to separately identify any planned vacations, scheduled training courses, doctor's appointments or other commitments that will impact the person's availability.
- For each team member, note the person's skill set or expertise. Some team members might have expertise in more than one area.
- Determine the most appropriate person(s) for each task, based on the knowledge, skills, education and experience that each brings to the process.
- For each skill set, compare your available resources to your requirements, as illustrated below. You might find that your resources are insufficient. If necessary, acquire additional expertise by adding employees or consultants to the team.
- Assign tasks to individual team members, or small groups within the team.

To help you with this process, you might want to create an analysis tool similar to the one below. It identifies the hours required for each task, the person assigned, and the hours per week each person is available. The tool then calculates the total weeks required to complete the task.

*The staffing budget determines your available resources, compares them to the requirements in the time budget, and allocates the most appropriate personnel to each task.*

*Sample staffing analysis tool.*

<b>Staffing Analysis</b>				
<b>Skill Set / Expertise</b>	<b>Hours Required</b>	<b>Person</b>	<b>Hours per Week</b>	<b>Weeks Required</b>
<b>1. GL/Accounting Module</b>				
1.1 Accounting	3	JL	8	0.4
1.2 Chart of Accounts	3	JL	8	0.4
1.3 Journal Entries	2	JL	8	0.3
1.4 Reports / Fin'l Strmnts	8	CVM	4	2.0
1.5 Closing	3	JL	8	0.4
1.6 Budgets	16	SM	8	2.0
1.7 Banking	24	AVT	8	3.0
<b>2. Lending Module</b>				
2.1 Transaction Volumes	4	BWF	8	0.5
2.2 Accounting	4	BWF	8	0.5
2.3 Methodology	4	BWF	8	0.5
2.4 Relationships	4	BWF	8	0.5
2.5 Clients / Customers	24	MGL	12	2.0
2.6 Loan Products	32	BWF	12	2.7
2.7 Loan Entry	8	PM	6	1.3

If you develop your staffing analysis in a spreadsheet program, such as Excel, the resulting tool allows you to sort the information in various ways. For example, because each person likely will be required to perform more than one task, you might want to sort tasks by the data in the Person column.

You also might want to sort based on the number of hours required to complete each task.

*If you create your staffing analysis in a spreadsheet, you can sort the information in many different, helpful ways.*

<b>Staffing Analysis</b>				
<b>Skill Set / Expertise</b>	<b>Hours Required</b>	<b>Person</b>	<b>Hours per Week</b>	<b>Weeks Required</b>
1.7 Banking	24	AVT	8	3.0
2.6 Loan Products	32	BWF	12	2.7
2.1 Transaction Volumes	4	BWF	8	0.5
2.2 Accounting	4	BWF	8	0.5
2.3 Methodology	4	BWF	8	0.5
2.4 Relationships	4	BWF	8	0.5
1.4 Reports / Fin'l Strmnts	8	CVM	4	2.0
1.1 Accounting	3	JL	8	0.4
1.2 Chart of Accounts	3	JL	8	0.4
1.3 Journal Entries	2	JL	8	0.3
1.5 Closing	3	JL	8	0.4
2.5 Clients / Customers	24	MGL	12	2.0
2.7 Loan Entry	8	PM	6	1.3
1.6 Budgets	16	SM	8	2.0

## Staffing Analysis

Skill Set / Expertise	Hours Required	Person	Hours per Week	Weeks Required
2.6 Loan Products	32	BWF	12	2.7
1.7 Banking	24	AVT	8	3.0
2.5 Clients / Customers	24	MGL	12	2.0
1.6 Budgets	16	SM	8	2.0
1.4 Reports / Fin'l Strmnts	8	CVM	4	2.0
2.7 Loan Entry	8	PM	6	1.3
2.1 Transaction Volumes	4	BWF	8	0.5
2.2 Accounting	4	BWF	8	0.5
2.3 Methodology	4	BWF	8	0.5
2.4 Relationships	4	BWF	8	0.5
1.1 Accounting	3	JL	8	0.4
1.2 Chart of Accounts	3	JL	8	0.4
1.5 Closing	3	JL	8	0.4
1.3 Journal Entries	2	JL	8	0.3

At this point in the planning process, your time estimates are preliminary. You might need to make slight adjustments if you find the budget to be unworkable when it is applied to the schedule.

