



Advancing financial access for the world's poor

# 2008 Microfinance Technology Survey

- a joint initiative of CGAP and the EU/ACP Microfinance Programme

March 2009

# 2008 Microfinance Technology Survey

## Introduction

Technology is consistently cited as one of the greatest challenges faced by microfinance institutions (MFIs) around the world.

It is widely recognized that use of current technology is invaluable for improving efficiency, accuracy, increasing outreach and reducing costs; however, many MFIs continue to sink funds into poor technology investments, or simply do not invest in technology, limiting their ability to grow and compete.

From July to September 2008, CGAP conducted a survey of 152 MFIs to gather information about how MFIs use technology today, how they approach future technology investments, and identify weaknesses and opportunities in the microfinance technology market. This document explores some of the issues raised by the survey.

# 2008 Microfinance Technology Survey

## Profile of Respondents

Survey responses were submitted on a voluntary basis and the analysis in this report is based exclusively on this sample, which is not necessarily representative of the microfinance field as a whole.

### Respondents

- 152 completed surveys
- 48 countries represented
- Median number of clients 4,659 (average 70,038)
- Median loans outstanding US\$ 579,000 (average US\$ 5,367,356)
- Median assets US\$ 612,000 (average US\$ 6,188,888)
  
- Some potential biases in sample:
  - 44% non-governmental organizations
  - 60% less than 10,000 clients
  
- Further information on profile of respondents can be found at the end of the document.

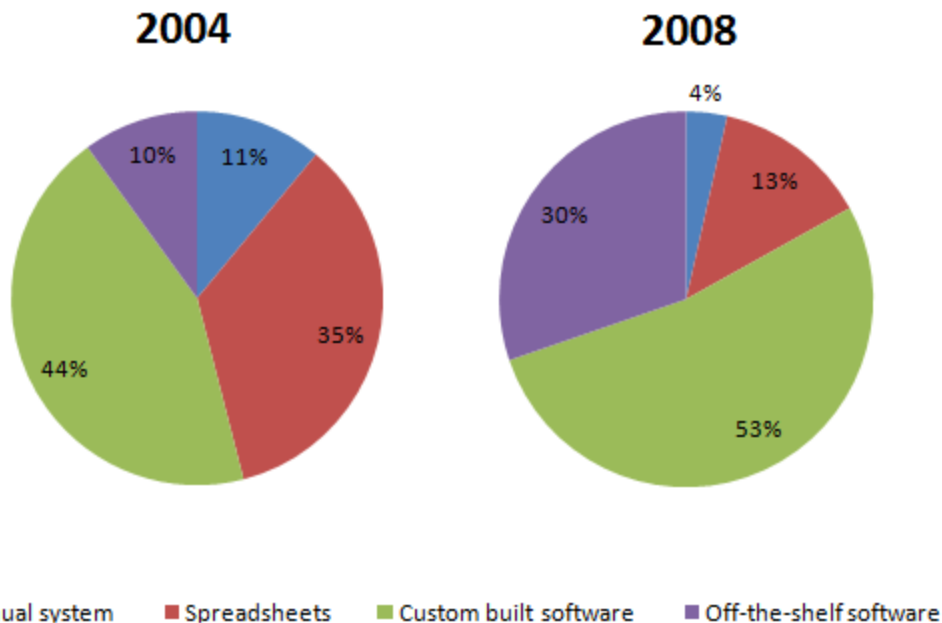
# 2008 Microfinance Technology Survey

## Management Information Systems

### Highlights:

- 18% use manual systems or spreadsheets to manage loan portfolio
- 53% use custom built software
- 29% use commercially available off-the-shelf products

