Costs and Benefits of Market Research and Pilot Testing for New Product Development in Microfinance

February 2006

Cheryl Frankiewicz

MicroSave
Market-led solutions for financial services

MICROFINANCE CENTRE
for Central and Eastern Europe and the New Independent States

WWB
Women's World Banking

1. Executive Summary

Today's microfinance agenda is increasingly market driven and reflects the industry's focus on competition and dropouts as well as its realization that poor clients demand a wider, more flexible range of financial services beyond microenterprise credit. To attract and keep clients, MFIs want to introduce new products that meet these demands. One of the most pertinent questions facing many microfinance institutions today is "how?" Significant resources have been invested in the research and documentation of a market-led approach to product development, which is now widely accepted by the microfinance industry's technical service providers. This approach includes five steps, two of which—market research and pilot testing—have rarely been adopted by MFIs, despite the fact that they are the core of the client driven approach.

Why these steps are rarely adopted is a matter open for discussion, but one simple hypothesis is that institutions may not believe that the benefits of market research and pilot testing sufficiently outweigh the costs to make investing in these two additional steps worthwhile. Drawing from existing literature and the experiences of ten case study MFIs in seven countries, this document explores that hypothesis and summarizes the costs and benefits recorded by institutions that have chosen to incorporate market research and pilot testing into their new product development processes.

Case study MFIs had difficulty reporting costs, but the available data suggests that market research tends to cost between US$9,763 and $32,520 per new product developed, while pilot testing may require from US$5,757 to $40,288. The total investment amounts to between 0.1% and 3.8% of an institution's total assets. MFIs also reported significant opportunity costs, including the cost of delaying a product's introduction to the market, psychological costs and reputation risks associated with not delivering on expectations that may be raised during the market research and pilot testing process.

Without exception, the case study institutions found these costs to be worth the benefits generated by incorporating market research and pilot testing into their new product development process. These benefits included:

- Better understanding of the market, including client perceptions
- Better understanding of internal capacity
- Identification of opportunities for competitive advantage
- Identification of easier or cheaper solutions to client needs
- Fewer and less expensive mistakes
- Easier change management
- Faster, smoother and cheaper product roll-out
- Lower stress for the majority of staff
- Enhanced image, reputation, skills, confidence and staff motivation
- An institutional culture more open to learning and experimentation
- Greater progress towards fulfilment of the institutional mission

In general, case study MFIs found that market research and pilot testing resulted in the development of more viable products and a stronger, more profitable institution. Incorporating these two steps in the new product development process helped them manage risk more effectively, avoid product failure, and launch products that were more attractive to the institution and to the market.

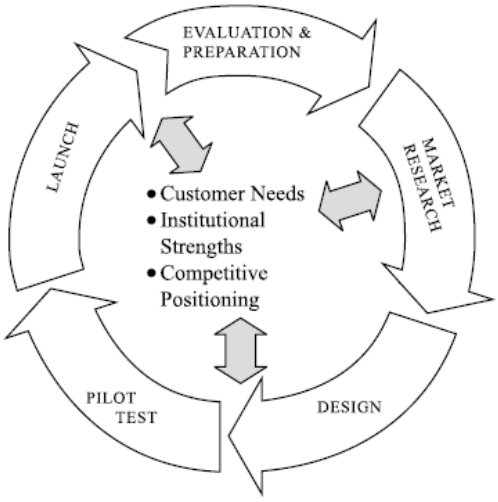
For case study MFIs, the most relevant cost/benefit questions revolved not around ***whether*** to conduct market research and pilot testing, but rather, ***to what extent*** research and testing should be undertaken. Under most scenarios, both market research and pilot testing will be of value in a new product development process, but the scale and scope of the research and testing effort can significantly affect its cost-effectiveness. Institutions cautioned that poorly structured research and testing will not yield the potential benefits no matter what the cost. Some of the lessons learned about how to minimize the costs and maximise the benefits of market research and pilot testing for new product development are summarized in Annex 3.

2. Introduction

Until only few years ago, the microfinance industry viewed its clients as a given. The general attitude among many of the experts was that 'we have the products, demand is unlimited and the clients will come.' Today, much of this has changed. The microfinance agenda is now increasingly client or market driven and reflects the industry's focus on competition and dropouts as well as its realization that poor clients demand a wider, more flexible range of financial services beyond microenterprise credit. To attract and keep clients, MFIs want to introduce new products that meet these demands.

One of the most pertinent questions facing many microfinance institutions today is "how?" Significant resources have been invested in the research and documentation of a market-led approach to product development, which is now widely agreed to consist of five major steps: 1) Evaluation and Preparation; 2) Market Research; 3) Concept/Prototype Design; 4) Pilot Testing; and 5) Product Launch and Roll Out (see Figure 1, and Annex 1 for more details).

Figure 1: Systematic Product Development Process



Source: Brand, *New Product Development for Microfinance*, 3.

Thus far, few MFIs have adopted this systematic, market-driven approach to product development. The first, third and fifth steps must inevitably be taken if a new product is to be introduced—MFIs will receive ideas for new products even without asking for them and those ideas will be evaluated as the person receiving them decides what to do with them; if it is decided that a particular idea merits development, a product will be designed and launched to the public. The second and fourth steps, however, do not have to be completed in order for a new product to be brought to the market. Indeed, MFIs rarely include market research and pilot testing (especially not of an organised nature) in their new product development process.

This begs the question, why? Do the costs of market research and pilot testing outweigh the benefits for microfinance institutions? Are there certain prerequisites or conditions that must be fulfilled in order for market research and pilot testing to be worthwhile? These questions provoked the research that resulted in this report. Drawing from existing literature and the analysis of in-depth case studies from seven countries, this document explores the costs and benefits of conducting market research and pilot testing for new product development in microfinance.[1] It begins with a brief description of the sources from which the research draws and overviews the market research and pilot testing processes that were generally followed by the MFIs participating in the study. It then explores the costs that institutions incurred as they implemented these processes, the benefits they received, and the conclusions they have drawn with respect to the value of incorporating market research and pilot testing into their new product development process.

[1] Although MFIs use market research and pilot testing for other purposes as well, the focus here is specifically new product development.

3. The Players and the Processes

This study builds on the concrete experiences of four research partners and their member MFIs: *MicroSave*, Microfinance Centre for Central and Eastern Europe and the New Independent States (MFC), Micro-Finance Consulting Group (MCG) and Women's World Banking (WWB), all of which have worked with a variety of microfinance institutions to support the development of new products and services. Each of these partners helped gather detailed case study information from the institutions listed in Table 1.

The MFIs in Table 1 represent a diversity of institutional types, market environments and product portfolios. They were selected on the basis of their willingness to share good and bad experiences with market research and pilot testing. Their in-depth case studies were analysed together with the product development experiences of numerous other MFIs which had already been documented (see Annex 2 for a list of sources referenced) in order to produce a cost benefit analysis that relies whenever possible on concrete experience, real figures and practical recommendations.

Table 1: Case Study Institutions

Research Partners	**MFI**	**Country**	**Product**
MicroSave	Equity Bank	Kenya	Jijenge (contractual savings account); SAKO Plus (loan based on savings history)
	Kenya Post Office Savings Bank (KPOSB)	Kenya	Bidii (card-based savings account)
	Tanzania Postal Bank (TPB)	Tanzania	Domicile Quick Account (card-based savings account)
	FINCA Tanzania	Tanzania	Uvibiashara (leasing); Overlapping loans within Village Banking product
	FINCA Uganda	Uganda	SEP (individual loan guaranteed by a group of entrepreneurs), Savings products
MFC	EKI	Bosnia and Herzegovina	Microloan
	MDF-Kamurj	Armenia	"Swallow Loan" (rural credit)
Micro-Finance Consulting Group	Ankuram-Sangamam-Poram (ASP)	India	Micro-insurance (life, health, asset)
	Indian Cooperative Network for Women (ICNW)	India	Delivery mechanism for making larger SME loans to mature clients
WWB	ADOPEM	Dominican Republic	Savings (passbooks, CDs, programmed)

As a baseline for interpreting this analysis, market research should be understood as the procedures and techniques involved in the research design, data collection, analysis and presentation of information used by managers to make marketing decisions.[2] The basic steps in the market research process include:

1. Defining a research objective – the purpose of the research or the questions that the research is intended to answer
2. Defining research methods – the techniques, tools and approaches that will be used to implement the research; these methods are often defined in a research plan together with the research objective
3. Reviewing secondary data – information that was previously gathered for some other purpose but is relevant to the current research question
4. Preparing for primary data collection – planning and organizing how new information will be gathered in an effort to answer the research question
5. Collecting primary data – gathering new information

[2] Wright, Market Research and Client-Responsive Product Development, 5.

6. Analyzing all data – processing the results of the research, drawing conclusions in response to the research question
7. Reporting – getting a relevant summary of the information and analysis to decision makers so that appropriate actions can be taken

Market research was conducted by all of the case study MFIs. Most research initiatives followed the general process outlined above, although some steps were given more emphasis than others, with notable weaknesses in the definition of research samples, the preparation of primary data collection, and the analysis of information gathered. Focus group discussions were the most widely used primary research technique, occasionally with the application of PRA tools. Individual interviews and questionnaires were also used, but quantitative market surveys to test demand were rare.