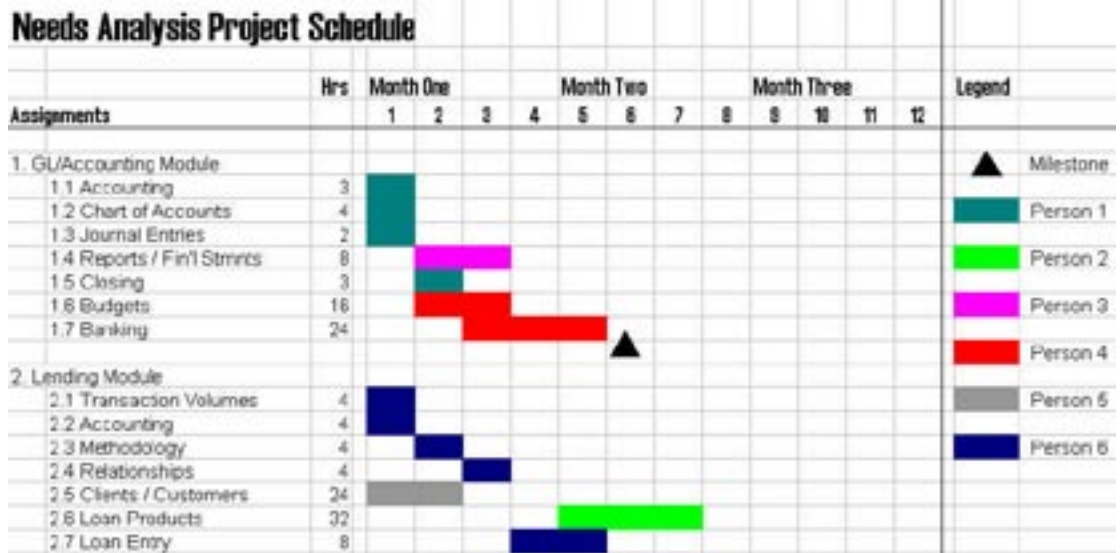
### Initial Schedule/Time Line

The time it actually takes to conduct a needs analysis will vary based on the size and complexity of the institution and the scope of the project. To determine the length of your analysis project, develop a schedule that projects the elements of your plan, including tasks, resources and budgeted hours along a time line.

A small institution with relatively simple processes might be able to complete its analysis within a few weeks. For larger, more complex institutions — or projects with a broader scope — the process takes longer.

*The project schedule allocates resources to tasks over the life of the project.*

*Small and uncomplicated institutions might be able to conduct a needs analysis in a few weeks.*

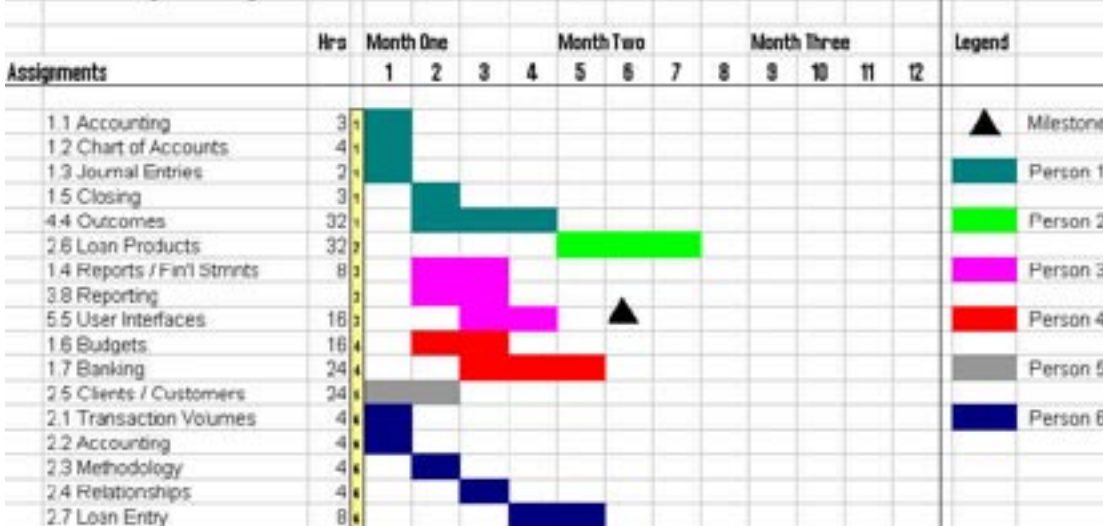


As you plot tasks on your time line, you create a visual representation of the project and establish start and end dates for each task.<sup>12</sup> In doing so, you must ensure that your personnel resources are not overly burdened in the analysis. If your accounting person can commit only 15 hours per week to the needs analysis, a 25-hour accounting task will take two weekly time periods to complete — even though the typical workweek has more than 25 hours. If the same person is assigned two eight-hour projects, two weeks will be required to complete them both — the total hours (16) exceed the available hours in one week (15).