Figure 1. Loan Portfolio Management<sup>[1]</sup>



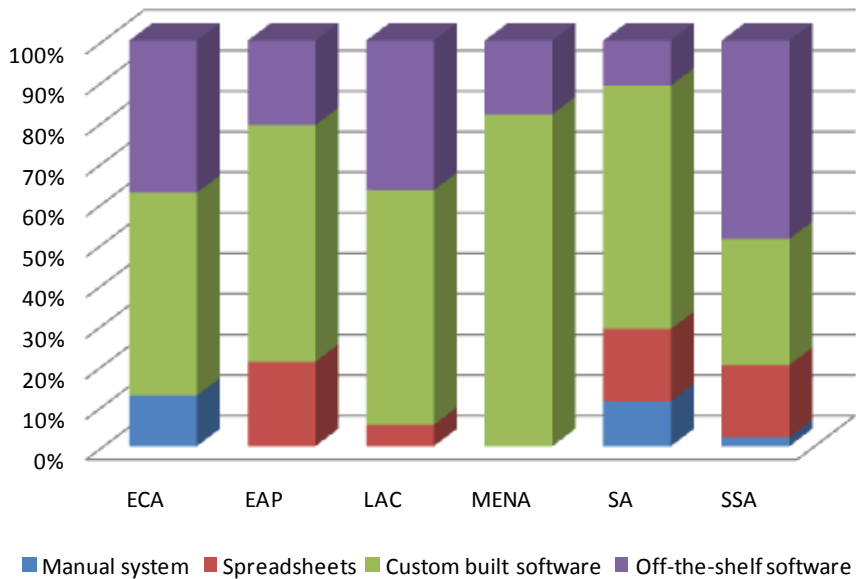
A similar CGAP survey in 2004 found that 46% of respondents were using manual systems or spreadsheets to manage their portfolio. While the 2004 figures are based on a different sample set, the figures may indicate an increase in the use of technology among MFIs.

<sup>[1]</sup> These are based on two separate samples and do not reflect changes to the same sample of MFIs. The 2004 survey is based on a sample size of 270.

# 2008 Microfinance Technology Survey

## Management Information Systems

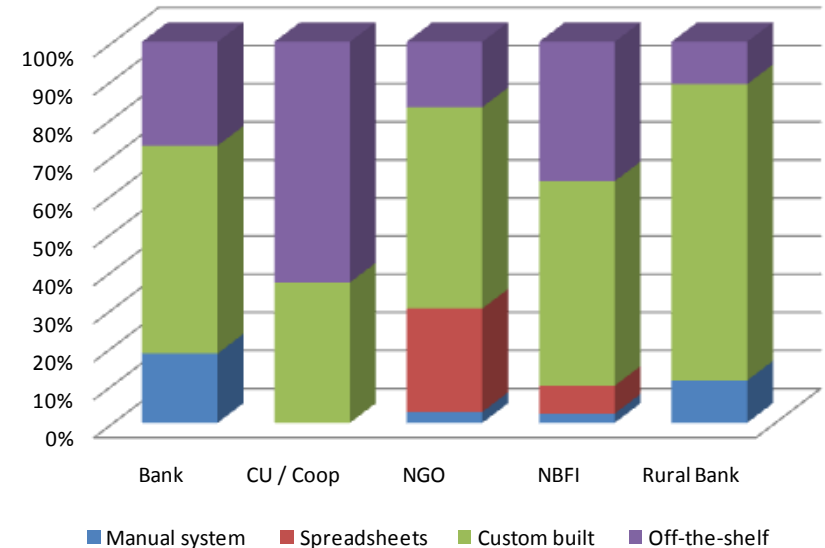
**Figure 2. Portfolio Management Systems, by region**



SSA, SA, and EAP have the greatest number of MFIs using manual systems and spreadsheets.

The majority of MFIs reporting use of spreadsheets are NGOs, and the majority of organizations with manual systems are Banks and Rural Banks.

