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MANAGEMENT ACCOUNTING AND CONTROL:

Lessons for and from the World’s Tiniest Businesses

By Srikant M. Datar, Marc J. Epstein, and Kristi Yuthas
Gilda makes tortillas at her home—and sells them there. Some say they are the best tortillas in the area. She cooks early in the day, but by late in the morning she has stopped cooking. She says that sometimes if she continues to make tortillas, she has extra product left at the end of the day and they are wasted. She doesn’t know the cost of the product to evaluate whether she’s better off making more even if she doesn’t sell out. When asked about hiring someone to sell her tasty tortillas on another street, she hadn’t thought about the possibility and had no idea how to do it.

How to help? If Gilda can be taught about the cost of her product and profit margins, she can make better decisions about how many tortillas she needs to sell out of each batch, even if she must dispose of the extras. And through learning how she might be able to hire employees either on a fixed payment or on commission, she can consider whether she could make even more tortillas and hire people to sell them in the neighborhood to individuals and businesses that wouldn’t otherwise be her customers and thus earn much more money.

For the past four years, we’ve been actively involved with helping people like Gilda—the poor in developing countries—to improve their businesses. Microfinance (or microcredit) institutions provide the capital for these tiny businesses. The microfinance industry promotes this access to capital as the key missing ingredient that helps the poor move out of poverty. Our experience tells us more is needed. The money is indeed important, but maybe the most important lesson that we’ve learned is something that management accountants should know intuitively. Management accounting and control often separates the successful businesses from those that fail. We teach it, write about it, and practice it in the leading business schools and corporations in the world. But what we’ve seen is that the same methods, tools, and techniques that we teach our students and that we practice in leading corporations are necessary for even the tiniest businesses to succeed.

Microfinance has been touted as one of the most promising approaches yet developed to address the seemingly intractable problem of global poverty. Microfinance institutions, which are often structured as nongovernmental organizations, provide financial services to the poor who can’t be served effectively and economically by the formal financial sector. These services include microcredit, usually short-term loans ranging from $100 to $5,000; microinsurance, which insures the lives of borrowers but can also include health insurance, for payments of less than $1 per week; and microsavings, savings accounts that allow clients to store lump sums they received from annual harvests or to make deposits in increments as low as 25 cents. Savings help clients deal with planned economic events, such as school fees, or with unplanned economic shocks, such as illness, funerals, or weather damage. Microcredit is the most well-known and widely available of these services. It recently came into the public consciousness when one of its founders, Muhammad Yunus, was awarded the Nobel Peace Prize in 2006 for his work with Grameen Bank.

Still, experience has shown that access to financial capital isn’t enough for many of the most vulnerable clients. Microbusiness owners often lack the knowledge and skills—the human capital—necessary to make effective use of financial capital. They lack even the basic knowledge about how a loan is obtained and repaid and how debt can be used for business development. Most microfinance institutions have developed training that teaches clients about the timing and amount of repayment, the need for financial discipline to meet the repayment schedule, and the importance of investing the loan in working capital or productive assets rather than using it for household consumption. Although this training is essential for successful loan management from the institution’s perspective, it often falls far short of the training necessary for clients to raise their businesses to a level of growth that can begin to break the cycle of crushing poverty in which they’ve been trapped.
Together with a team of researchers, we interviewed hundreds of these microfinance clients (microentrepreneurs) and microfinance managers in numerous countries ranging from Nicaragua in the Americas to Ghana in Africa, reconstructing their cash flows and attempting to identify the problems these small businesses face and the most important decision-making strategies they use to solve them. We also developed a variety of new, culturally sensitive instruments to understand both the financial transaction flows and the decision-making strategies of these businesses. We found that what these businesses needed most to complement access to financial capital was enhanced human capital. And time and time again, the principles that provided the greatest potential for reducing common mistakes and increasing productivity and growth were principles found in any basic course of study of management accounting: budgeting, cost control, process improvement, and risk management.

Microenterprises and Their Capabilities

Microenterprise refers to businesses with five or fewer employees and less than $10,000 in assets. More than 500 million businesses around the world meet this description, and they play a huge role in the global economy. Two thirds of the world’s population—some four billion people—live on the equivalent of $2 per day or less. Microenterprises support the vast majority of these people. Microentrepreneurs aren’t small traders or craftsmen happily operating in local markets. The reality is far more grim, as household providers, often women, exploit any means available to eke out a living. African “rag-pickers,” for example, scour through garbage dumps, searching for small scraps of discarded fabric. They trim and cleanse the fabric, add edging or decorations, and then sell them as rags to households and businesses. This is dirty and often dangerous work, yet thousands of women use such strategies to successfully feed families, build homes, and provide for other needs, including healthcare and schooling, from the income they generate.

