

Catalytic Innovation in Microfinance for Inclusive Growth: Insights from SKS Microfinance

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ABSTRACT. Microfinance offers a means for reaching the poor who are left out of the formal financial sector. A fundamentally new way is needed to create a scalable and sustainable business model to meet this unmet need – a catalytic innovation. Our study focused on Swayam Krishi Sangam (SKS), an archetype of a catalytic innovator. The insights gained from our three-year longitudinal study led to the proposed framework for a catalytic innovator encompassing five factors: customer focus on the poor and social entrepreneurship for the social mission; operational innovation, information technology and human capital management for scaling and financial sustainability.

KEYWORDS. Framework for a Catalytic Innovator in Microfinance, Innovation in Microfinance, Microfinance Institutions, Social Entrepreneurship

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INTRODUCTION

Inclusive growth has been succinctly defined by the Asian Development Bank as “growth that not only creates new economic opportunities, but also ensures equal access to the opportunities created for all segments of society, particularly for the poor.” (Ali and Son, 2007, p. 12) Over one billion people lack access to basic financial services, which is strongly correlated with low incomes. A study by Consultative Group to Assist the Poor (CGAP) showed that countries with higher poverty rates have the lowest penetration of deposit accounts per 100 adults. Specifically, 70% of adults in developing countries are still excluded from the regulated financial system. (CGAP, 2009)

Our study focused on India since it has the world’s largest number of poor people in a single country. An estimated 300 million, out of the total population of over a billion live under the poverty line of \$1.25 per day (World Bank, 2005a). Although India has the fourth largest banking infrastructure in the world, 94% of its 600,000 odd villages do not have a single Branch. The number of households facing financial exclusion is estimated at 120 million by CRISIL (2009). It takes an average of 33 weeks to get a loan approved in rural India, with borrowers having to pay up to 42% of their loan amounts in bribe to officials. (World Bank, 2005b)

Microfinance provides financial services such as loans, savings and insurance to the poor who are left out of the formal financial sector. The prefix, “micro”, highlights the distinct feature of these services: they involve *small* amounts of money, frequently less than \$100. Commercial banks do not serve poor people for several reasons. A poor person cannot secure a loan because of lack of collateral. The person may not be literate enough to complete the paperwork to open a

savings account. A small loan, or savings account with a small balance, yields only a tiny profit. The underlying economics also provide no incentive for banks to reach the poor in remote locations in rural areas. The cost of establishing a rural finance network in a remote area is estimated to be 80% higher than in a more accessible region.

At the heart of microfinance is microcredit which provides small, unsecured loans to individuals to establish or sustain a small business and generate income. A vast majority of loans go to women because studies have shown that women tend to undertake small, manageable activities rather than risky ventures, and they are more likely to reinvest their earnings in the household for the benefit of the entire family. An important element of microcredit is the recycling of funds. When loans are repaid, usually in six months to a year, they are re-loaned.

Microfinance institutions (MFIs) have traditionally been backed by government agencies and charitable organizations. A limited pool of donor funds, however, inhibits scaling for reaching the poor. The 2009 State of the Microcredit Summit Campaign Report indicated that 75% of the 3,552 MFIs covered by the study are small organizations serving less than 2,500 customers, with only 1.4% of the customers reached by them as the poorest living on \$1 a day or less. In contrast, the 16 large financial institutions with over a million clients each had a penetration of over 25% in the poorest segment (Daley-Harris, 2009). Aside from capital, MFIs face two other obstacles to scale: high cost of handling millions of small transactions, and lack of standardized business processes.