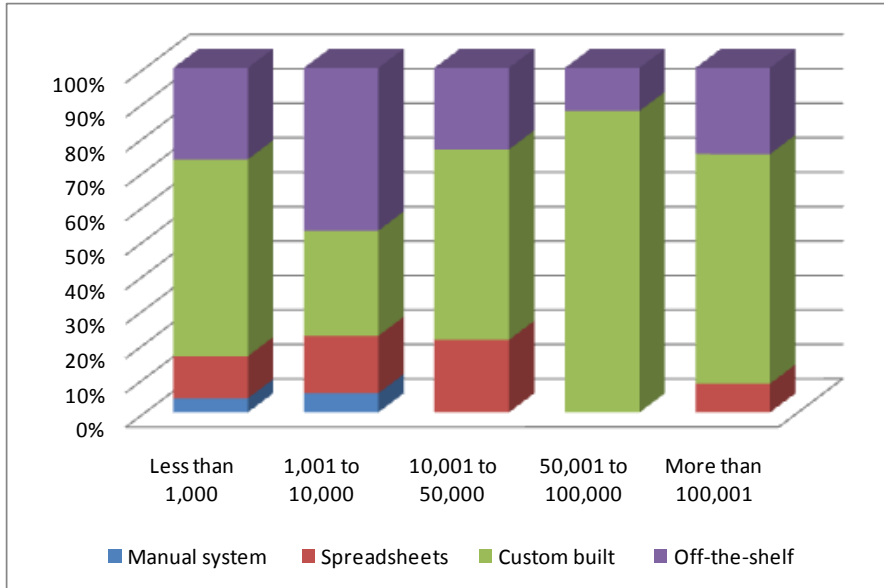
**Figure 3. Portfolio Management Systems, by type of institution**



# 2008 Microfinance Technology Survey

## Management Information Systems

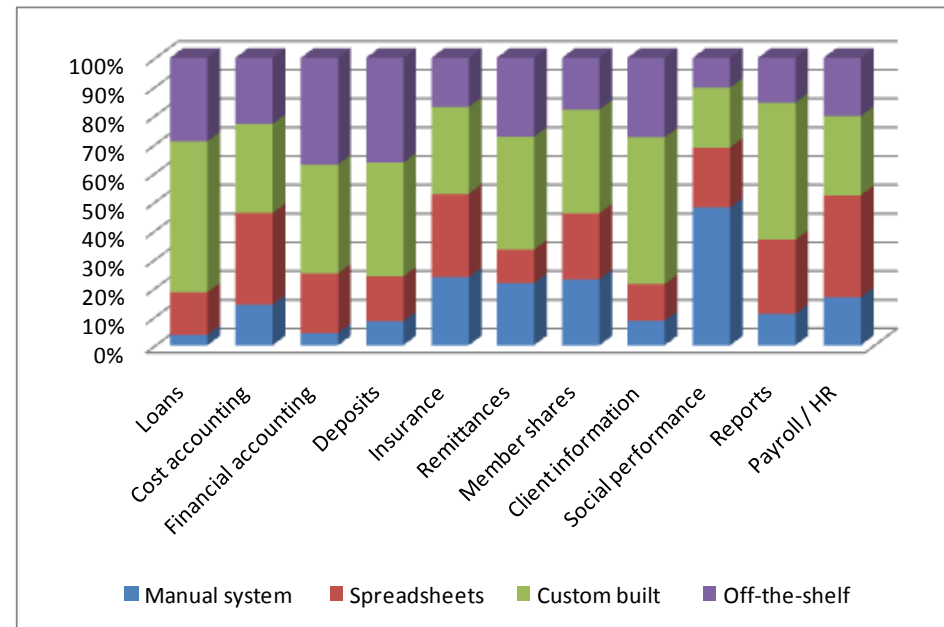
**Figure 4. Portfolio Management Systems, by number of clients**



Not surprisingly, spreadsheets and manual systems are most common among smaller MFIs with less than 50,000 clients.

- Automated systems are widely used to manage loans, deposits, remittances, client information, and MIS reports.
- However, many functions remain largely manual, including cost accounting, insurance, social performance, and human resources.

**Figure 5. MFI Information Systems, by module**



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## Satisfaction and Challenges

### Highlights:

- 41% feel that their information system prevents them from achieving goals
- Relatively equal distribution among MFIs reporting a weak IS
- 57% report that funding is an obstacle to improving their systems
- Of the MFIs reporting that funding is a major constraint, 60% have <10,000 clients