Pilot testing is defined as the process of measuring a product's worth on a limited scale and scope so that the results of the test guide management decision-making about a broader rollout of the product.[3] Like market research, the pilot testing process can be broken down into several steps, which complement each other in a comprehensive manner:

1. Composing the Pilot Test Team
2. Developing the Testing Protocol
3. Defining the Objectives
4. Preparing All Systems
5. Modelling the Financial Projections
6. Documenting the Product Definitions and Procedures
7. Training the Relevant Staff
8. Developing Customer Marketing Materials
9. Commencing the Product Test
10. Evaluating the Test

Pilot tests have been implemented by 7 out of 10 of the case study institutions; the others plan to launch pilots as a result of their market research efforts in the months to come. In general, institutions performed all ten steps, although systems preparation and documentation of product definitions and procedures was often weak. Interestingly, it is not these steps that MFIs found the most challenging, but rather the composition of an effective pilot test team, the appropriate definition of pilot test protocol and the modelling of financial projections.

Since this study focuses on market research and pilot testing in the context of new product development, it is important to note that these two processes are intertwined where the development of a new product is concerned. MFIs that follow a market-led process usually do not limit their market research efforts to the exploratory phase that comes before product design; they conduct additional research to obtain feedback from staff and clients at critical points in the product development process. As a result, the market research effort tends to be more extensive than it would be under most other scenarios.

4. What Does It Cost?

New product development is a costly undertaking. Practitioners and theorists agree on this point. Yet it is an investment that an increasing number of MFIs are willing to make because they believe it will generate returns for their institution that outweigh the costs. The question being posed here is whether the costs of including market research and pilot testing in the new product development process are worth the benefits generated. Answering this question requires that some kind of estimate be made about the costs involved.

4.1 Financial Costs

For market research, the costs incurred are mostly manpower costs. According to the Microenterprise Best Practices (MBP) Guide to New Product Development, the market research step of the product development process requires between 15 and 50 days of effort, but the overall process of getting a prototype ready for testing (a process through which market research can be thoroughly woven) requires

[3] McCord, Wright, Cracknell, A Toolkit For Planning, Conducting and Monitoring Pilot Tests, 1 and 7.

between 47 and 101 days of effort.[4] *MicroSave* provides similar estimates—25 to 50 days for market research and 42 to 103 days overall to prepare a product for pilot testing.[5]

As shown in Table 2, case study MFIs reported spending between US$10,000 and $63,780 on market research activities designed to produce new product prototypes for testing. This cost data is interesting for a number of reasons. First, the sums surpass most previously published estimates for the cost of market research. In general, this is because new product development research is more comprehensive and complex than the market research typically associated with product refinement or monitoring, which has received more attention within the microfinance industry to date because of the "quick wins" that can be generated through relatively inexpensive research initiatives. The new product development process benefits from market research at several different stages including the exploratory phase, testing of the product concept, and monitoring of the pilot test. Fully integrating market research throughout this process will cost more than organizing a single round of focus group discussions to rank client preferences or gauge satisfaction with an existing product.

The second interesting observation with respect to the cost data is the difficulty MFIs have collecting it. Four out of ten case study institutions were unable to provide cost estimates of any kind. Only three out of the ten were able to confidently report on their costs—one MFI used activity-based costing and two others set up systems for carefully tracking the money and time spent on market research. The cost data for these three institutions is shaded in Table 2. Three other MFIs estimated costs, which was a relatively straightforward process for non-staff expenses such as transport, communications, refreshments for respondents and facility rental, but these costs accounted for a very small percentage of the total cost. The bulk of market research expenses related to the time spent by staff and consultants on these activities and the institutional resources that they consumed (such as electricity and office space) as they carried out these activities. These costs were very difficult to estimate.

Table 2: Comparing Market Research Costs Across Case Study MFIs

	MFI 1	**MFI 2**	**MFI 3**	**MFI 4**	**MFI 5**	**MFI 6**
Total cost	$10,000	$16,269	$29,288	$32,520	$62,770	$63,780
Number of new products resulting	1	1	3	1	6	3
Cost per new product developed	$10,000	$16,269	$9,763	$32,520	$10,462	$21,290
LOE (manpower days)	n/a	160	252	n/a	1125	n/a
Internal costs as percentage of total	70%	80%	n/a	17%	n/a	n/a
Cost per research location	n/a	n/a	$976	$1806	$3923	n/a
Cost per research participant	63	102	7	200	25	n/a
Total cost as % of total assets	0.08%	0.04%	n/a	1.69%	n/a	0.28%
Activities included: Secondary data analysis	Y		Y	Y	Y	Y
Qualitative Concept test	Y	Y		Y		Y
Quantitative survey				Y	Y	
Exploratory Qualitative research	Y	Y	Y	Y	Y	Y
Monitoring during pilot		Y		Y		

Comparing the cost data reported by the six MFIs in Table 2, a third observation can be made—a wide range of total costs has been reported, even within a very small sample. The different methods used in estimating costs certainly accounts for some of the variation, but other factors have influenced the results, including the local cost of labour. Not surprisingly, the more external consultants are involved, and the larger the scope of the research initiative, the more expensive the process tends to be. If, for example, total market research costs are divided by the number of new products developed as a result of the research, the variance in cost estimates is cut by almost 60 per cent, resulting in a per-product market research cost of $9,763 to $32,520.

It is difficult, of course, to gauge the relative significance of a market research investment by looking at absolute cost figures. A small institution will find a $50,000 investment in market research to be more

[4] Brand, The MBP Guide to New Product Development, v.
[5] Wright, Market Research and Client Responsive Product Development, 16.

significant than a large institution. To control for the impact of institutional size to some extent, costs are also analysed in Table 2 as a percentage of total assets. This analysis indicates that case study institutions spent between 0.04% and 1.7% of their total assets on market research activities associated with a new product's development.

Pilot testing is generally perceived to be a much more expensive process than market research, and indeed it can be, especially if the pilot test is not properly planned or prepared for, but it does not necessarily have to be. The Virtual Conference on Pilot Testing hosted in March 2005 by *MicroSave* generated a long list of costs that are commonly associated with pilot testing (see Box 1). However, most of these costs are not unique to the pilot test; they are costs that would have to be incurred even without a pilot test if an MFI wanted to introduce a new product into the market.

In reality, only a limited number of financial costs are truly pilot testing costs: 1) the cost of meeting to agree upon a pilot test protocol; 2) more intense monitoring to track performance against protocol targets; 3) the documentation of lessons learned; and 4) evaluating the pilot and deciding whether or not to roll out the product.

Calculating the true cost of a pilot test proved even more difficult for case study MFIs than calculating market research costs because few institutions track their costs by product and hardly any cost the individual processes associated with a pilot test. *MicroSave* estimates that 40-80 days of management time will be required over the 6 to 12 months of a pilot. The MBP Guide to New Product Development estimates an overall level of effort from 75 to 135 days. Pilot tests at case study MFIs lasted between one month and 33 months, with an average duration of approximately one year, but the actual level of effort required in terms of manpower days is unknown.

Box 1: Costs Commonly Associated with Pilot Testing

- Building the product concept
- Pricing the product
- Documenting policies and procedures
- Preparing systems (especially the MIS)
- Training (staff, clients, pilot test team)
- Marketing (product launch, promotional materials, incentives)
- Feedback and follow up sessions and activities
- Product modifications
- Gathering performance data
- Analysing performance data
- Cost of monitoring and evaluation
- Loss of confidence, morale and money if the product fails
- Developing and maintaining a system to track product profitability
- Sensitization and negotiation
- Meeting regulatory requirements

Only two institutions were able to estimate the cost of their pilot test, one of which reported total costs of US$5,757 and the other $40,288. Once again, the difference in reported costs is significant. In this case, it is accounted for primarily by a higher local cost of labour and the more extensive involvement of external consultants in the pilot testing process carried out at the second institution.

4.2 Non-Financial Costs

Of course, the direct, out-of-pocket expenses for market research and pilot testing activities are not the only costs incurred during the process. There are four other types of costs that can be significant and need to be considered.

First and foremost, there is opportunity cost. By spending money and time on market research and pilot testing activities, MFIs choose not to spend those resources on something else. At MDF-Kamurj, for example, the major question was whether to focus resources on entering rural areas as a new market, or to spend those resources on further development of the urban market.

There is a second type of opportunity cost, and that is the cost incurred by delaying the introduction of a product to the market. Together, market research and pilot testing could result in a product reaching the market several months to more than a year later than it would without market research and product testing. During this time, the competition could develop and launch a similar product and "steal" the first mover advantage from the MFI doing testing. In competitive markets, in particular, MFIs worry that pilot testing will "give away" their secrets and allow competitors to avoid investing resources in concept development themselves by simply copying what others have already started to test. The opportunity

cost of being late to the market is especially high for those institutions that want to position themselves as fast-responding or innovative trend setters.

The third type of non-financial cost that is frequently mentioned is the psychological cost. As one participant in the recent Virtual Conference on Pilot Testing noted, "We never take count of it—the anxiety of making the pilot work is a big cost. There are instances of the pilot testing team taking on additional work to ensure groups properly functioned, met on time, wrote their records and often times, they had to do this early morning or evening. They did it because they believed in the idea and believed that it would work and wanted to do everything to make it work."[6] One could argue that this stress would exist at the time of roll out even if a pilot test was not done, but certainly those who participate in a pilot will experience a concentrated degree of pressure that could result in weaker performance in their other areas of responsibility if they are simply adding the pilot test to their other list of activities. They may feel like they are in the spotlight and risk burnout trying to prove that they can produce a successful product for the institution.