What's required is a fundamentally *new* way to meet the unmet need for financial services at the bottom of the pyramid (BOP). Clayton Christensen et al. (2006) coined the term *catalytic innovation* for new solutions that bring about social change, often on a national scale. They defined a catalytic innovation as a *scalable, sustainable, and systems-changing solution*

that meets a need that is *not served* at all. Their paper delineates five ways of identifying catalytic innovators using several examples, including Grameen Bank in microfinance. Our study addresses the research question: what are the factors that would make an MFI a catalytic innovator in microfinance? In our attempt to develop a framework, we draw upon management literature in two distinct fields. First, the theory of the resource-based view of the firm postulates that a firm's resources include tangible and intangible assets such as "brand names, in-house knowledge of technology, employment of skilled personnel, efficient procedures, capital, etc." (Wernerfelt, 1984, p. 172). This perspective provided the lens for formulating some of the success factors for a catalytic innovator. Second, the literature on social entrepreneurship, while still in an embryonic stage according to Short et al. (2009), fueled our thinking since microfinance as a means for bringing about financial inclusion is indeed a social venture.

We selected Swayam Krishi Sangam (SKS) Microfinance as the research site for our study since it stood out in the microfinance industry in India for the scale it had achieved in providing microcredit to the rural poor suffering from financial exclusion, and achieving a double bottom-line. Our three-year study of SKS identified five factors that worked in concert for SKS to meet the criteria posited by Christensen et al for a catalytic innovator.

To put the social innovation engineered by SKS in perspective, we begin with an overview of three distinct innovations that brought microfinance into the limelight as an industry that can do well and do good. The next section outlines the research methodology. The main body of the paper presents the proposed framework that resulted from our study of SKS chronicling its growth and analyzing the factors that have made it a catalytic innovator in microfinance. Further research is required to validate the framework derived from the SKS study by applying it to other prominent MFIs in India, which have attained scale and are committed to

a social mission.

INNOVATIONS IN MICROFINANCE

Grameen Bank of Bangladesh pioneered an ingenious method of advancing credit *without any collateral* to poor women in rural areas for starting a small business. The innovation in the Grameen model was the group-lending methodology, where loans are made to *self-selected* groups of five women to be repaid in weekly installments. The group acts as the guarantor for the loan – if one member cannot make the weekly payment, the others will make up the difference. The collective responsibility of the group serves as the social collateral for the loan. This model minimizes transaction costs relating to selection of clients since members of the group have more information about each other, and can exert peer pressure for prompt repayment. The discipline of regular weekly meetings also reduces the risk of default (Greeley, 2006). Grameen's founder, Muhammad Yunus, believed that charity is not an answer to poverty. His experiment proved that the poor do not lack ideas, motivation, skill or entrepreneurial spirit to start income-generating activities to improve their livelihoods. The Nobel Peace Prize of 2006 shared by Yunus with the bank recognized the social impact of microfinance and stimulated a global interest in micro-lending.

The second innovation in microfinance was the transition from a not-for-profit to a *for-profit* model for overcoming the constraint of limited donor funds for scaling. Microfinance became an attractive proposition for banks and institutional investors for two reasons. First, the large potential demand for financial services at the BOP in the developing world is estimated at \$300 billion by JP Morgan. Second, MFIs had a low default rate, below 3% in many cases, compared to the write-off of 5% of outstanding credit balances by US credit card issuers. Big

banks saw the business opportunity to team up with MFIs to extend their reach to the BOP, and do well *and* do good by providing credit and increasing the earning potential of the poor. Several banks have already done so. For instance, ICICI Bank, the second-largest commercial bank in India, has benefited from a partnership model with MFIs to expand its outreach to low-income clients who are not covered by their Branch network. Partnering with MFIs helps ICICI also meet the target set by the government for financial inclusion: 40% of a bank's lending should be to priority sectors, including 18% to farmers.