Other personnel conflicts are less obvious; you might find that you have allocated too many tasks to the same person in the same week. If these tasks are scattered throughout the schedule, they can be difficult to see. Sort your schedule by the person assigned to each task, and these types of conflicts become more obvious.

<sup>12</sup> The sample schedule in the illustration is similar to the Gantt chart produced by many project management software products. Although the sample numbers the weeks in the project, the use of actual dates for your own project is preferable. For example, you could replace the number with the start date for each of these weeks.

## Needs Analysis Project Schedule



You will update the time line regularly as the project progresses and budgets or personnel availability change.<sup>13</sup> To minimize the effort required, be sure to build a contingency for slippage into your schedule. Inevitably, one or more of your team members will be ill at some point during the project, or have a personal emergency, or take longer than anticipated to complete an assignment. If your team is too tightly budgeted, you will find yourself constantly updating the schedule.

### Expenditures Budget

Needs analysis projects are labor intensive; they generally do not require a significant cash outlay. However, they can require expenditures for such things as:

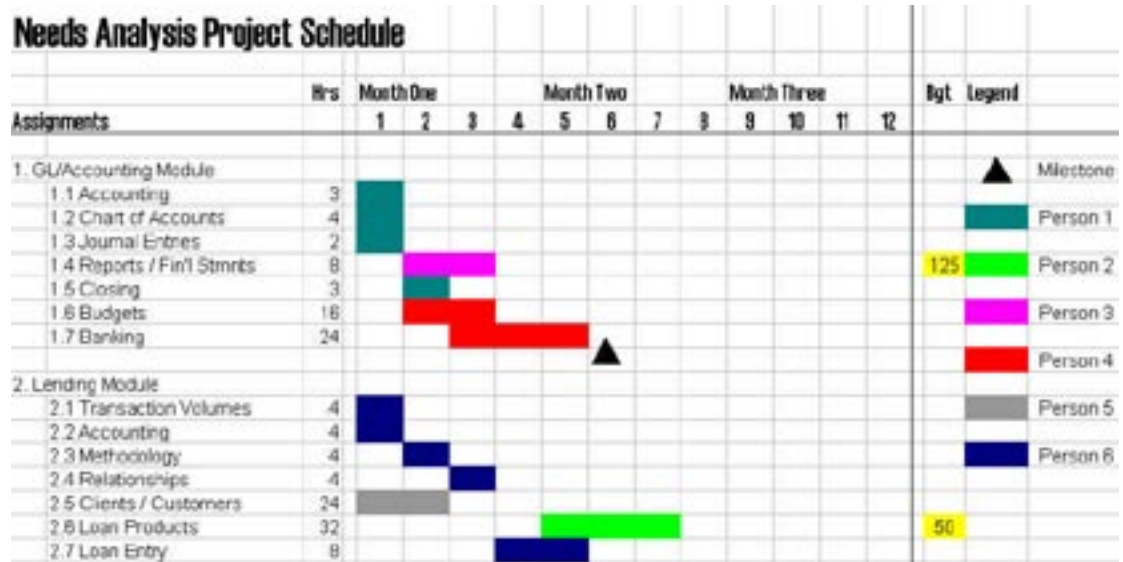
- Fees for outside consultants, to supplement the skills of your in-house team members.
- Overtime pay (if any) for staff members.
- Bonuses or other incentives for on-time completion.
- Travel costs for site visits and other observations.

Some of your project costs, such as bus or plane fare, are fixed. Others might vary. For example, consultant fees are generally determined based on a set amount per hour or per day worked. Regardless of the nature of the costs involved, include a contingency amount to your budget to cover unanticipated expenditures.

*Project costs might include consultant fees, additional payments to staff, or travel costs for site visits.*

<sup>13</sup> For additional information on updating the project time line, refer to the section Maintaining the Schedule later in this guide.

If you wish, you can record the budgeted amounts directly onto your project schedule, as illustrated below.



*Prepare a work packet for each team member to provide important background information on the project, as well as to describe the tasks required of each person.*

**Work Packets**

A work packet is a set of materials that explains a project task, and includes a time budget and description of the desired deliverable. Generally, you prepare a separate packet for each task in the project. To simplify things for this project, you can choose to prepare instead one for each team member by combining the tasks assigned to each person.