Fourth and finally, there is a risk that market research and pilot testing as part of a new product development process could negatively affect the image or reputation of the institution. It might raise clients' hopes that a new product will be introduced and if one does not materialize or takes a long time to appear, it may disappoint clients and discourage them from giving feedback to the institution in the future. In another scenario, clients in non-pilot test locations could find out about the product and become upset when their requests to access it are denied. Both client and staff expectations during the market research and pilot testing process must be carefully managed to minimize this cost. Towards this end, communication is critical.

5. Is It Worth It?

The experiences of case study institutions suggest that it costs between $16,000 and $73,000 or 160 to 1,125 days of manpower to incorporate market research and pilot testing into a new product development process. Is it worth it?

Case study MFIs responded to this question with an overwhelming "YES". According to FINCA Tanzania, which used market research and pilot testing to launch products as well as to decide not to launch them, the costs incurred "are minimal when you compare to end results." When Equity Bank's current CEO, James Mwangi, was still Finance Director he commented, "There's a perception that it's expensive, but when you look at the end results, the savings and the impact… you find out how cheap the research is." ASP concluded that the market research process was "extremely time consuming… but well worth it."

Why the rave reviews? Why, without exception, were the ten case study MFIs willing to state that they would incorporate market research and pilot testing into their future new product development processes despite the cost? In general, because they found that market research and pilot testing results in a more viable product and a stronger, more profitable institution. There is a perception (although only one MFI has tracked its results with sufficient detail to prove it) that the costs of market research and pilot testing are covered over time by the revenue generated by the new product and by people and systems within the institution that are capable of doing their jobs better, faster and/or cheaper as a result of the investments made during research and testing. The specific benefits mentioned most frequently by the case study MFIs are described below.

5.1 Better understanding of the market

The benefit mentioned most often by case study institutions is the enhanced understanding that market research and pilot testing generate about what clients actually want. This includes information about product feature preferences, relative priorities, (dis)satisfaction with the current product offering, and potential demand for new products. The process enables MFI staff to move beyond their assumptions about what they *think* their market needs or desires and to hear in clients' own words what is important to them and why. It also raises awareness of the environment in which clients live and work, the external factors that could influence buying decisions, and clients' ability to make effective use of an MFI's

[6] Arunachalam, MicroSave Virtual Conference on Pilot Testing Summary, 30.

product. It helps institutions better understand the nature of competition in the marketplace and, in particular, how major competitors are likely to respond to a new product.

> *"[Clients] told us they didn't mind having a charge introduced, and they gave us an acceptable range we could charge." ~ TPB*
>
> *"We were quite surprised to see which promotion method was considered most recognizable by our clients. The findings were opposite to some marketing dogmas and definitions that are common and already used as mantras in the commercial sector. However, upon our analysis we concluded that our clients are different from those served by others! … In general, they told us how they would like us to promote EKI, how they would like to be approached, what they like and what they think we should improve about our promotion strategy."* ~ EKI
>
> *"[Market research] has provided a great understanding of the unmet financial needs of mature clients, who were indeed approaching several other (informal) sources." ~ ICNW*
>
> *"Understanding the rural specifics resulted in reducing delivery risks." ~ MDF-Kamurj*

While market research was most useful in understanding client preferences and rationale, pilot testing was most useful for gauging real demand before making a final decision about a new product's viability. Clients may say they want something in a hypothetical research scenario, but will they actually buy it when given the chance? Pilot testing allowed institutions to answer this question before investing in a large scale roll out.

5.2 Identification of client perceptions

Through market research, several MFIs realized that client perceptions are not always in line with reality. If what the MFI knows to be true is not what clients perceive to be true, product performance (and thus, institutional performance) can suffer unnecessarily. For example, at Equity Building Society (now Equity Bank), market research revealed that clients perceived Equity's loans to be more expensive than competitors' products when in fact they were cheaper. The misperception was the result of the way Equity priced its products and then communicated that pricing, something which Equity was able to change and consequently reap tremendous rewards. Soon after the changes were implemented, the number of accounts opened in a day jumped from an average of 20–30 to about 200.[7]

5.3 Identification of opportunities for competitive advantage

If MFIs know what their clients want and which of those needs and desires are not being met by the competition, they can find ways to deliver value that is unique in the market. They can offer a broader array of products or design a specialized product to meet an unmet need; they can also make more strategic choices about the particular market segments that can be targeted profitably. In Bosnia and Herzegovina, EKI deliberately shifted its target market from exclusively small and medium-sized enterprises to include a poorer and more rural clientele because it believed that market segment had significant potential for growth. It developed a micro-loan product to meet the needs of this new segment which came to represent 73% of its portfolio within two years of the product being introduced. In the same time period, EKI's total number of clients increased from 8,999 to 18,815.[8]

In the process of researching the answers to one research question, clients and staff often identified ideas for future research and/or product development that constituted new opportunities for the institution. ASP, for example, realized that cash flow based financing could be critical in satisfying the needs of its clients and is now studying how BAAC in Thailand does this. MDF-Kamurj has decided to implement Business Development Services to enhance client supply chains and market access.

5.4 Better understanding of internal capacity

In addition to helping institutions understand their external environment, market research and pilot testing have been appreciated by MFIs for increasing their understanding of

> *"The instruments provided some knowledge on how to organize the work, i.e. extensive traveling during the exploratory qualitative research indicated possible challenges with logistical support."*
>
> *~ Szubert, et al (2005) writing about MDF-Kamurj*

[7] Coetze, Ksabbucho, and Mnjama, Understanding the Re-birth of Equity
[8] Szubert and Petric, Market Development through Product Refinement,

internal capacity, for example, the efficiency of procedures, the robustness of systems, and the attitudes and aptitudes of staff. This understanding was used to better plan and prepare for the introduction of a new product, to find solutions to problems that appeared when testing the product and, ultimately, to decide whether the institution was capable of supporting the product's roll out.

5.5 Identification of easier or cheaper solutions to client needs

Rather than assume that an identified need is best met by a new product idea, market research can illuminate other options for meeting the need, perhaps more affordably or more effectively, by using another product, or through modifications to an existing product. For example, Tanzania Postal Bank set out to develop a new product to meet the needs of clients in the Arusha area, yet market research showed that the needs of those clients could probably be met very well by an existing product that had not yet been introduced in that location. Pilot testing the product in the Arusha location brought to light several modifications that needed to be made, but the bank did not have to invest in the creation of an entirely new product. Secondary literature on the topic of market research contains many more examples of institutions that have been able to modify an existing product or service to meet client needs rather than embark upon an expensive new product development process to achieve the same result.[9]

5.6 Fewer and less expensive mistakes

The enhanced understanding of internal and external environments gained through market research can help institutions limit the amount of trial and error they must experience in order to produce a viable design. However, whenever an MFI introduces a new product the first implementation of the design will always be an experiment, and if there is something about the product that does not work, the cost of fixing whatever is broken will be limited by the scale of a pilot test. As Bernadette Gogadi, Acting Director of the Business Development Department at TPB stated, "If there are problems, you can contain them."

> *"You can "test" several products until you find the right one – but it will be too expensive, time-consuming and frustrating for the staff"*
> ~ Gagik Vardanyan, Executive Director, MDF-Kamurj

Pilot tests also help to contain costs by minimizing the time that it takes to identify and respond to problems. When the attention of technical staff and senior managers is focused on a limited number of locations, monitoring is more intense and reaction time can be much faster than during roll out when the same limited resources must pay attention to events across the country. Institutions that move straight to roll out often find that they must spend more of their resources fighting fires than preventing them, and are less likely to have the chance to deal with minor problems while they are still small. This can have significant cost implications given that the cost of correcting a product error at each stage of the product development process is said to be ten times more costly than the previous stage.[10]

5.7 Tool for managing change

Both market research and pilot testing can help an MFI demonstrate that a new product idea is worth investing in. First hand stories from clients who say they want the product, together with pilot test results that show it will be profitable in the MFI's "real world" environment, go a long way toward helping an institution overcome staff uncertainty and resistance to change.

It is easier for staff and clients to embrace change if they can see an example of successful implementation. At MDF-Kamurj, for example, "Market research also built staff self-confidence by showing to staff that the rural loans are doable."[11] This demonstration effect can make change easier to accept, and also make implementing the changes associated with the new product easier because a successful example exists from which to learn. This is particularly true if the results of the pilot are clearly documented and used in staff and client training. Experienced staff will have developed skills and can coach their colleagues on how to effectively apply new systems and procedures, and how to troubleshoot likely problems to achieve successful results.

---

[9] See, for example, Brand, MBP Guide to Product Development: Synthesis Report on Field Tests or Natilson, Case Study on Product Develpoment: Pro Mujer Nicaragua and Pro Mujer Peru.

[10] This statistic was in Annex 2 of the TOR for this assignment; does anyone have a citation?

[11] Szubert, Vardanyan, and Lalayan, Entering New Markets with New Products: Costs and Benefits of Following New Product Development Process, 16.

As a result of these factors, MFIs should be able to spend fewer resources (either time, money or both) allaying staff fears or convincing them of the desirability and potential for results. Funds for expansion may also be easier to raise once the product's success has been demonstrated.