Institutional investors also began to provide direct backing to MFIs in 2007. The initial public offer (IPO) of Banco Compartamos, Mexico's biggest MFI, in April 2007 was a landmark event that heralded the interest of private investors in microfinance. Compartamos raised \$498 million by selling off about a third of its equity which demystified microfinance as an industry for just "do-gooders". The for-profit model, however, runs the risk of mission drift because of commercial pressures to generate a return to its investors, which became evident in the case of Compartamos. At the end of 2007, it had a portfolio of \$316 million lent to 765,000 clients at annual interest rates that could exceed 100%. Loan officers earned bonuses of up to 120% of their salaries which made them sign up clients for more loans regardless of their needs. Investors earned an average annual return on equity of 53% between 2000 and 2007 (Epstein & Smith, 2007). The exceptional financial performance of Compartamos clearly came at a social cost of overcharging borrowers, and demonstrated the danger of an MFI losing sight of the focus on *poor* customers in a for-profit model.

The risk of mission drift is eliminated by the third innovation, an entirely new model of microfinance on the Web - *online micro-lending*. Instead of commercial capital, a brand new *virtual* class of *individual* investors provides the capital for microfinance. Donors make loans to

poor people for establishing or expanding their small businesses, instead of giving charitable hand-outs to them. The lender gets the money back making the loan a gift that keeps on giving. Kiva.org was the first to launch a peer-to-peer lending portal in 2005 where profiles of microentrepreneurs from developing countries are posted. Visitors can click through the pictures and personal stories to choose the person they want to fund, and make a loan of as little as \$25 using a credit card. Kiva partners with existing MFIs in the developing world, who choose qualified borrowers, distribute the loan and collect repayments. Updates of the borrower's business are posted on the website. The lender also receives email journal updates about the sponsored business throughout the six -12 month duration of the loan. The funds are returned to the lender as loans get repaid, which could be funneled into another loan. By October 2009, Kiva had reached over 239,000 entrepreneurs in over 50 countries, disbursing over \$100 million from 573,000 lenders – proof that people see the value of social investments even in difficult economic times (Sys-con, 2009). Kiva is not yet present in India because of government regulations that require Kiva to be approved by the central bank. However, two peer-to-peer lending portals, Rang De and dhanaX.com, were launched in 2008 using a model similar to Kiva.org. The online model is still in a nascent stage. A critical issue is whether the MFIs in the developing countries, who actually select the micro-entrepreneurs, are indeed targeting poor people. Further, the viability of online lending to reach significant numbers is limited by the infrastructure in rural areas in developing countries, including India.

Our study looks at the dominant brick-and-mortar MFI model prevalent in India for identifying the underlying factors for a catalytic innovation in microfinance.

METHODOLOGY

Our interest in microfinance and SKS in particular was sparked by the inclusion of Vikram Akula, the founder of SKS, among the “TIME 100: The People Who Shape Our World” in 2006. He was recognized by *Time* magazine for use of smart-card technologies to dispense small loans to the poor “in the hinterlands with few landlines, let alone ATMs making SKS one of the fastest-growing micro-lenders, having dispensed \$52 million to 221,000 clients since 1998...(with) a default rate below 2% by using software that provides real time data” (Rawe, 2006, p.1). The novelty of this accomplishment in a non-traditional business, with technology playing a significant role, motivated us to study how SKS did it.

SKS was launched in 1998 in Hyderabad in the state of Andhra Pradesh (AP) as a not-for-profit with a social mission to “empower the poor to become economically self-reliant”. The Grameen model for making loans to poor women using social collateral was modified by SKS. It began operations in the drought-prone Deccan region of AP not covered by other MFIs already operating in AP. From 1999 to 2004, SKS focused on perfecting its systems and processes in AP, and had scaled by end-March 2004 to over 85,000 clients with a 99% repayment rate. In April 2004, SKS expanded to four adjacent states *simultaneously*, a first for any MFI in India. By March 2006, SKS members totaled 201,493. In July 2006, SKS extended operations to six states in North India which are considered “tough” to operate in, expanding the total number of clients to over 600,000 by March 2007.