At a minimum the packet should contain copies of the following:

- Statement of project goal and objectives.
- List of all team members, their work titles and contact information, and the skill set(s) each brings to the project (unless your institution is small enough that they all know each other well). For example:  
 James Laurenz, Accounting Manager  
 Room 14, Building A  
 Phone 14-2449837  
 Background in accounting and auditing
- WBS.
- Needs analysis project schedule, and a second copy sorted by person.
- Staffing analysis, and a second copy sorted by person.
- Work templates for assigned task.
- Description of how the results are to be documented.

As your team members have been involved in the development of these materials, everyone should be familiar with them. If you make sufficient copies of documents and schedules ahead of time, each person can create his or her own packet during a planning meeting.



# How Do You Conduct Your Needs Analysis?

## »THE GUIDES

■ Understanding

■ Needs Analysis

Planning

Implementation

■ Analyze

Requirements

■ Identify

Priorities

Management

Documentation

# I

n conducting a needs analysis, you analyze and prioritize important aspects of your institution's business operations — including information flows, internal controls, and detailed practices and procedures.

If you have adequately prepared your institution for this analysis, as described in Guide 1, you already have evaluated certain major aspects of your business practices and reengineered them as necessary. Your needs analysis takes that process a step further in terms of detail. As you analyze the detailed practices involved in your business processes, you also might find opportunities for small improvements or fairly minor reengineering.

## Analyzing Your Requirements

Your project plan and WBS provide a road map for analyzing your current and anticipated IS requirements. For each task in the plan (i.e., each business function and activity that your institution intends to automate), you research and document a number of business practices that impact the design of your future IS.

For example, in the Lending template, you describe your lending methodology, the number of loans you disburse each period, how you assign customer numbers, when you write off delinquent loans, if and how you assess late payment penalties, how you establish your loan payment schedules, and so on.

### Analysis Method

To conduct your analysis, you and the other members of the analysis team perform the tasks as outlined in each work template. The elements in the template represent potential IS requirements for your institution. Taken together, they describe the IS features necessary to automate your institution's business operations.

Without a work template, you have no assurance that your needs analysis addresses the range of issues that are critical to successfully describing your IS requirements. In other words, a template reduces the risk of an incomplete analysis.

However, it should not restrict your ability to analyze and document additional requirements or business practices if you uncover them in the process of conducting the analysis. Consider the template a working document that can be adapted as necessary or appropriate.

As you conduct your analysis, explore each element as comprehensively or as minimally as appropriate for your unique situation, but give them all careful consideration. If you develop your own IS, the resulting needs analysis is the starting point for developing functional specifications. If you purchase an off-the-shelf IS, the analysis provides the framework for evaluating your available options and for specifying any necessary customizations.

You could employ any or all of the following techniques to gather required information:

- Personal knowledge and expertise.
- Surveys and interviews with management and staff.
- A review of all existing policy and procedural manuals.
- A review of research and other materials generated by your business planning process.
- Flowcharts of business processes.<sup>14</sup>
- Business walkthroughs, where you follow a process through from start to finish.
- An analysis of your existing IS — whether manual or computerized — including any known limitations, inefficiencies or other serious problems relative to your current and future requirements.

### **Recordkeeping Options**

While working through the needs analysis process, your team must maintain a written record of its findings as well as the work papers it generates. This creates institutional memory. To the extent that information is located only in the minds of team members, rather than on paper, your project risk increases. If a team member changes jobs or becomes ill, for example, you stand to lose critical information. In a worst-case scenario, you might have to repeat completed portions of the analysis.

While the work template guides your analysis, it might not provide a sufficiently comprehensive mechanism for recording all of your findings. You can supplement it using any of the approaches described below, or any other that you prefer.

Regardless of the approach you choose, your team members should save all of their rough notes and other working documents to support the analysis results.

*A work template reduces the risk of an incomplete needs analysis, but should not prevent you from adding any new requirements that you uncover during your analysis.*

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<sup>14</sup> For additional guidance on using flowcharts in a business process, refer to the companion guide (Guide 1), *Understanding Information Needs for MFIs*.

*Maintain a comprehensive written record of your findings as you work through the needs analysis process. This creates institutional memory.*

## **Samples**

As you conduct your analysis, collect samples of all of the forms, input documents, and reports and analyses from your current operations. If you find (or generate) any written materials during your analysis process, such as surveys, organization charts and business process flowcharts, include them as well.