Figure 6. System Constraints, by type of IS

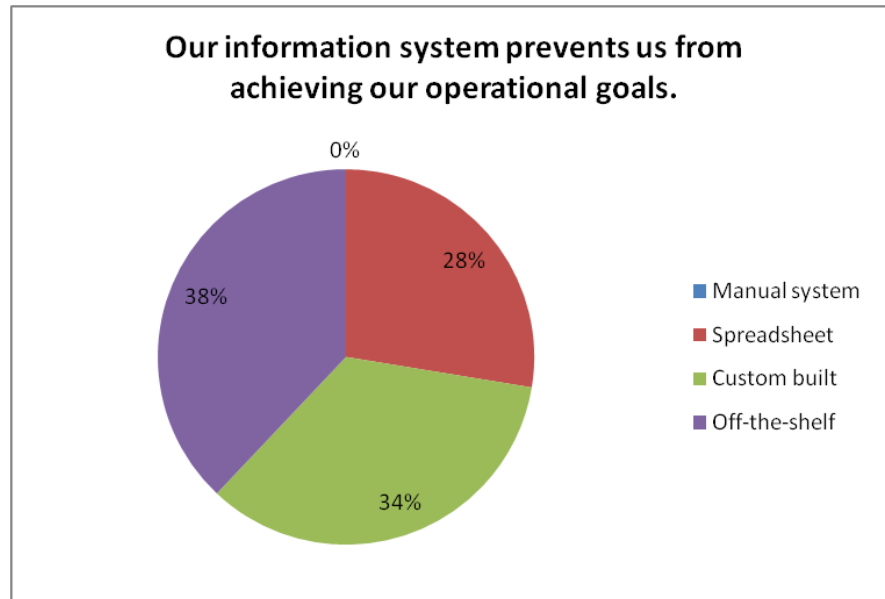


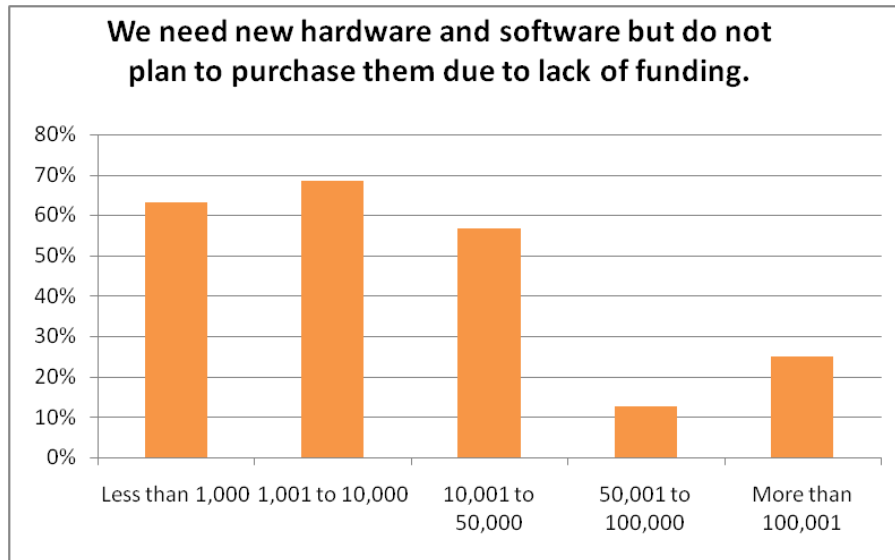
Figure 7. System Constraints, by number of clients