5.8 Buy-in

> *"A pilot test will automatically supply the organisation with a number of ambassadors who will be in a first-class position to promote the idea of the new process/system to their peers, based on their own (positive) experiences."*
> ~ Arunachalam (2005), 41

In addition to demonstrating the real potential of a new product idea, the market research and pilot testing process can help an MFI generate internal support for the new product by involving a broader group of actors in its development. Instead of being perceived as one person's "baby" or the "pet project" of a particular product champion, a properly executed market research and pilot testing process will involve staff from a variety of departments, as well as field staff. As MDF-Kamurj reported, "Thanks to market research, staff had a better attitude towards the rural product as it is the result of their work (they perceive the product as *their child* and are more eager to work on its launch and further refinement)." MFC consultants confirmed, "The internal participatory process resulted in significant ownership of the process among staff. This significantly lowered the costs (as staff was more efficient in their work) and increased the quality of work (as they were motivated)."[12]

5.9 Product roll out is faster, smoother and cheaper

Although the market research and pilot testing process costs MFIs money, it saves them money when it comes to product roll out. It does this in three ways. First, it helps MFIs more accurately predict and plan for the resources that will be needed for wider implementation. If everything is in place and ready to go when it is needed, implementation can move more quickly and more smoothly. Second, it provides MFIs with tools for managing the organizational changes that are required when a new product is introduced. As discussed above, the demonstration effect, the availability of experienced staff, and greater buy-in from staff in key departments will make it easier to accept and implement something new. Third, MFIs can introduce their product into a new location with systems, procedures and policies that have already been tested and had major problems already resolved. They can launch their product with promotion materials and marketing strategies that have already proven successful. For all of these reasons, the roll out of the product should be much smoother than the pilot.

This was the experience of Tanzania Postal Bank, which faced a number of challenges during the piloting of its DQA product, but then found the roll out of that product nationwide to be relatively straightforward. "The branches where TPB has rolled out after Arusha had the benefits of the lessons learnt from Arusha and their roll out has been very smooth. Whereas the pilot was quite bumpy."[13] Without the pilot, the roll out itself would have had to be bumpy, meaning that all staff and clients would be exposed to that rough ride, rather than just a few. Equity Bank used its pilot test to compare the performance of branches that marketed the product through different mechanisms and then rolled out the product using the delivery system that proved most effective.

5.10 Lower stress for the majority of staff

MFIs noted that market research and pilot testing for new product development is not simple or easy, especially the first time around. The psychological costs mentioned in section four can be significant due to the stress experienced by those who want (or do not want) the pilot to succeed, and because many things about the way business operates may have to change in order for the product to succeed. As several case study institutions experienced, the introduction of products that make use of new technology are particularly stressful for staff because they must struggle to become comfortable with the new technology while fearing that the technology may take over their jobs. This stress is unavoidable, but market research and pilot testing can moderate it by limiting the number of people involved in the initial introduction of the product and by demonstrating positive outcomes. For example, at Equity Bank,

[12] Matul, Szubert, Vardanyan, Lalayan and Tomilova, Entering New Markets: How Market Research Can Inform Product Development, 13.
[13] Interview with Madhurantika Moulick, former *MicroSave* Young Executive.

employees in non-pilot branches were able to see how the growth in demand generated by new and improved products kept all staff busy serving a larger number of clients and, thus, the introduction of new technology and improved efficiency did not result in lay-offs.

5.11 Enhanced image or reputation

> *"TPB has put itself in our position, so I am not surprised that they introduced DQA to ease our burdens"*
>
> ~ TPB client

This benefit was mentioned by nearly all the case study institutions. They report that both market research and pilot testing can contribute to an improved reputation although they do so in different ways. An MFI that conducts market research and then develops a new product in response to the feedback collected during that research (especially when it effectively communicates to the market that this is what it has done) is more likely to be perceived by clients as an institution that listens, values their opinions, and wants to develop products that are in their best interests. Clients perceive institutions more positively when they believe their opinions are being listened to and want to associate themselves with those that offer products better tailored to their needs.

A case in point is that of TPB which, according to research conducted by Leonard Mutesasira, has transformed its image in several regions of Tanzania as a result of its introduction of the DQA product. "TPB is perceived to be faster and more responsive to clients needs than it used to be a couple of years ago. The majority of clients attribute these improvements to the introduction of the DQA, which demonstrated that the bank is keen to provide faster service to its clients."[14] Equity Bank cultivated a loyal customer base that stuck with it through numerous growing pains because customers believed that the institution was doing its best, had their best interests in mind, and was truly a "listening, caring financial partner." Both EKI and MDF-Kamurj report that clients have begun to perceive them as market-oriented, which provides them with a solid foundation for market expansion. Both EKI and FINCA Tanzania noted that inviting client opinion helped reduce client drop out.

> *"Since clients noticed that MDF-Kamurj implements changes based on feedback they provided, the institution has been perceived to be client-led and trustworthy."*
>
> *"Staff are viewed very positively by clients as they see ICNW as having done research to give them (clients) new products tailored to their needs."*

The contribution that pilot testing makes to an MFI's image and reputation is of a different nature. Pilot tests help ensure that an institution takes a product to the market that is attractive to clients, that it gets it delivered right the first time around, and that when clients return the next time to purchase the same product, they get a product that is equally or more attractive. One of the greatest risks of not pilot testing is taking a product to the market that is not attractive—something that is priced too high or does not meet its promises because the internal processes do not work effectively or efficiently enough to, for example, process the loan in 24 hours or less. FINCA Uganda credits the market research and pilot testing process with enabling it to save its reputation by not rolling out a product that would not have been successful.

5.12 Internal skills and confidence built

> *"I've added some skills and now I can communicate with customers…. These are skills you can use across the institution." ~ TPB*
>
> *"Staff are now better prepared to identify market opportunities and innovate future products." ~ MDF-Kamurj*
>
> *"Staff are also very confident when talking to insurance companies who have visited the organization/field as their knowledge of risks and life cycle events is quite in depth." ~ ASP*
>
> *"The market research provided staff with knowledge and skills how to establish contact and maintain it." ~ EKI*

[14] Mutesasira, Evaluating the Impact of DQA on the Image of TPB, 3.

> *"We shall never forget the product development process; it is an experience that will always be in our minds. It is the beginning of where we are now both as an institution and individuals." ~ Equity Bank*

As the selection of quotations above suggests, the building of skills and confidence is another benefit frequently mentioned by MFIs. Naturally, skills in market research and pilot testing were strengthened, including the ability to set research objectives, design discussion guides, facilitate groups, analyze data, and plan, operate and monitor pilot tests. Several MFIs noted that they now have the ability to obtain quality feedback from the field on a regular basis. At ASP, each field worker is expected to use at least one market research tool with two to three client groups every month.

In addition to these skills, however, institutions have built other capacity. Some of the areas mentioned by MFIs include marketing (learning how to become more customer-centered), product documentation, customer service and communications, risk assessment, and the ability to develop and modify financial projections. As MFIs improved their knowledge of the external environment and client characteristics, they improved the quality of the training they offer new field officers in loan analysis and approval. At ICNW, software developed to analyse PRA results has been incorporated into the institution's MIS and promises to be a very useful tool for ongoing analysis of field level data that can be used for much more than new product development.

5.13 Increased staff motivation and satisfaction

Increased skills and confidence contribute to staff motivation and satisfaction, as recognized by ASP, "Local staff are quite motivated and should stay with the organization and use their skills to help the institution become more market led. They feel a sense of self-worth that the organization has invested in building their capacities." MDF-Kamurj concurs, "It contributed to increasing staff satisfaction from working in rural areas. It has become easier because the market needs, preferences, behaviours are better known. Staff also feels that the institution they represent is positively perceived by clients."[15] ICNW noted that staff-client relationships are quite good and, hence, "staff morale is also high".[16]

> *"The team was also happy because they met the needs of the customers" ~ KPOSB*
>
> *"Pilot testing requires and encourages teamwork, cooperation and participation from various actors in the organization." ~ FINCA*

Having objectives and meeting them (which is inherent in both the market research and pilot testing processes) also helps to create a sense of accomplishment, and therefore satisfaction among staff. Summarizing the experiences of three case study institutions, Dorota Szubert wrote, "Staff, being aware that their efforts contributed to success, feel prouder working for the institution. Moreover, they observed personal benefits that may be drawn from the process. Better understanding of clients' needs fosters daily work."[17] At FINCA Tanzania, improved product performance enabled staff to increase their income through commissions, which contributed to both staff motivation and satisfaction.

5.14 An institutional culture more open to learning and experimentation

By incorporating market research and pilot testing into their product development processes, MFIs believe they have positively influenced their institutional cultures in two important ways. First, they have become more client-focused. At EKI, "The staff was more eager to listen to clients and share this knowledge across the institution knowing that it may be used by the management." Sixty-eight per cent of MDF-Kamurj staff identified "being more responsive to clients' needs" as a main institutional objective at the end of the process versus 42% at the beginning.[18] At KPOSB and Equity Bank, two of the largest MFIs studied, the product champions who led the first market-led new product development

[15] Szubert, Vardanyan, and Lalayan, Entering New Markets with New Products: Costs and Benefits of Following New Product Development Process, 24.
[16] Mishra, Narayanan, Samy, Pandyan and Arunachalam, Market Research for Microfinance—Use, Costs and Benefits at WWF and Indian Cooperative Network for Women, 17.
[17] Szubert, Costs and Benefits of Implemented Market-Led Solutions, 23.
[18] MDF-Kamurj Survey about Attitudes, Satisfaction and Loyalty of Employees

effort (i.e., the one that first incorporated both market research and pilot testing into the process) are now the CEOs of their respective organisations.