To store (and readily retrieve) these samples, you can use the numbered elements from your WBS as the foundation for your file-numbering system. For example, assume you are using the sample WBS from page 20. File your chart of accounts in a folder numbered 1.2, your lending policy manual in folder 2.3, sample payment schedules for each loan product in folder 2.6, and sample savings forms and reports in folder 3.8.

## **Work Template**

Copies of your work templates provide the basic scripts that team members use to complete the analysis. Because these templates and your WBS and filing system all use the same numbering scheme, your team should number all of notes and other working papers using the same scheme.

To help each team member chronicle the details of his or her findings, optional Word documents are available for each of the sample templates in the annexes,<sup>15</sup> with additional space for reference numbers, detailed comments and other notes. If you do not have these template documents, but do have access to an electronic version of this guide, you can copy and edit the work templates in the annexes to create space for handwritten notes. You could even assign a member of the team to enter these notes — and other notes your team generates — into the Word file(s) regularly.

## **Flowcharts and Requirements Use Case Documents**

As noted in Guide 1, IT analysts often use flowcharts and requirements use case documents to describe the business practices they analyze.<sup>16</sup> You might find it necessary to develop new, or update existing, flowcharts and requirements documents as you conduct your needs analysis.

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<sup>15</sup> The file names for these Word documents are: Client Impact-Outcomes Work Template.doc, GL Accounting Work Template.doc, Institutional Issues Work Template.doc, Lending Work Template.doc, Other Applications Work Template.doc, Savings Work Template.doc, and Technology Work Template.doc.

<sup>16</sup> For additional information on creating and analyzing flowcharts and requirements use case documents, refer to *Documenting Work Flows and Business Practices* in Guide 1.

## Needs Analysis Tool [Optional]

To chronicle the overall findings of the needs analysis team, this guide provides an Excel-based workbook, the Needs Analysis tool. It is distributed as an Excel template file (Needs Analysis Tool.xlt).<sup>17</sup>

This tool mirrors the structure of the work templates, and provides a mechanism to record summary results (without all the detail of the work templates) and to assign priorities. The individual sheets, or checklists, in the Needs Analysis workbook represent the work templates in this guide:

■ *Institutional Issues Checklist* summarizes the requirements from the Institutional Issues template. [Annex 2, Institutional Issues Module]

■ *Lending Checklist* summarizes the requirements from the Lending template. [Annex 3, Lending Module]

■ *Savings Checklist* summarizes the requirements from the Savings template. [Annex 4, Savings Module]

■ *GL/Accounting Checklist* summarizes the requirements from the GL/Accounting template. [Annex 5, GL/Accounting Module]

■ *Client Impact/Outcomes Checklist* summarizes the requirements from the Client Impact/Outcomes template. [Annex 6, Client Impact/Outcomes Module]

■ *Other Applications Checklist* summarizes the requirements from the Other Applications template. [Annex 7, Other Applications Module]

■ *Technology Checklist* summarizes the requirements from the Other Applications template. [Annex 8, Technology Module]

The rows on each sheet in the Excel-based tool represent the individual elements in the template.<sup>18</sup> Each element defines a specific feature to be reflected in the IS. You can use the tool as designed or modify it to accommodate the more unique aspects of your institution's operations. Alternatively, you can use it as an example for creating your own unique analysis document.

Eventually, the data you record in this tool provides the basis for evaluating possible information systems and comparing how well each applies to your needs.

*The sheets in the Excel-based Needs Analysis tool represent the business functions to be automated.*

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<sup>17</sup> The Needs Analysis tool is used with the permission of S.A. Lunde

<sup>18</sup> For additional information on documenting your analysis, refer to the section *Analyzing Your Requirements* earlier in this guide.

Before you begin to record your needs and wants, add or delete sheets in the workbook as necessary to reflect the changes you made in creating your WBS and work templates. Then, to use the Needs Analysis tool, complete the following process:

*Use the tool as designed or modify it to accommodate the more unique aspects of your operations.*