# 2008 Microfinance Technology Survey

## Satisfaction and Challenges

**Figure 8. Funding Constraints, by number of clients**

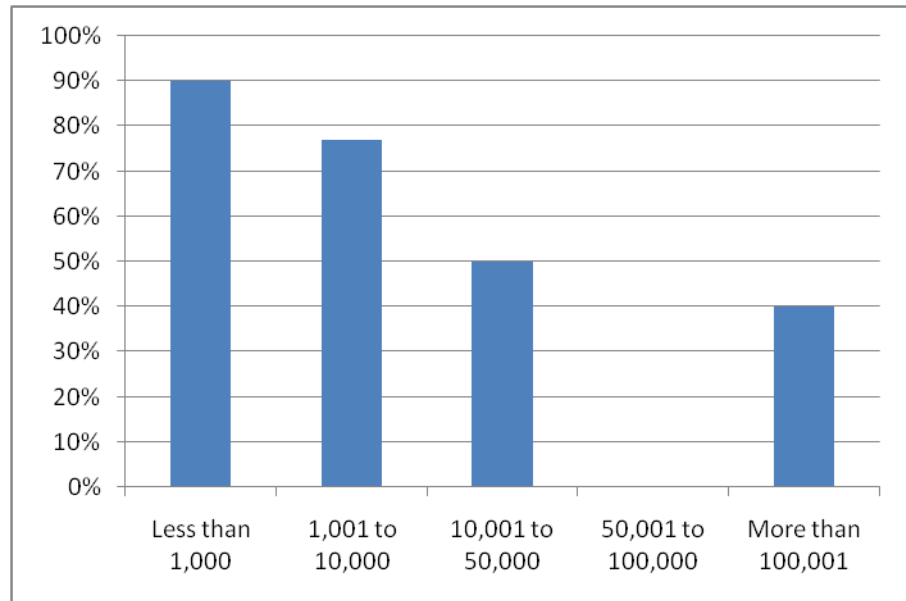


Lack of funding is a common problem among institutions with less than 50,000 clients.

•73% of small institutions (<50,000 clients) with a weak IS also report lack of funding; funding is perceived as a major driver of weak information systems among small MFIs.

• Only 29% of large institutions (>50,000 clients) with a weak IS also report lack of funding; funding not a major driver of weak IS among larger institutions.

**Figure 9. Of MFIs reporting a weak IS, % of those also reporting a lack of funding for hardware and software.**



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## Pros and Cons of Different Types of MIS

Figure 10. Pros and Cons of Different Types of MIS

	Pros	Cons
<b>Spreadsheets</b>	<ul style="list-style-type: none"> <li>- low cost</li> <li>- no installation required</li> <li>- easy to use</li> <li>- easy to customize</li> <li>- no IT team required</li> </ul>	<ul style="list-style-type: none"> <li>- limitations in functionality</li> <li>- potential for human error</li> <li>- becomes unwieldy as the institution grows</li> <li>- difficult to generate accurate reports</li> <li>- difficult to maintain centralized data for multi-branch MFIs</li> </ul>
<b>Custom-built</b>	<ul style="list-style-type: none"> <li>- may be lower cost than off-the-shelf, but not always</li> <li>- customized to MFI requirements and local regulation</li> <li>- may reduce potential for human error</li> </ul>	<ul style="list-style-type: none"> <li>- risk of dependency on one person or a small group of people who built the software</li> <li>- perceived costs may be low (i.e. no maintenance fee paid to vendor), but long-term costs of running a custom-built system may be high in cases where the system is not well built</li> <li>- may be difficult to interface with other systems</li> <li>- typically requires internal IT staff to manage system</li> </ul>
<b>Off-the-shelf</b>	<ul style="list-style-type: none"> <li>- allows the institution to add modules and functionality as the MFI grows</li> <li>- reduced potential for human error</li> <li>- higher likelihood of accurate information and reports</li> <li>- may be easier to interface to other systems</li> </ul>	<ul style="list-style-type: none"> <li>- reliant on vendor support for changes, new reports, or bug fixes</li> <li>- vendors not always present in local markets so response time is slow</li> <li>- not as flexible/customizable to individual MFI requirements</li> <li>- may be higher cost</li> <li>- typically requires internal IT staff to manage system</li> </ul>

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## Satisfaction and Challenges

### Most in need of improvement:

1. Reporting and data analysis
2. Flexibility to customize products
3. Accuracy of information
4. Speed of processing transactions

- 76% confident in management's expertise to make technology investment decisions
- 56% confident in IT department's ability to maintain their hardware and software
- 53% are satisfied that they are informed about best practices in use of technology

### Common impediments to use of technology:

1. Consistent access to internet connectivity
2. Transfer of data between branches
3. Reliable IT support for software and hardware
4. Funding for long-term IS solutions

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## Infrastructure Challenges

### Highlights:

- 36% report having at least one branch without internet connectivity
- 65% have a branch with a slow internet connection or no connection
- Of the MFIs with a branch not connected to the internet, 40% are in Sub-Saharan Africa