In all cases, qualitative exploratory research was a powerful tool as it not only provided plenty of information, but also influenced the building of an institutional culture.~ MFC

"[Market research] encourages organizational changes, with a reorientation of professionals towards a culture of open learning, moving away from top-down standardized research" ~ ICNW

The culture of Equity was closed up then; this was the beginning of the 'open door policy- for both customers and among staff. [19]

"'It was a great opportunity----for the first time, all departments were in the field…listening to customers'. This was important because most of the other departments (other than operations) never had any previous interface with customers." ~ KPOSB [20]

The second major impact has been the encouragement of a culture that is more willing to try new things and to learn. By lowering the risk and limiting the cost of mistakes, market research and pilot testing make experiments more palatable. MDF-Kamurj credits the process with creating a learning culture that now facilitates mentoring within the institution, "Mentoring meant conveying knowledge by more experienced employees across the institution. It was possible due to learning atmosphere that was enhanced during exploratory market research."[21]

5.15 Mission fulfillment

As a result of market research and pilot testing, case study institutions found ways to adjust product features or processes to either meet clients' needs better or generate more profit for the institution. Some, such as MDF-Kamurj and TPB, did both simultaneously. MDF-Kamurj introduced incentives for repeat borrowers and shortened the waiting period for a follow up loan while TPB improved the speed with which customer transactions were processed, and both institutions were able to introduce fees during their pilot test that were viewed as acceptable by clients.

Some MFIs emphasized the contribution that market research and pilot testing made to the achievement of their social objectives. At ASP, that contribution has been the empowerment of clients who appreciated having a financial institution seek out their opinions and respond to their feedback. At MDF-Kamurj, the contribution was deeper outreach. This was another benefit that resonated strongly in the secondary literature as well. At Pro Mujer Puno in Peru and BURO, Tangail in Bangladesh, for example, market research and pilot testing helped MFIs to identify elements of a new product design that would not necessarily have threatened product viability, but could have taken the institution off track in terms of meeting its larger objectives.[22]

6. The Cost of Failure

By making products and institutions more viable, market research and pilot testing provide MFIs with one additional and major benefit—a lower risk of failure. Microfinance products can fail, and when they do, the cost of failure is much higher than the cost of rolling out a mediocre product or even not rolling out a product at all. The cost of failure may include:

- ➔ the damage done by the unsuccessful product (e.g., expenses incurred in an attempt to recover bad loans, fraudulent claims or loans that must be written off, disbursement delays, damaged

[19] Kariuki, Cost/Benefit Analysis of MicroSave's Market Research for Microfinance and Pilot Testing Toolkits at Equity Bank, 10.

[20] Kariuki, Cost/Benefit Analysis of MicroSave's Market Research for Microfinance and Pilot Testing Toolkits at Kenya Post Office Savings Bank, 4.

[21] Szubert, Vardanyan, and Lalayan, Entering New Markets with New Products: Costs and Benefits of Following New Product Development Process, 8.

[22] See Brand, The MBP Guide to Product Development: Synthesis on Field Tests, 14; Wright, BURO, Tangail's Approach to Product Development: A Case Study, 9.

reputation in the marketplace, loss of morale amongst staff, loss of loyalty or trust among clients);

- ➔ the expense of fixing the broken product (e.g., systems adjustments, retraining of staff); and
- ➔ the cost of repairing the institution's reputation or its relationship with clients.

Avoiding product failure may be the most significant benefit of market research and pilot testing, given that the cost of failure can be so high and the chances of a new product failing are so great—for conventional financial products and services, the new product failure rate has been estimated at more than 75 percent.[23] Why do so many new products fail? According to a 2003 study, new products typically fail for one of four reasons:

1. they target an unprofitable market segment;
2. they misunderstand or ignore customer needs;
3. they do not focus sufficiently on making sure that they are offering something that customers will value given all their other options in the market; or
4. they underestimate the total cost of delivering that product.[24]

Market research and pilot testing lowers the risk of product failure by reducing the likelihood that these four things will happen. As explained in the previous section, they do this in part by helping MFIs better understand who their market is, what it values and what the competition is already offering. They test MFI assumptions, not only about client needs and competitors' responses, but also the assumptions underlying its financial projections, such as expected demand, repayment rates, and efficiency. They give the institution a chance to check whether all costs have been identified and whether the revenue generated will be sufficient to cover those costs. They test the MFI's systems, especially its information systems (be they computerized or not), but also internal control, marketing, training, documentation and incentive systems. They allow the institution to verify that it has the capacity to deliver the product, and to build capacity if it does not. Pilot testing helps MFIs lower the risk of product failure in one other way, and that is by requiring that the product demonstrate a certain level of performance at a small scale before being allowed to roll out. This quality control on new products has helped several MFIs avoid large-scale losses.

The value of incorporating market research and pilot testing into the product development process is demonstrated, at least to some degree, by the fact that none of the new products launched by case study MFIs through market research and pilot testing failed, while at least three of the ten institutions have either recently had a product fail or have had to invest significant resources to keep a product from failing that was developed without market research and/or pilot testing (see Box 2 for an example). One MFI has already written off more than US$1 million in bad and doubtful debts and continues to struggle with its weak product.

[23] Clancy and Shulman, The Marketing Revolution: A Radical Manifesto for Dominating the Marketplace, 6.
[24] Jones and Ammon, Introducing New Products: An Approach to Beating the Odds, 1.

Box 2: Testing the Value of Pilot Testing: Introducing the Equiloan at Equity Bank

Although Equity Bank was a proponent of market research and pilot testing and had used a market-led approach to successfully develop other products, its exponential growth in 2003 and 2004 (more than 100,000 customers per year) and its transformation from a Building Society into a Bank challenged management to find ways of giving adequate attention to all the changes taking place. During this period, it decided to roll out one apparently straight-forward salary-based loan product (Equiloan) without a pilot test.

In the words of CEO James Mwangi, "We thought it would be a quick win." Equity Bank had a great deal of liquidity thanks to its successful savings mobilization and was looking for a way to use those funds profitably. Other banks already offered a salary-based loan product and Equity was under pressure to do the same. It already offered a Salary Advance product, so it thought it understood the salaried market fairly well.

From the outset, there was enormous demand for Equiloan. The product was easy to administer at low volume, so the bank scaled up quickly, reaching a portfolio of US$3.75 million within 9 months. Although Equity Bank expected the strong response, it was not fully ready for it. It underestimated the amount of staff time that would be required to complete employer assessments and to manage the employer relationships on a daily basis. Soon, one Equity employee was managing a portfolio of 5,000 clients.

It took more than three months for Equity to get into the central payment system and it had not built a grace period into the product's design, so several months of arrears quickly piled up as customers' loan payments came due and their salaries had not yet been credited to the bank. Once an employer's salary payments had been processed, there was no easy way for Equity's MIS to identify clients associated with that employer.

The delays in getting salaries credited, together with instances of internal and external fraud involving fake and fraudulent pay slips masked other product weaknesses which contributed to rising PAR levels. By July 2004, six months after Equiloan had been introduced, the portfolio-at-risk greater than thirty days was 7 per cent, a level Equity deemed dangerous for a new product. Three months later, it had risen to 18 per cent.

Equity Bank had a major challenge on its hands. As Mwangi noted, "Tackling the problem when it is small is one thing; solving it when you already have a portfolio of 60,000 clients is another." Equity re-mapped all of the product's processes and completely reengineered how the product is delivered, paying careful attention to the risks that had been identified. It purchased and installed a new MIS and launched a major collections effort. By November 2005, it could report that 90 per cent of the delinquent portfolio was performing, although provisioning and monitoring costs associated with the product continue to be significant.

If Equity could do things over again, would it pilot test? "Absolutely," says Mwangi. Equity shared its story with a gathering of MFI CEOs in November 2005, offering the bank's experience as an example of how even an apparently straight-forward new product can backfire and how a pilot test could not only have limited the damage, but also made it easier and less costly to resolve once it had occurred. In parting, Mwangi counseled, "If you want to manage the risk of new product development effectively, pilot test!"

MFIs that incorporated market research and pilot testing into their new product development processes had an easier time avoiding product failure. For example:

- FINCA Tanzania began pilot testing a new leasing product in November 2003. The product was well-received in the market, but within six months of the start of the test, arrears had risen high enough that the institution froze new leases until the cause of the repayment problems could be identified and fixed. Several improvements were made, notably in the loan appraisal and disbursement procedures, and the product was rolled out in July 2004. The results have been tangible. As of November 2005, the product had a portfolio-at-risk greater than thirty days of five

per cent, yet none of those arrears were associated with loans disbursed after the pilot test improvements had been made. All of the arrears were associated with the "problem" portfolio left over from the pilot test period. Clearly, FINCA Tanzania succeeded in solving problems during the pilot test that would have cost it much more dearly had roll out been pursued without a pilot test.

- ASP initially thought it would provide one insurance product with a combination of product features, but market research made it realize that clients preferred individual insurance products with different types of risk covers, premiums, payouts and conditions. As the research report stated, "Having a single combination product would have been a recipe for disaster as the clients would have rejected it outright."[25]
- During the initial pilot test of FINCA Uganda's Self Employed Partnership (SEP) loan product progress was rapid. However, it was decided to extend the pilot test to a greater number of clients before considering whether to rollout the product to all branches. During the second phase testing, FINCA Uganda started to experience repayment difficulties which led to a strengthening of appraisal processes, operational procedures and monitoring. Ultimately, it chose not to roll out the product, as it realized SEP was not meeting the needs of the market segment for which it was designed. The product offered larger loan sizes through smaller groups and was meant to be attractive to successful Village Bank clients, but the credit assessment process failed to give clients the faster service and individual treatment that they wanted and often needed given the nature of their businesses. Thus, SEP was phased out and well-performing clients were transferred to FINCA Uganda's individual loan product instead.