Recognizing the need for capital to expand outreach, SKS converted to a for-profit company in August 2005. By this time Akula had proven the ability of SKS to scale with a default rate of less than 1%, a pre-requisite for attracting private capital. The equity investment of Sequoia Capital (a venture capital firm reputed for its early-stage investments in Yahoo!, YouTube and Google) among others in March 2007 was indicative of the investors’ confidence

in the financial viability of the SKS model. SKS was, however, cognizant of its social mission even after becoming a for-profit company. The Microcredit Summit Campaign Report verified that 90.5% of the 134,346 SKS clients as of December 31, 2005 were below the poverty line of \$1 a day (Daley-Harris, 2006).

SKS qualified as a research site for our study since it satisfied the criteria laid by Christensen et al for a catalytic innovator. First, it met the need for microcredit of the poor, who are *not* reached by mainstream financial services. It had achieved scale from just 10 customers in 1998 to over 600,000 by March 2007 when we started our research. The wide geographical footprint of SKS manifested by early 2007, with the focus on underserved areas, provided additional evidence of SKS meeting an unmet need. The infusion of private capital to fuel its growth substantiated the financial sustainability of the company. Finally, data from industry rating reports verified that SKS did not abandon its social mission after becoming a for-profit company.

We began with an extensive review of the rich literature in microfinance ranging from academic papers in journals of development economics to numerous studies by international organization and their affiliated agencies to help us understand the factors underlying the growth and dynamics of the microfinance industry. In the next phase we undertook secondary research of leading MFIs, including Grameen Bank and two other prominent MFIs in Bangladesh, ASA and BRAC, as well as the early MFIs in India such as BASIX and Share Microfin. Our analysis of the strengths and weaknesses of the different business models of these MFIs gave us the perspective for the in-depth study of SKS. Over a period of three years, we tracked multiple sources that generated a wealth of data points on SKS. Case studies, dissertations, and reports from institutions that cover the microfinance industry in India provided multiple sources of

evidences for data triangulation to achieve contextual validity, or dependability of the data. Interviews with knowledgeable observers and players in the microfinance industry published in the business press were valuable to get first-hand views on various issues. Two important sources for assessing the social performance of MFIs, including SKS, were the annual State of the Microcredit Summit Campaign Reports and MIX MARKET Reports. Primary archival data on SKS was obtained for the time span of 1998 through 2009 from quarterly updates, monthly tracking reports and other documents posted on the SKS website. The longitudinal data enabled the construction of a narrative to connect events germane to the success of SKS.

A three-stage coding process was based on the Strauss methodology (Strauss, 1987) for inductively processing data sourced from more than 500 documents. In the first stage, we listed all the data points, a process that corresponds to the “open coding” stage of the Strauss methodology. We examined various data points with lenses such as: What is going on here? Why is it done? And what does this data point indicate? The continuous assessment of data points based on periodic additions to the data set helped to strengthen the findings.

In the second stage, we teased out various data points to unearth commonalities and detect patterns that could be clustered under distinct labels. For example, all the data points shedding light upon the ‘internal audit process’ in SKS were clustered under ‘financial compliance’, which is termed as an ‘axial code’ in the Strauss methodology. We consolidated the axial codes from the second stage into five succinct factors in the third stage termed as the ‘selective coding’ stage in the Strauss method. For example, in the third stage, ‘operational innovation’ emerged as a common theme for two patterns identified in the second stage, standardized business processes and financial compliance. The analytical process used in this example is shown in Table 1. Our objective was to construct a *parsimonious* model advocated by

Eisenhardt (1988), who noted that “...given the typically staggering volume of rich data, there is a temptation to build theory which tries to capture everything.” (Eisenhardt,1988, p.547).