The entrepreneurs we met were hardworking, resourceful, and ingenious, but their businesses were weak and stagnant, allowing the owners to meet basic needs but falling well short of lifting them out of poverty. Microcredit can help entrepreneurs change this by starting new businesses, expanding their existing businesses, or diversifying into new products and industries. But what our personal interviews, as well as research involving data from thousands of microfinance clients, has shown us is that the loans by themselves aren’t enough. These entrepreneurs need basic management knowledge and skills to help them grow their businesses.

Despite the resourcefulness and ingenuity that allow them to develop and operate their businesses at a subsistence level, these business owners lack the knowledge necessary to move beyond that level. For example, very few owners keep any records beyond a listing of money owed to them. They rarely have an accurate idea of how much they sell or how much they earn, and our research shows that, when asked, they underestimate both by a significant amount.

They also tend to make a number of common mistakes—such as the amount of inventory or the extent of credit—that hurt their profitability and doom their businesses. Through our interviews with these clients, we’ve identified a number of common choices that, while understandable in this highly vulnerable environment, hamper the productive potential of their businesses.

Our research has convinced us that most microbusinesses could benefit greatly from education relating to a handful of standard management accounting and control concepts and techniques that would help microentrepreneurs avoid some common pitfalls. As we’ve discussed our ideas with microfinance institution managers, we’ve come to realize that many of them could also benefit from a review of these basic concepts. Concepts that are second nature to management accountants are often outside the interest or focus areas of many managers, or managers understand them only in a general or vague manner.

Management Accounting Tools for Microbusinesses

Five management accounting tools have the greatest

Time and time again, we found that the tools microentrepreneurs needed most were some of the same basic tools management accountants use every day.
Topics We Teach the Business Owners

Here's a sample of some of the topics we teach our microentrepreneur clients.

**CASH FLOW TOPICS:**

**Cash control:** Learning how and when to record spending, what to include in the record of cash expenditures, how to differentiate business and household expenses, common categories of expenses, overcoming difficulties in remembering unrecorded expenses.

**Cash flow form:** Understanding the form and where various expenses are to be recorded, practice with commonly occurring transactions.

**Cash management:** Importance of record keeping, understanding the cash flow record, lessons learned from initial attempts at recording cash flow, identifying nonessential spending.

**Using the numbers:** Understanding cash flow information to recognize cost patterns, understanding how to reduce inventory, other business, and household expenditures.

**Practice:** Practice understanding completed cash flow forms, practice developing strategies for more effective cash control.

**FINANCIAL LITERACY TOPICS:**

**Planning:** Importance of planning in avoiding problems and stress and in building wealth, types of events to plan for, common reasons for failing to plan, what happens when there is no plan, what happens when there is a plan.

**Creating your budget:** Importance of budgeting for creating and adhering to plans, core elements of budgets, common revenue and expense items, practice in creating a budget, comparing budgeted and actual results.

**Using your budget:** What to do when actual results deviate from plans, common planning mistakes, common behavioral problems, methods to estimate sales.

**Know your profit margin:** Importance of profit margin in guiding business investment and household spending, calculating profit margin, understanding components of the profit margin.

**Three paths to profit:** Exploring opportunities to increase sales price, increase sales volume, and reduce business costs; calculating the proportion of sales that must be reinvested to sustain the business.

**VALUE CHAIN TOPICS:**

**Understanding the value chain:** General understanding of how the product moves through the supply chain to the final customer. Are there ways, through bulk purchases, sales, extra traveling, etc., to reduce middlemen and costs? Alternatively, are there benefits to adding middlemen so that the entrepreneur can focus on his/her strengths? For example, someone who prepares food could hire another person to walk around the streets and sell the food.

**Understanding the value proposition:** Why do customers buy from a particular entrepreneur and not someone else? Help entrepreneurs understand that, besides price, customers value many other factors, such as location, time, quality, range of products, personal relationships, and availability of credit. How can entrepreneurs provide more value to their customers?

**Understanding value entrepreneurs receive from customers:** Customers provide entrepreneurs with sales revenue. Could they provide additional value such as information about how to improve the product or service or about additional items they would like to buy? Could they refer other customers to you? Could they do anything that would make your job easier—share in some of the transportation, come at a certain time, buy in bulk, pay on time?

**Understanding the supplier’s value proposition:** Why do entrepreneurs buy from a specific supplier? What aspects are important: size of purchase, price, location, selection, quality, convenience, consistency, information? Could more value be gained from the supplier or a different supplier, for example, by paying a lower price for the product purchased?