7. Is It ALWAYS Worth the Cost?

The experiences of case study institutions, as well as others that have already been documented in the existing literature on this topic clearly indicate that MFIs aiming to be client-focused find market research to be an indispensable part of their new product development process. They recognize that understanding the ever-changing needs, wants and preferences of clients is at the heart of a market-led approach.

Pilot testing, on the other hand, is not embraced as wholeheartedly. Even among case study institutions, MFIs that committed themselves to include pilot testing as part of their new product development process have not always followed through on that commitment. The "non-financial" costs associated with pilot tests—in particular the opportunity costs associated with exposing a new product idea to the competition for an extended period of time before its official launch—are perceived to be significant. The need to act quickly is often cited as the principal reason for which MFIs choose not to include pilot testing in their product development process.

Certainly there are examples of MFIs that have successfully developed products without pilot testing. But as the previous section illustrated, there have also been cases of product failure that could have been mitigated if pilot testing had been done. So, how can an MFI judge whether the costs associated with pilot testing are worth the investment? The summary report from *MicroSave*'s Virtual Conference on Pilot Testing suggests the following:

> For introducing new products, servicing new segments and in large organisations, pilots would be very useful and necessary. They may however not be required in large measure when organisational beliefs do not foresee natural organic growth in the sector and/or for small organisations. Sometimes, MFIs have to respond to client needs in a hurry – e.g., post disaster situations such as the Tsunami. In such situations, there may be no time for designing/piloting because of rapidly changing market conditions.[26]

According to the conference report, MFIs that have struggled with the trade off between speed and risk observed that pilot testing may not be cost effective in several other situations as well:[27]

---

[25] Mishra, Narayanan, Samy, Pandyan and Arunachalam, Market Research for Microfinance—Use, Costs and Benefits at Ankurm, Sangam and Porum (ASP), India, 14.
[26] Arunachalam, MicroSave Virtual Conference on Pilot Testing Summary, 1.
[27] Ibid, 30.

1. In dynamic, fast changing and/or conflict contexts where the pilot could offer very few lessons for the future – i.e., when the world of tomorrow is likely to be very different from the world of today
2. In unsaturated markets where demand for financial services far exceeds the supply
3. Where the product is a refinement of existing products—as long as the modification has been properly researched and does not require major systems modifications
4. Where specific technical expertise is purchased, such as when an MFI did brings in a team of professionals that already has experience delivering a particular product in the MFI's market
5. Where the product itself is low risk or has become a "hygiene factor"—something that all institutions are expected to have with terms and conditions that are broadly similar to those of competitors already offering the product

As a general rule of thumb, one participant in the conference suggested, **"**A pilot test should be done only if the outcome of the test is going to decide or will at least substantially influence what we are going to do after the test." [28]

Market research and pilot testing can make important contributions to the new product development process, as summarized in Table 3. The cost effectiveness of these contributions will be influenced, however, by a complex set of factors including those mentioned above, the quality of planning and implementation, and the scope of testing. Poorly structured research and testing will not yield the potential benefits no matter what the cost. Thus, perhaps more important than understanding the actual costs and benefits experienced by case study MFIs is understanding the lessons they learned about how to minimize costs and maximise benefits so as to get the most out of their investments. Some of the major lessons learned are summarized in Annex 3.

The issue of scope was raised by all of the case study MFIs and is an appropriate note on which to end. For these institutions, the most relevant cost/benefit questions revolved not around ***whether*** to conduct market research or pilot testing, but rather, ***to what extent*** research and testing should be undertaken. The most frequently mentioned suggestions for lowering the cost of a systematic, market-led approach to new product development focused on two strategies: 1) reducing the scale of the research or testing, for example, by reducing the sample size, the number of locations, the length of the discussion, the number of tools applied, or the duration of the test; and 2) narrowing the focus of the research or testing through clearly defined research objectives and pilot test targets. A brief discussion of these suggestions can also be found in Annex 3.

[28] Arunachalam, MicroSave Virtual Conference on Pilot Testing Summary, 2.

Table 3: Summary of the Costs and Benefits of Market Research and Pilot Testing for New Product Development in Microfinance

	Possible Costs	Possible Benefits
If market research and pilot testing ARE conducted	• Between US$16,000 and $73,000 for comprehensive market research and pilot testing activities • Opportunity cost of not being able to spend the above resources on something else • Delays in moving a new product idea into the market • Product may become visible to the competition before it becomes visible to the market overall • Burnout amongst staff involved in the pilot testing team • Loss of trust from clients and staff if expectations are not managed or met	• Better understanding of clients • Better understanding of the internal or external environment • Identification of opportunities for competitive advantage • Identification of easier or cheaper solutions to client needs • More viable products • Lower risk of product failure • Less expensive mistakes • Tool for managing change • Buy-in • Lower stress for the majority of staff • Enhanced image or reputation • Internal skills and confidence built • Increased staff motivation and satisfaction • Stronger institution • Institutional culture more open to learning and experimentation • Generation of new ideas and opportunities • Mission fulfilment
If market research and pilot testing are NOT conducted	• Damage done by the unsuccessful product (e.g., fraud, write-offs, disbursement delays, damaged reputation, loss of morale amongst staff, loss of trust among clients) • Cost of fixing the broken product (e.g., system adjustments, retraining staff) • Cost of repairing the institutions reputation and its relationship with clients	• Can introduce new product ideas to the market more quickly • Can spend money on other needs instead of market research or pilot testing • Can build a reputation in the market as a rapid responding trend-setter

9. Annexes

Annex 1: The Market research and pilot testing Process

The product development process is a systematic step-by-step approach to developing new or refining existing products:

I. ***Evaluation and Preparation***

Analyse the institutional capacity and "readiness" to undertake product development
Assemble the multi-disciplinary product development team, including "product champion"

II. ***Market Research***

2.1 Define the research objective or issue
2.2 Extract and analyse secondary market data
2.3 Analyse institution-based information, financial information/client results from consultative groups, feed back from frontline staff, competition analysis etc.
2.4 Plan and undertake primary market research

III. ***Concept/Prototype Design***

3.1 Define initial product concept
3.2 Map out operational logistics and processes (including MIS and personnel functions)
3.3 Undertake cost analysis and revenue projections to complete initial financial analysis of product
3.4 Verify legal and regulatory compliance
3.5 On the basis of the above plus client feedback sessions refine the product concept into a product prototype in clear, concise, client language.
3.6 Finalize prototype for final quantitative prototype testing or pilot testing, according to the risk/cost nature of the product

IV. ***Pilot Testing***

4.1 Define objectives to be measured and monitored during pilot test, primarily based on financial projections
4.2 Establish parameters of pilot test through the pilot test protocol, including sample size, location, duration, periodic evaluation dates etc.
4.3 Prepare for pilot test, install and test systems, draft procedures manuals, develop marketing materials, train staff etc.
4.4 Monitor and evaluate pilot test results
4.5 Complete recommendation letter documenting the results of the pilot test, comparison with projections, lessons learned, finalised systems/procedures manual etc. and the initial plans for the roll out

V. ***Product Launch and Roll out***

5.1 Manage transfer of product prototype into mainstream operations
5.2 Define objectives to be measured and monitored during roll out based on financial projections
5.3 Establish parameters of roll out through the roll out protocol including schedule, location, tracking, budget, process
5.4 Prepare for roll out, install and test systems, finalise procedures manuals, develop marketing materials, train staff etc.
5.5 Monitor and evaluate roll out process and results

Annex 2: Reference Sources

Anyango, Ezra, Jennefer Sebstad and Monique Cohen, "Assessment of the Use and Impact of *MicroSave's* Market Research for Microfinance Toolkit", *MicroSave*/AFCAP (2002)

Arunachalam, Ramesh S., ed., "*MicroSave* Virtual Conference on Pilot Testing Conference Summary", *MicroSave*, Nairobi (2005)

Brand, Monica, "The MBP Guide to Product Development", Microenterprise Best Practices Project ACCION International, USA (2001)

Brand, Monica, "The MBP Guide to Product Development: Synthesis Report on Field Tests", Microenterprise Best Practices Project ACCION International/DAI, USA (2001)

Brand, Monica, "New Product Development for Microfinance: Evaluation and Preparation", Microenterprise Best Practices Project, Technical Note No.1, ACCION International/DAI, USA (1998)

Brand, Monica, "New Product Development for Microfinance: Design, Testing, and Launch", Microenterprise Best Practices Project, Technical Note No.2, ACCION International/DAI, USA (1998)

Brand, Monica, "Market Intelligence: Making Market Research Work for Microfinance", *ACCION Insight No. 7*, ACCION International, USA (October 2003)

Clancy, Kevin J. and Robert S. Shulman. *The Marketing Revolution: A Radical Manifesto for Dominating the Marketplace*. New York: Harper Business (1991)

Coetzee, Gerhard, Kamau Kabbucho and Andrew Mnjama, "Understanding the Re-birth of Equity Building Society in Kenya" *MicroSave*, Nairobi (2002)

Cracknell, David, Henry Sempangi and Graham A.N. Wright "Costing and Pricing of Financial Services", *MicroSave*, Nairobi (2004)

Cracknell, David, Henry Sempangi, Graham A.N. Wright, Leonard Mutesasira, Peter Mukwana and Michael J. McCord, "A Brief Review of *MicroSave's* Action Research Programme (2001)", *MicroSave*, Nairobi (2002)

Cracknell, David, Henry Sempangi, Graham A.N. Wright, Leonard Mutesasira, Peter Mukwana and Michael J. McCord, "Lessons from *MicroSave's* Action Research Programme (2002)", *MicroSave*, Nairobi (2003)