Figure 11. Internet Connection, head office

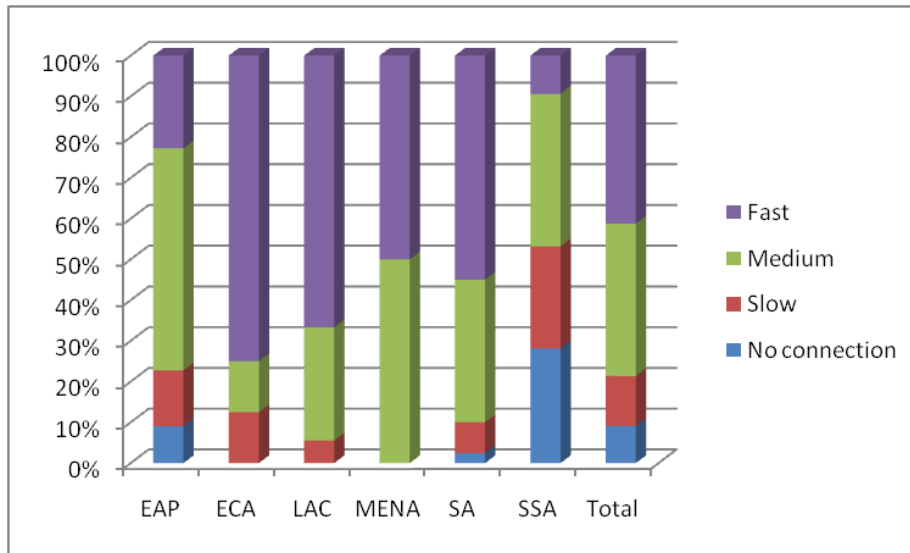
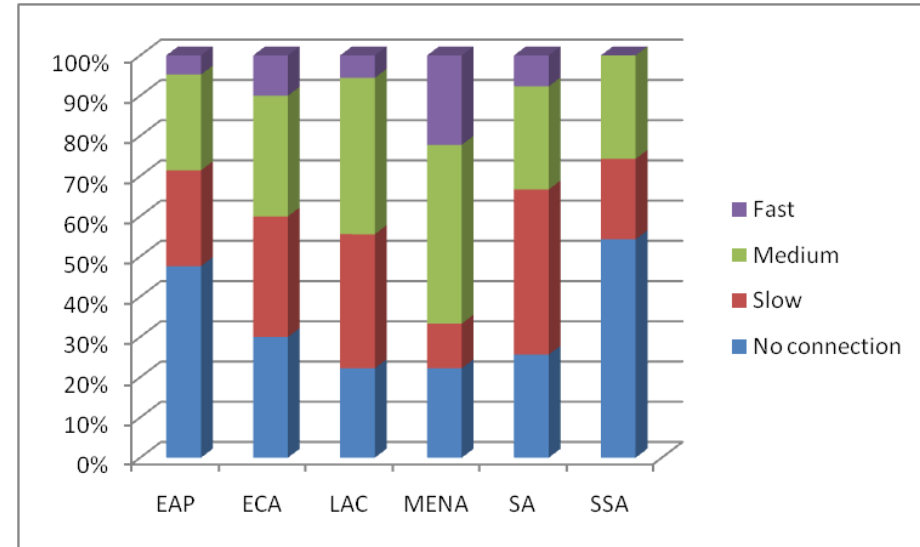


Figure 12. Internet Connection, branch with worst connection



# 2008 Microfinance Technology Survey

## Infrastructure Challenges

### Highlights:

- 21% of respondents can determine payments in arrears in less than 1 day, while 48% can determine payments in arrears in 1-3 days
- Significant regional variation in both data transfer methods and number of days to determine arrears