<b>Step</b>	<b>Description</b>
1	Double-click on the Needs Analysis template file (Needs Analysis Tool.xlt) from within Windows Explorer. The template opens as an Excel file (Needs Analysis Tool1). You can save this file under any name you like, and in any folder you prefer. As you enter data into the file, be sure to save it often to avoid losing your work.
2	Review the introduction and instructions for use on the <i>Instructions</i> sheet in the Excel workbook file. (See the named tabs on the bottom of the Excel window.)
3	Complete one sheet in the workbook for each function you intend to automate (tabs <i>Institution, Lending, Savings...</i> ) by following steps 4 through 7 below.
4	Enter a brief DESCRIPTION in each applicable row on the sheet to explain your requirements for the potential feature. If you need a more detailed explanation for any item on the sheet, refer to the related work template in annexes 2–8 of this guide.
5	Optionally, supplement the DESCRIPTION with a more detailed narrative for your needs analysis folder. You can use a software program for this purpose, such as Word or Excel, or use paper documents.
6	Enter a PRIORITY — a value from 1 to 3 — to establish the importance of each feature. An entry of 3 represents the highest or most important priority (a must-have feature). An entry of 1 represents the lowest, or least important, priority (a nice-but-not-necessary feature).
7	Optionally, enter or edit the reference number to identify a document or a file location that contains additional, supporting information regarding your requirements.

## Identifying Priorities

Not every feature of an IS is equally important to your institution. By adding a priority rating to your needs analysis process, you can assign a weight, or importance factor, to each IS element.

Generally, this means applying a scale of 1 to 3 to each element as part of its documentation.<sup>19</sup>

- Assign a priority of 3 to your *must have* features, resulting from regulatory requirements, industry requirements or business needs.

- Use 2 for your *wants*.

- A priority of 1 indicates a *nice-but-not-necessary* feature of the system.

If you use the optional Needs Analysis tool, a column is allocated for this purpose.

A review of the assigned priorities during your weekly team meetings can be helpful. As you do so, remember that your needs analysis is a wish list for your new IS and will be used as a basis for evaluating potential systems.

However, the analysis does not provide any assurance that the must-have features in your needs analysis actually exist in any off-the-shelf product. In fact, you should not expect to find an IS that meets all of your needs exactly — or that you would be able to afford it if it did exist.

*By assigning priorities to your analysis, you recognize that not every feature in the system is equally important.*

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<sup>19</sup> A number of alternative prioritizations schemes, some of which involve additional categories, are available. Keep in mind that a significantly larger scale (one with more options) can be difficult to apply consistently due to its many nuances. However, if you have experience with a four- or five-option scale, and prefer it to the one recommended here, you can use it to assign priorities, instead.





# How Do You Manage Your Needs Analysis Project?

## »THE GUIDES

Understanding

Needs Analysis

Planning

Implementation

Management

Documentation

# M

anaging a needs analysis project is more art than science; your approach will be influenced by the style of your team leader, the personalities of your team members and your institution's culture.

Regardless of your approach, the two most important tasks are to ensure effective communication among the team members, and to maintain and disseminate vital information regarding project status.

## Ensuring Effective Communication

If you develop your project schedule using a time line with weekly intervals (as recommended), schedule weekly project meetings as well.

Besides the obvious social and team-building benefits, the weekly meetings provide a mechanism for members to:

- Report on progress and findings.
- Seek guidance or assistance from other members of the team.
- Recommend personnel changes for specific tasks, or the addition of consultants with specific areas of expertise.
- Discuss recommended priorities.
- Generally, develop consensus.

## Maintaining the Schedule

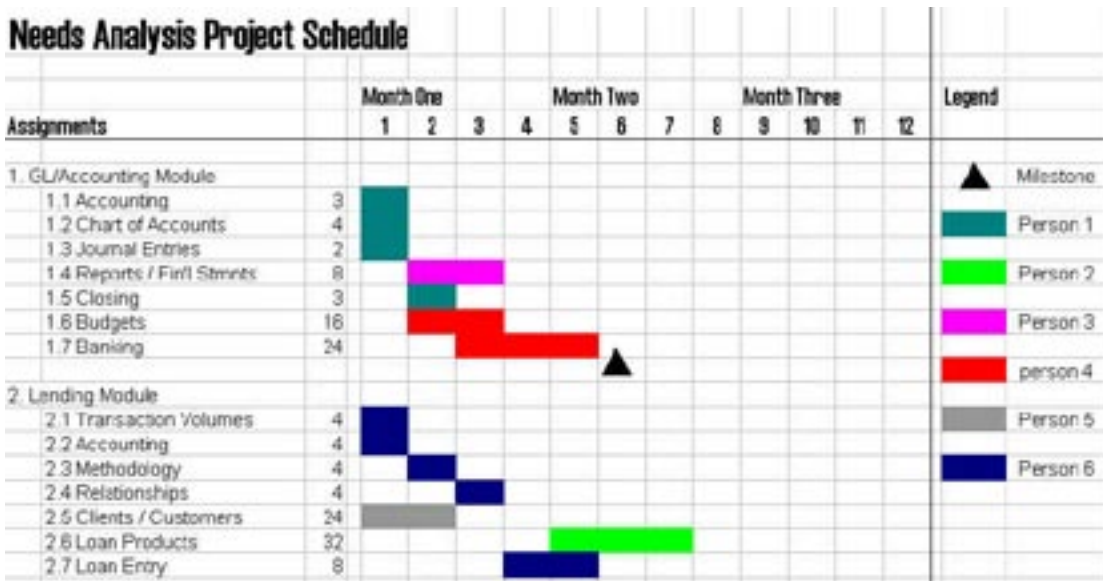
As you conduct your analysis, you will find that certain tasks took less hours or more hours than anticipated. Expenditures varied from budgeted amounts. Team members became ill or took other employment. New tasks were added to the project, and others were deleted.