**Providing value to the supplier:** Why does a supplier sell to you? Are you a good customer? Why? How could you provide more value to your supplier—for example, by having regular purchase patterns, giving the supplier referrals, information? What could you gain by providing more value to your suppliers?
potential for microbusinesses: cost management, throughput enhancement, budgeting, risk management, and identifying opportunities. Cost management and throughput enhancement improve current day-to-day operations of the businesses, increase short-term productivity and profitability, and are easier to learn and apply. Budgeting, risk management, and opportunity identification help microentrepreneurs envision multiple potential futures. In environments of extreme scarcity, microentrepreneurs lack confidence in an “investible future,” making these concepts more difficult to convey.

Cost Management and Throughput Enhancement

Cost management encompasses several concepts. We focus on three: costing products, granting credit, and managing inventory. As is common in many businesses, large and small, microentrepreneurs often lack a clear understanding of their product costs, and the problem generally lies in identifying overhead and administrative costs. They include the costs of direct and indirect materials when computing product costs but ignore overhead costs like transportation and fuel, which can be significant. As is common in activity-based costing (ABC), recognizing overhead costs helps entrepreneurs better understand and manage their costs. For example, they make fewer trips to the market and cook larger quantities of food with each batch of firewood.

Entrepreneurs rarely estimate a value for their time or the time spent by unpaid family members. Imputing a wage helps them understand how much return they’re making on their investment and above the wages they might earn elsewhere. It also helps them recognize that learning to hire, manage, and pay employees beyond their immediate family can increase sales and profits.

In the resource-poor environments in which microentrepreneurs operate, credit is routinely granted by one business to another and by a business to its customers. Although entrepreneurs pay interest on the money they borrow, they rarely charge interest on the credit they provide their customers. Without charging interest, the slow payment cycle chokes the business. Successful entrepreneurs learn when to give credit, how much to charge, and to give discounts to cash customers. They understand the additional profits they earn by reinvesting early collections.

For example:

Maria doesn’t understand why she isn’t earning any money in her business. She sells children’s clothing by purchasing in the marketplace and reselling to her neighbors. She asks for cash, but often the customers aren’t able to pay immediately. There is no discount for cash payment and no penalty for credit sales. With very high interest rates, significant competition, low margins on sales, and a desperate need for cash, the delays in collections that can often be 30-90 days can be devastating to Maria. Although the customer isn’t paying interest, Maria must continue to pay interest to the lender, and her sales generate no profits.

How to help? Teaching Maria some important management accounting tools, such as tracking of cash flows, helps her better understand where she is currently spending her money, helps her separate her business revenue and expenses from her personal, and helps her recognize the reasons why she has no profits. It also helps her learn about the costs of offering credit to her customers and the costs of interest on her debts and why collecting cash as quickly as possible helps increase her profits.

All customers aren’t the same. Some require more time, more travel, or product enhancements. Asking entrepreneurs to consider which customers provide the greatest value or incur the least cost and pay most promptly helps them focus on the most profitable customer relationships. This is exactly the same problem facing many large companies today as they realize that the investments they need to support customers may or may not be consistent with the value customers provide them.

One of the most severe problems in microenterprise cost management is managing inventory. Many retail businesses selling nonperishable goods hold too much inventory, failing to consider how quickly items turn over. They overvalue the cost of a stockout (lost revenue rather than lost profit) and undervalue inventory carrying costs (by ignoring imputed interest costs). The successful businesses adequately stock popular items and minimize stocks of all others.
Let’s look at one last example from our experience: Pedro sells shoes in the marketplace. He needs to stock shoes in different styles and sizes, but sales have been slow, and some of his inventory is old and not selling at all. He’s tight on cash and is trying to maintain high per-unit sales prices to keep profits up, but this isn’t working.

**How to help?** Teaching Pedro about value proposition and product profitability helps him understand how reducing prices may increase sales and profits despite a lower profit margin on each shoe. It also reduces the amount of money tied up in inventory. Teaching him about the value chain and buying in bulk with others in the industry helps him reduce his per-unit cost.

Businesses that supply perishable products, such as vegetable sellers or tortilla makers, suffer from understocking because, in a resource-scarce environment, throwing away unsold or spoiled products feels like throwing away money. Many businesses close shop for the day at whatever time their supply runs out, turning away potential customers who arrive later. Now, however, they are learning that gradually increasing stocking levels to better match demand increases profits, even if it sometimes means throwing away products.

Many microentrepreneurs don’t see time as a valuable and scarce resource that they must manage efficiently. For example, many microentrepreneurs travel to the market every day to purchase supplies for their businesses and household items for the family. This process often takes two or three hours that could otherwise be used to sell more products. With the exception of businesses needing perishable products, this activity needn’t be performed every day. And even for businesses that require daily purchases, the more savvy entrepreneurs coordinate with neighbors to take turns going to the market. But the usual routines are difficult to change because they provide structure to the day and are often a source of valuable social interaction. We ask clients to consider the potential monetary value of shifting time to productive activities and then balance this against the social value of the daily market trips. And we ask them to consider how they could change their allocation of time and how they could work more efficiently if they wanted to sell more or sell faster.