Figure 13. Data Transfer Method, by region

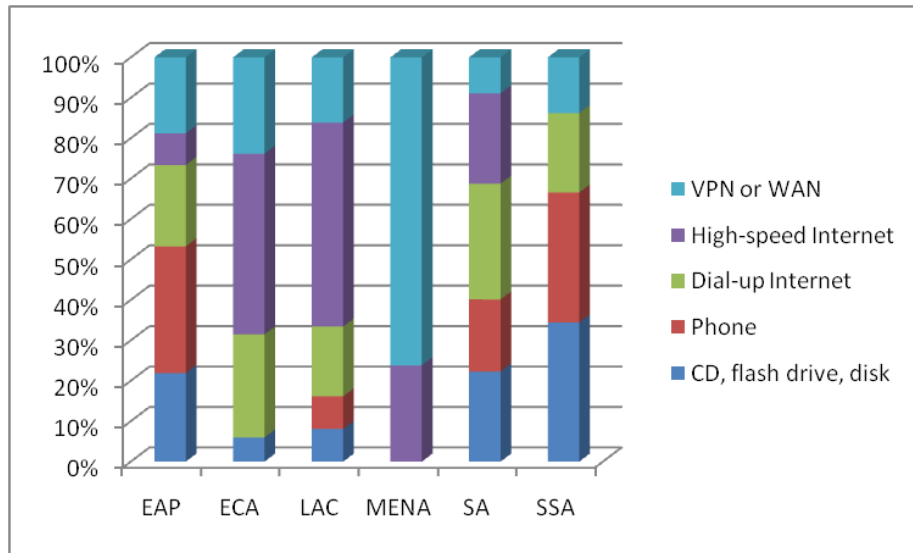
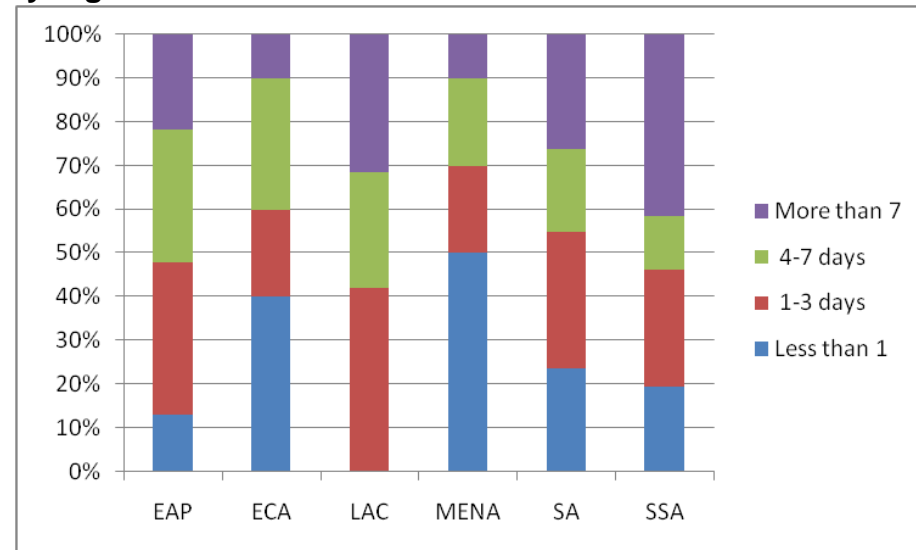