To reflect these types of changes, update your schedule regularly — generally weekly, to coincide with the time line and with your team meetings. This means updating start and end dates, revising time and expenditure budgets, updating milestones, changing staff assignments, and adding or deleting tasks as necessary.

If you have a relatively small project and team, you can gather the information necessary to update the schedule during each weekly meeting.<sup>20</sup> You can then update the schedule and disseminate new copies after the meeting.

If you prefer, you can ask team members to submit a brief status report at some point before the meeting, so that you can prepare revised schedules for distribution during the meeting.

*The most important management tasks are to ensure effective communication among team members, and to maintain and disseminate vital information regarding project status.*

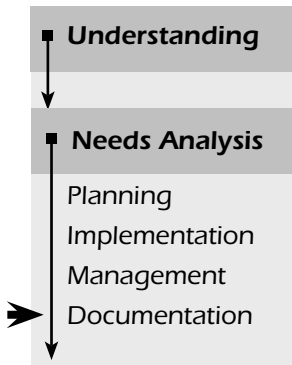


<sup>20</sup> For larger projects or larger teams, you might need additional mechanisms or tools to collect project information — for example, timesheets. A detailed discussion of such tools is outside of the scope of this guide. However, you can refer to any comprehensive guide on project management for more information.



How Do You  
Document the Results  
of Your Analysis?

## »THE GUIDES



*The information you collected during your analysis, while critical to support your results, is simply too detailed for others readily to absorb.*

# Y

ou have two principal audiences for communicating the results of your needs analysis: the members of your institution's staff and board of directors, and potential system providers (including off-the-shelf software vendors and/or custom IT developers). The question then arises: How do you most effectively communicate the results of your analysis to these persons?

At this point in your analysis process — after your team has completed the tasks in the project plan — you will have developed the following to document your IS requirements:

- A filing system containing samples of policy manuals, forms, reports and other institutional documents.
- Notes and working papers generated by your analysis team members to describe your requirements and establish the priority of each item.
- Annotated copies of the work template documents (optional).
- Completed copy of the Needs Analysis tool (optional).

While all of this data is critical to support the results of your needs analysis, it is simply too detailed for members of your principal audiences to absorb. Instead, to communicate effectively, you need to prepare documents similar to the following:

- An *executive summary* of your needs analysis. Ideally, this summary includes an introduction to your institution, a brief overview of your current system and IT resources, a list of the functions/applications that you intend to automate or replace, and your most critical requirements for each function — usually, somewhere between five and 10 general features. You can use this as an introductory communication for potential vendors, and as an initial screening tool for potential products.
- A *matrix of needed and wanted features*, complete with a brief description for each item and an assigned priority to indicate its relative importance. This features matrix expands upon the information in the executive summary. Consider structuring it according to the outline implicit in your WBS and work templates.

■ A *formal, written needs analysis report*. This report provides a comprehensive, functional specification for the anticipated new elements of your IS. While the preparation of this report should be thorough, you do not need to include voluminous detail. If you structure (and number) the report according to your WBS, you automatically provide a reference to files and folders with detailed supporting information. And if you use the optional Word-based templates, you can include completed copies in the report's annexes to provide most of the detail for the report. (Note that this report does not need to be provided to every potential vendor. If you use the previous two documents — executive summary and features matrix — to qualify vendors, you can save this report for those vendors that pass your initial screening process.)

As you prepare these documents, keep in mind that many of the software vendors and IT consultants who will read them are not experts in microfinance, or even banking or business. On the other hand, most of your staff and board members likely do not have a significant IT background. To effectively communicate with members of these key audiences, avoid unnecessary use of acronyms, technical terms and jargon, wherever possible.