Cracknell, David, Henry Sempangi, Graham A.N. Wright, Peter Mukwana and Michael J. McCord, "Lessons from Pilot Testing Financial Services– The Experience of *MicroSave*", *MicroSave*, Nairobi (2003)

Cracknell, David, Henry Sempangi, Peter Mukwana, Trevor Mugwanga, Lisa Parrot and Graham A.N. Wright, "Lessons from *MicroSave's* Action Research Programme (2004)" *MicroSave*, Briefing Note # 40, *MicroSave*, Nairobi (2005)

Crnkic, Kenan, "Effective Ways to Promote MFIs: An Overview of Research Conducted in MKO EKI BiH", *Microfinance in CEE and the NIS, Issue No.1* (2004)

Jones, Larry and Francesca Ammon, *Introducing New Products: An Approach to Beating the Odds*, New York: Marakon Associates (2003)

Kariuki, Cecilia, "Costs/Benefit Analysis Of *Microsave*'s Market Research for Microfinance and Pilot Testing Toolkits At Equity Bank", unpublished study, *MicroSave*, Nairobi (2005)

Kariuki, Cecilia, "Costs/Benefit Analysis Of *Microsave*'s Market Research for Microfinance and Pilot Testing Toolkits At Kenya Post Office Savings Bank", unpublished study, *MicroSave*, Nairobi (2005)

Leftley, Richard, "An Overview of Product Development within the Opportunity International Network", Opportunity International (2002)

Matul M., Dorota Szubert, Gagik Vardanyan, Margarita Lalayan, Katarzyna Pawlak, "Institutionalizing Market Intelligence: An Important Step to Become Client-Focused MFI", MFC Spotlight Note 14 (2005)

Matul M., Dorota Szubert, Gagik Vardanyan, Margarita Lalayan, Olga Tomilova, "Entering New Markets: How Market Research Can Inform Product Development", MFC Spotlight Note 13 (2005)

Matul M., Vejzovic S. (2004) Beyond Numbers: Prizma's Exit Monitoring System, MFC Spotlight Note 10

McCarter, Elissa, "Adapting Market Research Tools to Diverse Environments - Lessons from Europe", Briefing Note #26, *MicroSave*, Nairobi (2003)

McCord, Michael J, David Cracknell, Graham A.N. Wright and Henry Sempangi, "A Toolkit for Planning, Implementing and Monitoring Pilot Tests", *MicroSave,* Nairobi (2003)

McCord, Michael J., "Product Roll-out: A Tool Kit For MFIs Expanding A Tested Product Throughout Its Market", *MicroSave,* Memphis (2002)

McCord, Michael J., "Strengthening the Feedback Loop from Market Research/Impact Assessment into MFIs' Systems and Products", *MicroSave*, Nairobi (2002)

Mishra, Sonal, S Narayanan, K Samy, Pandyan and Ramesh S Arunachalam, "Market Research for Microfinance – Use, Costs and Benefits at Ankuram, Sangam and Porum (ASP), India", unpublished study, *MicroSave*, Nairobi (2005)

Mishra, Sonal, S Narayanan, K Samy, Pandyan and Ramesh S Arunachalam, "Market Research for Microfinance – Use, Costs and Benefits at WWF and Indian Cooperative Network for Women", unpublished study, *MicroSave*, Nairobi (2005)

Moulick, Madhurantika and Michael Onesimo, "Use of Market Research Toolkit at FINCA Tanzania", unpublished study, *MicroSave*, Nairobi (2005)

Mutesasira, Leonard, "Evaluating the Impact of DQA on the Image of TPB", *MicroSave*, Kampala (2002) – unpublished

Natilson, Nancy, "Case Study on Product Development: Pro Mujer Nicaragua and Pro Mujer Peru", Microenterprise Best Practices Project, DAI, Washington (2001)

Nelson, Candace (ed.), "Learning from Clients, Assessment Tools for Microfinance Practitioners", SEEP, USA (2001)

Partner, completed questionnaire

Pikholz, Lynn and Pamala Champagne, "Toolkit For Institutional and Product Development Risk Analysis for MFIs", *MicroSave /* Shorebank Advisory Services, Chicago (2002)

_____, "Pilot Test of Micro-Life Insurance Product: Results and Lessons Learned", Dissemination Workshop (2004)

Szubert, Dorota, "Costs and Benefits of Implemented Market-Led Solutions, *MicroSave* /MFC (2005)

Szubert, Dorota and Borislav Petric, "Market Development through Product Refinement", based on a Case Study of MikroCredit EKI, *MicroSave*/MFC (2005)

Szubert, Dorota, Ivonna Planinic, Sefika Coric-Beba, "Costs and Benefits of Market Intelligence System Supportive to Mission Fulfilment", based on the Case Study of Prizma, *MicroSave*/MFC (2005)

Szubert, Dorota, Gagik Vardanyan, Margarita Lalayan, "Entering New Markets with New Products: Costs and Benefits of Following New Product Development Process", based on a Case Study of MDF-Kamurj, *MicroSave*/MFC (2005)

Wright, Graham A.N., "Designing Innovative Products, Processes and Channels for the Promotion of Microfinance", MicroSave, Nairobi (2005)

Wright, Graham A.N. and Shahnaz Ahmed "Market Research for Microfinance – 7 Cautions and a Recommendation" Briefing Note #37, *MicroSave (2004)*

Wright, Graham A.N and Leonard Mutesasira, **"**Market Research for MicroFinance Toolkit", *MicroSave,* Nairobi (2003)

Wright, Graham A.N., "Market Research and Client Responsive Product Development", *MicroSave*, Nairobi (2001)

Wright, Graham A.N. and Mosharrof Hossain, "BURO, Tangail's Approach to Product Development: A Case Study", *MicroSave,* Nairobi (2001)

Wright, Graham A.N., Monica Brand, Zan Northrip, Monique Cohen, Michael McCord and Brigit Helms, "Looking Before You Leap: Key Questions That Should Precede Starting New Product Development", *Journal of MicroFinance Vol. 4. No.1*, USA (2001)

Annex 3: Lessons Learned

MFIs that have integrated market research and pilot testing into their new product development processes broadly agree that doing so is valuable, despite the fact that the costs and benefits of doing so have varied significantly from one institution to another. The variance is caused, to some extent, by the institutions' different sizes, ages and macroeconomic contexts, yet it is also due to the way that institutions implemented market research and pilot testing. Some of the decisions made resulted in higher costs; others limited the benefits that could be obtained.

Comparing the successes, failures, challenges and experiments of the institutions participating in this study generated numerous insights that can assist others who want to incorporate market research or pilot testing into their product development process in the future. Which steps of the process proved most difficult, and how did MFIs overcome those difficulties? What have institutions done to keep costs down and control risks? How did they take greatest advantage of the potential benefits of the market research and pilot testing process? These are the issues explored below. The following list of 35 suggestions is designed to help MFIs make market research and pilot testing for new product development more cost-effective.

1. The first time you do it, get help

As with most things in life, the first time an institution integrates market research and pilot testing into its product development process is the hardest. Without exception, case study MFIs dealt with this reality by getting help from an outside entity that had done it before—either from consultants in the region or from a network with which they are affiliated.

2. Capacity will not necessarily stay with the institution or be institutionalized

If an MFI wants to make the most of the skill and knowledge-building benefits that the product development process can offer, it must make a deliberate effort to institutionalize this capacity, which means:

- Using external consultants to build internal capacity to complete the process in the future, and not just to get the job done.
- Focusing not only on how the tools work, but also on developing communication, observation and analysis skills.
- Structuring the working relationship to ensure that MFI staff design, apply and analyse the results of their tools with input and feedback from the external consultants (rather than the consultants always taking the lead).
- Organizing follow up activities as soon as possible after the initial training or research activity to reinforce what was learned.
- Taking new staff (including branch staff) into the field every time a new research initiative is launched to increase the number of people in the institution who understand the process and the nature of the results it produces.

3. Have a designated multi-disciplinary team

Being well organized to support the introduction of a new product or service is essential and having a product development team is widely recognized as a key part of that process. A multi-disciplinary team is able to gather more information, take a broader perspective, and generate more comprehensive solutions than a team that consists only of marketing or operations staff. It also facilitates communication between the various departments that must cooperate if a new product idea is ever to be launched. With respect to the composition and operation of the team, case study MFIs recommend the following:

- Get frontline staff involved on the team
- Teams of 8 to 11 members function best
- Make sure the pilot testing team meets regularly
- Proactively manage competing demands for team members' time since market research, pilot testing and product development teams are typically made up staff who are already employed full time and have a significant workload.
- Have at least one senior manager with decision-making authority on the team

4. Keep the sample size manageable; use segmentation to help

The challenge, of course, is how to keep the sample size manageable while still obtaining representative results. Segmenting the market and then screening potential focus group participants, pilot test locations, questionnaire respondents, etc. on the basis of whether they belong to or serve a particular market segment is a valuable technique for managing the sample size. It is also helps increase the relevance of the information gathered by ensuring that respondents are knowledgeable about the research topic, or match the profile of the customer the institution wants to serve.

5. Start with training

All of the case study MFIs received training from their network, or from a technical assistance provider that was certified to train others in *MicroSave*'s market research and product development tools. In both scenarios, the training aimed to develop the skills required to apply the tools in the field, but also provided some guidance in terms of data analysis and the synthesis of results. This initial training was insufficient for first-time institutions which benefited significantly from the follow up mentoring and support provided as the MFI actually developed its new product. However, the initial training was reported to be extremely valuable in building support for the market-led approach, for understanding the processes and the tools, and for making participants feel comfortable taking the first steps.