Regardless of the demand and the potential for increased sales and profits, many owners have great difficulty with the prospect of hiring another employee. If no family members are available to work in the business, the business often stops growing. By providing knowledge of how to hire, manage, and pay employees, we help the microentrepreneurs understand the tools, skills, and value of leveraging resources and time.

**Budgeting, Risk Management, and Identifying Opportunities**

When asked what help they need to grow their businesses, microfinance clients commonly answer that they need larger loans to purchase more inventory and supplies. When we analyzed costs and revenues for these clients, we found that, after the initial investment in inventory, clients didn’t reinvest, began drawing down inventory, and had greater difficulty generating the cash surpluses needed to support their families.

In fact, many clients start the loan cycle with this disadvantage. They use only part of the loan for the business and the rest to meet immediate household needs. Starved of cash, the businesses fail to generate sufficient income to service the debt, leaving the entrepreneurs in a debt trap that’s difficult to escape. What the clients need is a budget to help them make better expenditure decisions.

We initially began with a simple record-keeping initiative. As we mentioned earlier, few microenterprise clients keep financial records of any type, and most lack a clear understanding of revenues and costs for the business or for the household. As a first step, some who were familiar with basic arithmetic and disciplined enough to keep daily records began tracking the cash inflows and outflows for their businesses.

But for many other clients, the process of budgeting remained challenging, even after they received considerable training. For them, we developed icons to help identify cash flows for sales and basic cost categories. Clients entered cash flow information in a simple matrix and compared budgeted and actual cash flows. They discovered how small, nonessential purchases added up to significant expenditures; how common
expenses could be unexpectedly large; and how small problems—a sick child, a broken tool—could severely impact revenue. They learned about the beneficial effect on cash flow from delaying substantial purchases for one or more inventory cycles. Budgeting helped clients establish rules of thumb about how much they could spend on personal consumption and how much they needed to reinvest to support the business. As a result, they began limiting personal consumption and making more judicious choices about business expenses.

The lives of the poor are fraught with risks. Fluctuations in income levels create uncertainty about food, shelter, and medical care. Unreliable or inadequate systems for water, electricity, communications, and transportation and unreliable supply chains for goods and services add to their burdens. Many microfinance clients belong to communities in which every family is and has been poor for generations, so they see before them only a bleak future full of challenges.

Risk management essentially requires assessment of risks that can impede accomplishment of objectives and development of plans for avoiding, mitigating, or sharing risks. Clients are well aware of the many risks that are beyond their control, such as political instability, transportation or electrical system malfunctions, weather problems, or natural disasters. Since they often believe there’s nothing anyone can do about them, they generally fail to plan for them. But in other cases there are solutions and workarounds.

By necessity born of scarcity, many microbusinesses operate in just-in-time mode—often receiving materials or inventory on the day they will be sold or used for production. Any problem in supply shuts down production and results in loss of sales and profits. To reduce the risk of a transportation problem delaying much-needed supplies, an entrepreneur can use a local supplier or stock an extra day’s inventory. Many businesses use the same consistent process—buying from the same suppliers, in the same patterns, and using the same production processes. But this singularity and consistency creates risks. Clients can mitigate these risks by identifying other suppliers of materials and by considering alternative production approaches.

For many microentrepreneurs dealing with the risks—internal and external, large and small—two important risk management strategies emerge: social networks and savings.
A Role for the Profession

Without question, the educational needs of microbusiness owners in impoverished regions are great. Most have minimal education, are illiterate, and have very low arithmetic or financial knowledge. They have few resources and lack business role models. Nonetheless, these business owners have learned through experience how to conceive, create, and operate their microbusinesses. They have developed capabilities and routines to succeed in the environments in which they operate and to respond to changing resources and demands. These skills provide them with an excellent foundation to build on.

Overall, our work in microfinance and microentrepreneurship has taught us that management accounting techniques have an important role to play in helping microentrepreneurs. Access to financial resources is clearly important for the success of countless small businesses. But the implementation of a few small changes, rooted in management accounting and control techniques, can make the difference between a life of constant struggle and more sustained success. Management accounting and business professionals have been largely absent in helping microbusinesses fight poverty. This creates both an enormous challenge and a great opportunity.

As the demand for microfinance funding and services continues to grow at an explosive rate, management accountants can make contributions that can help ensure these services have the greatest possible positive impact. By contributing their ideas and expertise to microfinance and microenterprise discussions, they can help sensitize the international development community to the importance and potential of management accounting tools in helping microenterprises develop and grow. And through additional effort and innovation, the profession can contribute new tools and techniques designed specifically to address the unique needs of the vast microbusiness sector. SF

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Although dealing with risks is necessary...clients need to develop approaches to identify opportunities as well.