Finally, if all you do is provide the needs analysis documents to your board and potential vendors and consultants, you cannot ensure that your requirements are actually understood. No matter how carefully you have written these documents, you do not control the manner in which they are interpreted (or not interpreted) by the reader.

To be more proactive with your communications, schedule a follow-on meeting — i.e., after the recipients have had time to read your report — to discuss your requirements and answer questions. Depending on the scope of your project, more than one meeting might be necessary.

Ultimately, it is *your* responsibility to ensure that your technology vendors and consultants truly understand your needs.

*To communicate your needs to potential IT vendors and members of your board, prepare summary reports that include references to folders with more detailed information.*





# Conclusion

*With adequate preparation and planning, you can increase your chances of choosing an IS that will satisfy most of your business requirements at a justifiable cost.*

**A**

s you plan for a new computerized IS, it is important to remember that no single system will meet all your wants and needs. Nor can an IS solve all of an institution's business or operational problems. However, with adequate preparation and planning, you can greatly increase your chances of choosing a system that will satisfy most of your business requirements at a justifiable cost. It all begins with a needs analysis.

As you have learned in this guide, a needs analysis prioritizes your needs and wants, and establishes a framework for evaluating your software options. It provides the software selection process with important transparency. Further, the needs analysis helps you to establish realistic expectations for your new system, and enhances your communications with potential consultants, service providers, software vendors and software developers.

This guide underscored that the analysis team you assemble should include a wide range of perspectives to increase the likelihood of achieving your information-management objectives. It is a participatory process that functions best when it draws upon the knowledge and experience of key management and of staff throughout the institution. The analysis team must meet regularly throughout the process and be given access to the resources and key personnel necessary to complete their assignments. The selection of the right team leader is critical to the success of the needs analysis. While managing a major institutional change, the team leader is responsible for championing the IS project within and outside of the institution, providing guidance and encouragement, updating management and generating their buy-in, resolving conflicts, and creating consensus. Keep in mind that the needs analysis team plays an advisory role, providing critical information (and usually a final recommendation) that the institution's top management and/or board of directors use in deciding on a new IS.

As you have seen, a needs analysis is a relatively simple project that can be conducted according to established best practices for project management. This guide described the needs analysis process in the context of the five project management phases — launch, planning, implementation/performance, monitoring/controlling, and wrap-up. It also described and provided examples of basic project management tools and techniques to assist you. A needs analysis begins with establishing goals and objectives and defining the scope of the work. Developing a work breakdown structure — essentially a hierarchical representation of the tasks required to complete the needs analysis — can be helpful. It is a project management road map that breaks the work to be done into small units, or modules, that can be tracked easily.

Once that is completed, a project plan must be created that includes a list of the major tasks, work templates to guide team members, time and staffing budgets, a schedule, and work packets containing a description of the desired deliverables. Your project plan allocates resources to each task, and then projects a time line for completing the process. As a result, your project plan clearly documents expectations for members of the team and provides a mechanism to monitor progress.

This guide demonstrated how to conduct a needs analysis by performing the tasks outlined in the work templates. The elements in the template represent potential IS requirements for your institution. Taken together, they describe the IS features necessary to automate your institution's business operations. In short, these templates help you reduce the risk of an incomplete analysis. As you work through the needs analysis, it is important to maintain a comprehensive written record of your team's findings. This creates institutional memory. As you have learned, not every feature of an IS is equally important to your institution. By adding a priority rating to your needs analysis process, you can assign a weight, or importance factor, to each IS element.

In managing your needs analysis project, the two most important tasks are to ensure effective communication among the team members, and to maintain and disseminate vital information regarding project status. Regular project meetings are an effective way to report findings, seek assistance from other team members, recommend personnel changes, discuss priorities, and build consensus. To disseminate important information on the status of the needs analysis, update the project schedule regularly. This means updating start and end dates, revising time and expenditure budgets, updating milestones, changing staff assignments, and adding or deleting tasks as necessary.

This guide addressed one final critical question: How do you effectively communicate the results of your project to the two main audiences of the needs analysis — the senior management and/or board of your institution, and potential systems providers? To effectively communicate the results, you need to prepare an executive summary of your needs analysis; a matrix of needed and wanted features; and a formal written needs analysis report with comprehensive, functional specifications for the anticipated new elements of your IS. Once the recipients have had time to read the report, schedule follow-on meetings to discuss your requirements and answer questions. This proactive approach to communication can help ensure that your technology vendors and consultants truly understand your needs.

*Follow-on meetings to discuss your requirements and answer questions can help ensure your vendors and consultants understand your needs.*