6. Train beyond the Product Development Team

Those who are not part of the pilot testing team but are involved in some way in delivering the pilot product also need to be trained. This is important as it gives clarity and confidence to staff who will be selling the product to the customers." Top management must also be knowledgeable, both about the product and the mechanics of pilot testing.

7. Each product needs a champion

The value of a product champion is found in more than his or her vision or determination. Having someone who is constantly communicating with the various players and organizes their interaction to make sure things stay on track was commented upon by many MFIs as important.

8. Drive the process with clear, focused objectives

Clear objectives that are set early in the product development process provide a 'unity of purpose' and a point of reference that help an institution avoid wasting resources on the gathering and analysis of unnecessary information. If the objectives clearly respond to an operational problem or institutional priority, they can not only help focus research, but also justify it. A well-articulated objective is simply easier to sell—it makes getting support and resources for the research easier. It can also assist the institution with problem solving and conflict resolution.

9. A successful pilot test will not necessarily recommend product launch

The lesson is to use the pilot test to examine the product's attractiveness under real market conditions, and to make a decision about roll out that is based on real demand and the institution's internal capacity to meet it. A pilot test protocol that clearly stipulates the level of performance that must be achieved in order for a product to be launched will help an MFI avoid expensive product failure.

10. Test the research tools

KPOSB learned the importance of this lesson when it tested a questionnaire that had been developed for it by an external research company. It had to spend time and money developing another questionnaire in order to meet its research objective, but it avoided the cost of a failed market research effort using the first version of the questionnaire. Research tools developed internally can also benefit from testing, for example, so that users can learn how to guide a discussion so it remains focused on the research objective, or questions can be fine-tuned to make the tool's actual implementation more efficient.

11. Process research results daily

By setting some time aside at the end of each research day to process, organize and begin analyzing the results, MFIs found that the information gathered could be processed more quickly and more thoroughly—more detail could be remembered and therefore captured.

12. Have multiple research teams operating simultaneously

Several case study MFIs sped up their research process and enabled more staff to participate in it by organizing more than one research team to gather information simultaneously.

13. Borrow tools and adapt them

Most of the institutions studied borrowed tools from either *MicroSave* or their network association and adapted them for use in their local environment. This strategy enabled the institutions to build on best practice and the investments that others had already made in testing the tools and avoid having to start from scratch. Institutions that borrowed tools stressed, however, the importance of being trained to properly use the tools, and of taking the time and having the flexibility to adapt the tools as necessary.

14. Choose research tools with care

Three factors seemed widely useful in helping institutions decide which tools to choose: 1) the research objective—MFIs chose the tool or combination of tools that best addressed a particular research question; 2) internal capacity to implement the tools (e.g., time needed, skills, attitudes); and 3) the characteristics of the individuals or groups that would be participating in the research (e.g., literacy level, history with the MFI).

15. Use a combination of methods for gathering data

Without exception, MFIs used multiple techniques in their research processes, including focus group discussions (the most popular methodology), individual in-depth interviews, participatory rapid appraisal (PRA) tools, quantitative surveys, mystery shopping, the mining of internal databases and secondary literature reviews. The use of multiple techniques enriches data analysis and allows the results obtained through one technique to be verified against the results obtained through another. However, a balance is required. Using too many techniques at once can increase the costs of research without generating additional insight.

16. Conduct secondary data research before primary research

Secondary data analysis informs the overall research effort, allowing MFIs to narrow the questions that need to be investigated and reduce the amount of more expensive primary research required.

17. Conduct only one exercise per FGD

Conducting more than one exercise with a group of participants makes the discussions too long and can be confusing.

18. Pilot test in a location that is easily accessible by staff from the Head Office

Pilot testing near the head office allows the product development team (most of whom will work at the Head Office) to provide timely and regular support to the pilot while keeping transport, communication and opportunity costs to a minimum.

19. Pilot test in a cooperative branch

Testing in a branch where the leadership is not supportive or communicative can dramatically increase costs, delay the process and stifle learning.

20. Center promotional campaigns on pilot test branches

MFIs have found targeted marketing strategies that focus on the pilot test site area to be most effective. Large scale publicity of a pilot is unnecessary and, in fact, can do more harm than good.

21. Market internally

When introducing a new product, internal marketing is just as important as external marketing. The information generated through the market research must be shared with those who were not directly involved with the process, so that they too can support the pilot test and, if the test is successful, the roll out.

22. Communication is a success driver

Effective communication is critical for the timely recognition of problems, the efficient solving of those problems, and the effectiveness of decision making in general. When communication vacuums appeared, institutions saw them get filled by rumours and hearsay which hampered the product development process. Where conflict resolution mechanisms did not exist, disagreements led to delays and escalated costs.

23. Use plans, guides and checklists

The plans, guides and checklists recommended as part of the market research and pilot testing processes were widely recognized by MFIs as being practical and useful. They helped institutions keep their activities focused on the objective and avoid delays that could have been caused by unclear timelines or distribution of responsibilities.

24. Test riskier products in a staged manner

MFIs that knew they were experimenting with a risky product actively sought ways to limit the scope of their pilot test (e.g., the number of testing sites or the number of clients in a particular location who would be given access to the product) as a way of limiting the size of the loss they might have to absorb if the product were to prove unprofitable.

25. Shorten the length of the pilot by increasing the quality of pilot test preparations

Pilot tests tend to extend because of poor initial product design (so the design must be changed during the pilot test), inadequate attention to monitoring (so that problems are not identified quickly), failure to anticipate risks associated with the product (so that risks are managed poorly), poor communication around the pilot test (so that people don't know what they need to do), or technology problems (due to failure to test the product set up comprehensively).[29] For example, at one case study institution, "The launch was hurried and they did not have sufficient time to prepare. They had to undergo training on the software and hardware while serving clients at the same time. Many times the system went down due to power failure and they did not have the necessary back up power supply resulting in customer waits for many hours, sometimes even days. Other operating and facility considerations like adequate number of computers to handle both front office and back office transactions had not been planned for." By paying more careful attention to these factors during the organization and preparation of the pilot, such delays (and their associated costs) can be avoided.

26. Budget for appropriate equipment

With the help of some basic technology such as a laptop, tape recorder and batteries, market research teams can significantly reduce the amount of time they have to spend processing and analysing data while also increasing the quality of the analysis and the reports they produce. Institutions that lacked this equipment noted the inefficiency.

27. Perform risk analysis

MicroSave recommends that formal risk analysis be performed at least three times: (1) After concept design; (2) Prior to launching the pilot test; and (3) When evaluating the pilot test/before rollout.[30]

28. Do sensitivity analysis

Sensitivity analysis is a very useful tool for establishing the degree of significance of different assumptions in the financial model. It helps institutions to answer "what if" questions, such as "What would the impact on our profitability be if our tellers became more efficient and decreased transaction time by 50%?" Not all case study MFIs used sensitivity analysis, but those who did found it helpful. For example, FINCA Tanzania learned that key assumptions for its product included the loan loss provision, the allocation of indirect costs, the costs of funds for lending, and the turnover of clients.

[29] Arunachalam, MicroSave Virtual Conference on Pilot Testing Summary, 33.
[30] Ibid, 17.

29. Do not underestimate the value of qualitative concept testing

In general, qualitative concept testing allowed institutions to fine tune many aspects of their product before the pilot test, thus improving the quality of what was launched and lowering the cost of making changes during the pilot, when marketing materials would have already been printed, staff would have been trained, procedures manuals would have been created, etc. Comparing the low cost and time commitment required for the qualitative concept test with the benefits that it can generate, skipping this step would be a false economy.

30. Outsource and partner

Outsourcing and partnerships are increasingly attractive options for MFIs in many areas of operation and market research and pilot testing are no exception. Institutions commonly use external consultants to help them navigate technical processes with which they may not be familiar and build the internal capacity to conduct those activities internally in the future. They have used research agencies to conduct market studies and data analysis and as well as to design and administer questionnaires, and they have hired part-time researchers to take some of the stress off the limited staff resources.

31. Test the MIS before pilot testing begins

Where tests were performed early enough in the product development process, there was sufficient time to upgrade systems without delaying the start of the pilot test. Where system testing was not performed, MFIs suffered from a lack of proper reports, the inability to calculate certain types of interest or fees, and periods of total inoperability during the pilot test.

32. Take more advantage of product costing and financial modelling to assist decision-making

When they are done, product costing and financial modeling seem to be regarded as good "decision-making filters" as part of the process of evaluating whether or not a product should be rolled out. Yet these tools could generate more benefit for MFIs if institutions regularly updated the assumptions underlying their models and continued to test them during the course of the pilot test. This would result in a much more accurate picture of profitability and also assist better informed planning for roll out.

33. Reap more benefits with stronger monitoring

Informal monitoring is most common among MFIs because it costs little, requires virtually no planning and enables institutions, if they have open and fluid communication, to identify problems and seek corrective action. However, this is an area where a more formal or systematic process defined at the time of pilot protocol definition at the start of the pilot testing process might be able to generate significant returns.

34. Learning lessons is not enough; the lessons need to be documented

More people will need to be involved in rolling out a product than were involved in the pilot test. For past mistakes not to be repeated, the lessons learned need to be tracked and communicated.

35. Have a document that formally commits the institution to roll out

This document, be it called a recommendation letter or by any other name, helps institutions make sure that they have made the necessary preparations before rolling out the product. If key performance indicators were benchmarked before the product began, it will be a relatively straightforward process to assess whether the pilot test objectives have been met and, therefore, whether the product should be rolled out.