

# The Financial Heuristics Training

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A proven mobile-based tool for teaching business lessons that stick

**Managing a business is complicated, and microentrepreneurs in developing countries often lack the skills they need to run their businesses successfully. Past efforts to teach these skills have failed to translate knowledge into action. We designed a mobile-based training product simplifying financial management best practices into easy-to-implement rules of thumb. To deliver the lessons at scale, we leveraged a mobile delivery platform. A rigorous evaluation of our curriculum in both India and the Philippines demonstrated that the training improved microentrepreneurs' business practices.**

## Summary

Microentrepreneurs are an engine of growth for developing countries – creating jobs, bringing valuable products and services to communities, and spurring economic expansion. With approximately **400 million micro, small, and medium enterprises** around the developing world, successful small enterprises have the potential to improve life for millions of families. However, many people understandably lack the skills needed to manage the complex finances of a small enterprise.

Traditional classroom-based financial education courses that aim to teach business skills have attempted to tackle this problem for many years. Despite their popularity and intentions, however, they don't make much of an impact in terms of changing behaviors around business management. They also require a lot of time and effort from the already busy microentrepreneurs themselves, and are expensive to scale. A **recent meta-analysis of 201 studies** found that traditional financial education courses accounted for just 0.1% of the change in recipients' financial behaviors.

Why? Behavioral science tells us that for multiple reasons, increasing knowledge through providing more information does not always lead to action. The cognitive bandwidth constraints individuals may be facing as they're juggling the tasks required in their day-to-day lives make it difficult to learn complex concepts or translate them into behavior change in the real world. Additionally, the hassles associated with attending an in-person training (scheduling, transport, time away from the business and family) suppress attendance. Therefore, despite making significant demands on microentrepreneurs' time, and financial service providers' budgets, these programs have not been making a real difference.

To ensure that training programs actually help entrepreneurs, our team, in collaboration with Professors Antoinette Schoar (MIT) and Shawn Cole (Harvard Business School) approached closing the skills gap by using a behavioral lens to design a new training that delivers management best practices in a succinct

## Highlights

- ▶ Rules of thumb prove more effective than traditional financial education at equipping entrepreneurs with necessary business skills
- ▶ Mobile phone-based training increases accessibility and engagement with the lessons
- ▶ Heuristics training led to improvements in business practices in India, the Philippines, and the Dominican Republic

and engaging way, with easy-to-adopt lessons that are delivered at the recipients' convenience, and most importantly, *actually* help them improve their business practices.

## Rules of thumb lead the way .....

A commonly held belief by policymakers and practitioners worldwide is that simply providing information is sufficient to change individuals' behavior. However, evidence shows that aiming for a complete understanding of specific content (such as accounting or business planning) is actually less actionable than information distilled into simple **rules of thumb**, or "heuristics." Armed with insights about human behavior, our initial goal was to improve the curriculum of these trainings by developing shortcut heuristics, which distilled important financial management practices into lessons that were easy to both learn and apply for microentrepreneurs. We created these heuristics by doing months of observations and interviews with microfinance lending clients in the Dominican Republic, and later conducted a randomized controlled trial (RCT) to test the efficacy of **heuristics-based lessons in a classroom setting**.

In doing so, we found that microentrepreneurs given the heuristics-based training were as much as 10 percentage points more likely to engage in key positive business practices, such as keeping accounting records and separating home and business accounts, than the group that did not receive any training. Moreover, the training led to a statistically significant improvement in the microentrepreneurs' weekly revenues as well as a nearly 19% increase in sales during bad weeks.

## Leveraging mobile phones .....

Motivated by the success of the Financial Heuristics curriculum in the Dominican Republic, we aimed to replicate and test the program in two other regions. With scale in mind, and to speak to the other behavioral challenges contained within traditional classroom based trainings, we adapted the program to mobile delivery through an Interactive Voice Response (IVR) platform. This technology allowed us to deliver the training to busy microentrepreneurs more conveniently over their mobile phones, bypassing the need for a classroom altogether. In doing so, we created a path to scale by optimizing the delivery of the training for both recipients as well as financial service providers who otherwise must invest considerable resources into classroom-based efforts. Furthermore, using automated voice messages enabled us to serve geographically disbursed clients through mobile channels, regardless of literacy.

The first pilot of this mobile-based Financial Heuristics Training was conducted in India from 2014-2016 in partnership with the Institute for Financial Management and Research (IFMR Lead) and Janalakshmi, a large Indian microfinance institution (MFI). It confirmed that mobile phones could be an effective delivery channel for Financial Heuristics. It also illuminated further opportunities for refinement.

In a subsequent iteration of the training, generously supported by CGAP and USAID's Development Innovation Venture (DIV) program, our goal was to use insights from this India pilot to refine the design and further scale and test it with microentrepreneurs in both India and the Philippines in partnership with two MFIs: Janalakshmi in India, and Negros Women for Tomorrow Foundation (NWTF) in the Philippines.