Figure 14. Number of Days to Determine Payments in Arrears, by region



# 2008 Microfinance Technology Survey

## Profile of Respondents

Figure 15. Responses by Number of Clients

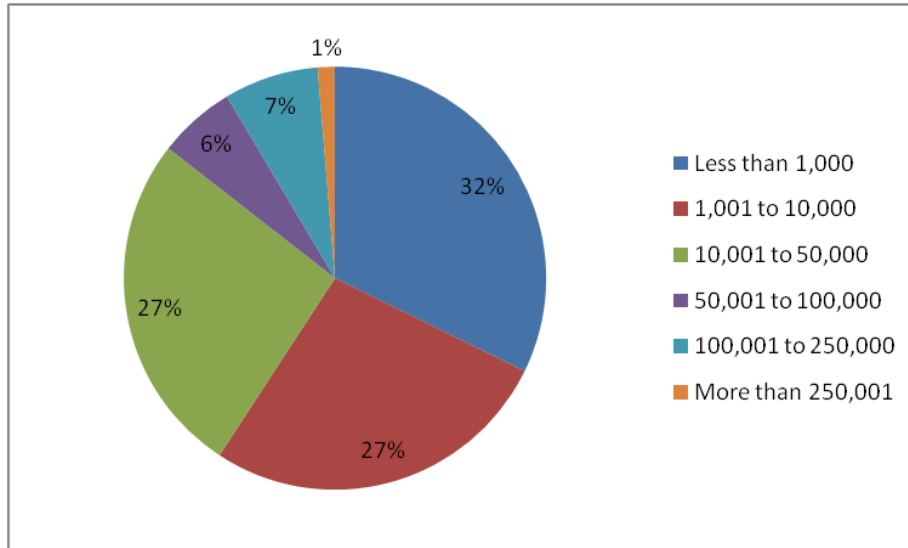
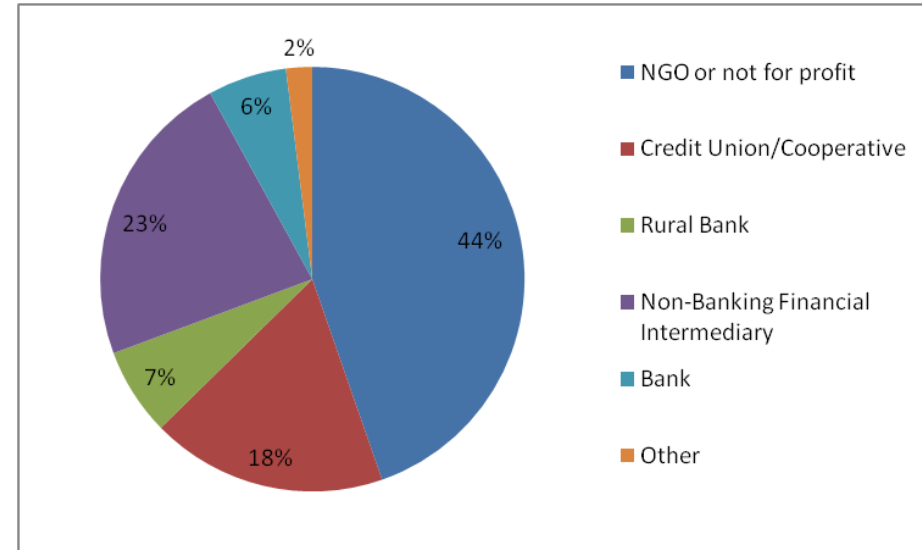


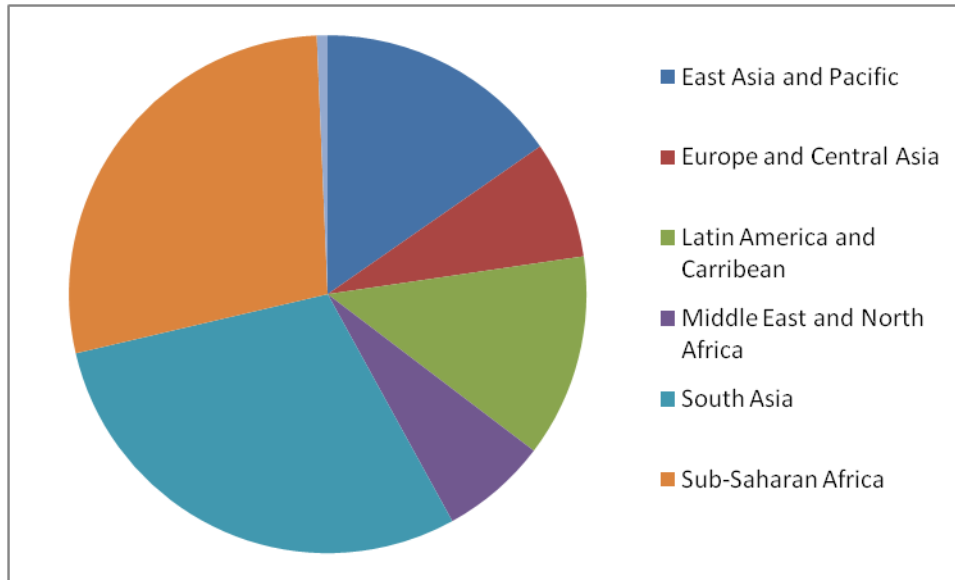
Figure 16. Responses by Type of Organization

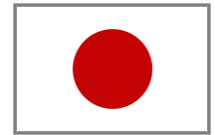


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## Profile of Respondents

Figure 17. Responses by Region





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[www.cgap.org](http://www.cgap.org)

[www.microfinancegateway.org](http://www.microfinancegateway.org)



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