We interviewed over 60 of their clients to identify potential behavioral bottlenecks to beneficial business practices. We were encouraged to find that the business challenges faced by small business owners in the Philippines were very similar to what we observed in the Dominican Republic and India. In India, we collected feedback from clients who had already received the pilot training, to learn about their experiences and identify areas for improvement in the content. We spoke with both engaged and unengaged participants to understand which features were working and which were not. Major insights coming from this effort were that unengaged recipients wanted to receive fewer messages in total, and that they sought to receive the heuristics-based lessons in a more engaging way.

In response, we restructured the training messages by making the content more concise and the lessons more actionable. To further encourage listenership, we couched the lessons in more of a narrative, storytelling style using professional voice actors.

We selected a new IVR-based platform offered by engageSPARK that was both highly automated and low-cost, and therefore easy to scale, in order to increase the appeal for providers. The platform offered real-time tracking of user engagement – such as pick-up and listening rates, which helped us track how much of the content the microentrepreneurs were exposed to.

In our final design phase, we user-tested the message content, length, timing, and delivery structure with small groups of partner MFI clients.

The **Financial Heuristics Training** is now a product that addresses many barriers of traditional trainings, and has been built with scale in mind. **It consists of two main components: A face-to-face orientation session and the package of mobile phone-based training messages.** The messages are delivered weekly, as a 3-4 minute audio message in the participant's local language, at their preferred time. Messages provide insight on cash separation, customer credit, inventory management, and supplier management.

## Results at scale

From 2016-2017, we evaluated the impact of the newly refined Financial Heuristics Training on the small business loan clients of our partner MFIs in India and the Philippines. We conducted RCTs across multiple sites to see if the training improved the business practices of microentrepreneurs, and whether these changes translated into better business outcomes. All clients in the RCT were surveyed before the training was offered to the group randomized to receive the treatment. Follow-up surveys were conducted at least three months after the offered trainings were completed for all clients.

Clients were highly engaged with the training messages in both countries. **About 75% of the clients picked up the training calls and listened to at least two thirds of the message content.** This was a particularly high engagement rate given that we sent a total of 21-22 messages to each client, with a new message every week. Additionally, 78% of clients in the Philippines and 62% of clients in India reported they were likely to recommend the training program to their family, friends and other business owners like them.

**Most importantly, the popularity of these messages translated into meaningful changes in micro-entrepreneurs' financial behaviors.** In both India and the Philippines, we found statistically significant differences across multiple taught practices between those microentrepreneurs who were offered the training and those who were not.

Improvements were found in behaviors that we believe to be particularly important for small business growth. In both countries, we found that **~8% more people physically separated their household and business cash—a critical first step in determining whether a business is generating a profit.** In the Philippines, we also observed a 5% increase in microentrepreneurs recording customer information (name, date, and credit amount) for customers who purchased goods on credit, which both helps to collect payments later on and serves as evidence of customers that should not be given credit in the future. Additionally, there was a 5% increase in the number of Filipino microentrepreneurs who visited competitors to check prices and goods, which is a behavior thought to be beneficial in maintaining competitiveness. Finally, in India, we found that clients in the treatment group were 2% more likely not to run out of stock for fastest selling items, which has implications for both their sales and perceptions of reliability with customers.

Though we were able to find significant improvements in microentrepreneurs' business practices, we were not able to capture these effects on their businesses' outcomes at the time of our endline survey. Unlike in the Dominican Republic, where we were able to follow up on business outcomes 12 months after training, we had to follow a more condensed timeline in India and the Philippines, with measurements captured just 3 months later. In this period, we found either a neutral or positive effect on profits and sales in India, but the results were not significant. Improved business practices may have also affected how business outcomes were measured at this time. In the Philippines, a small reduction in “good week” sales was found, upon further investigation, to be associated with individuals who had actually improved their sales measurement practices relative to their comparison group.

## Spreading Financial Heuristics farther

The Financial Heuristics Training has been found to be both uniquely impactful in improving microentrepreneurs' behaviors as well as uniquely cost effective and scalable relative to traditional offerings. **In India the Financial Heuristics Training cost about 67% less than the cost of our partner's existing classroom-based financial education program.** In the Philippines, where airtime costs are high, costs of conducting mobile and in-person business trainings were somewhat comparable, with the Financial Heuristics Training requiring substantially less time and effort by MFI staff and clients alike. Compelled by the results and ease of executing the training program, our Filipino partner has invested additional internal resources to scale the product to an even larger customer base.

**This means a resource proven to support entrepreneurs is readily available for microfinance institutions that wish to leverage it.**

Both the scalability of the product and the success of the curriculum in such diverse settings suggests

significant potential for the Financial Heuristics Training to improve microenterprise growth on a global scale. Microentrepreneurs contribute to their communities and local economies, and starting a business is often one of the only paths to economic success for women. It is important to empower them with the tools they need to run their businesses well, support themselves and their families, and bring needed goods and services to their communities.

The success of our heuristics training points to the impact behavioral science can have in improving outcomes for countless people. We are continuing to identify ways to scale this mobile-based heuristics training to other communities where microentrepreneurs likely face similar business challenges. In this process, we will continue to generate insights and apply them to future work designing scalable resources to support financial health.