TABLE 1. Analytical Process Used to Derive the “Operational Innovation” Factor

Selected Data Points – Open Coding	Clustering of Data Points – Axial Coding	Factor
Standardization SKS standardized the processes for - selecting a village - conducting the village surveys - forming the groups and the Centers - training members on the procedures	Standardized business process	Operational Innovation
Operations Manual Prepared “how to” procedures for a. conducting the weekly center meetings b. how to deal with problems of non-attendance and non-repayment or issues raised by customers.		
Pilot Efficiency Project Pilot started in December 2007 with 30 branches in AP, extended to 30 more branches in February 2008, to move from weekly meeting with clients to a fortnightly interval to reduce operational cost. Initial concern that clients may find it difficult to meet fortnightly repayment commitment was not reflected in the pilot project. Also, member attendance actually increased from 70% to 80%.		
Internal Audit SKS was the first microfinance institution in the world to get an ISO certification for	Internal Audit as an Innovation in MFIs	

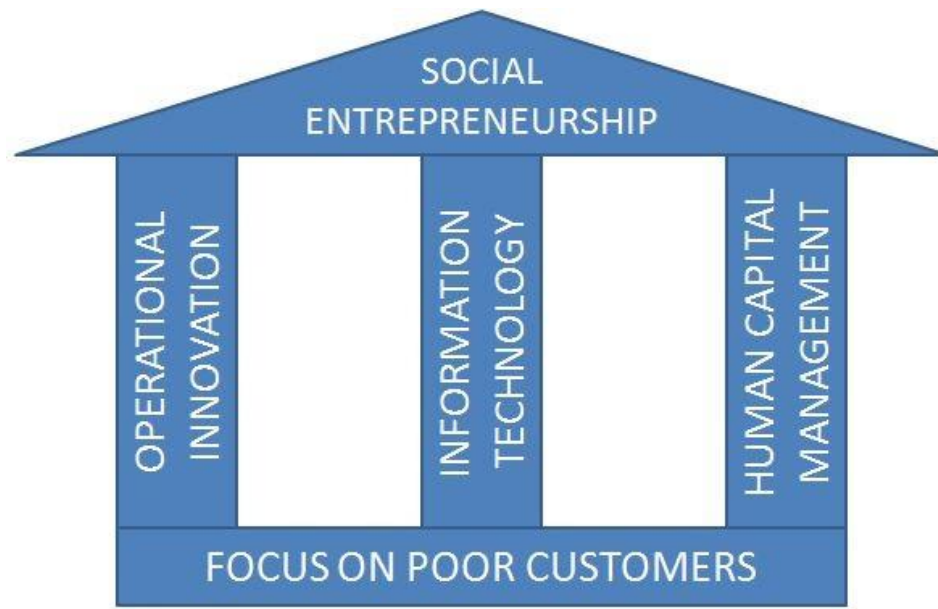
internal audit processes with a team of 225 employees. It was certified by ISO 9001:2000 on May 6, 2008 by a certifying agency RINA - certificate valid till May 2011.		
Grading of Branches Internal Audit took an initiative in 2008 to grade all branches for linking staff incentives to branch grading based on parameters like documentation, loan repayment and disbursement, fund management, fixed asset verification, attendance, etc.		

We were able to cross-check the validity of our analysis of SKS with a managing partner of Sequoia Capital, which had selected SKS for its *first* investment in microfinance in 2007, and made a subsequent investment in 2008 after our interview with him.

PROPOSED FRAMEWORK

Five factors emerged from our analysis of SKS, which are linked in a framework proposed for a catalytic innovator in microfinance. (see Figure 1)

FIGURE 1. Proposed Framework for a Catalytic Innovator in Microfinance



Two factors are essential for the social mission of providing financial services for the poor:

1. Focus on Poor Customers: Customer focus should be the foundation of any business model since, as Peter Drucker put it over 50 years ago, the only valid purpose of business is to create a satisfied customer. For an MFI with a social mission, the focus should be not just on customers, but on *poor* customers.
2. Social Entrepreneurship, which is characterized by the focus on creating social wealth, and is a pre-requisite for sustainability of social ventures (Zahra et al., 2009). For an MFI with a social mission, social entrepreneurship is an overarching factor that provides the compass for the other factors in the framework.

The other three factors are components of a “systems-changing” model for achieving scale and financial sustainability. They can be viewed as the firm resources that could be deployed for a catalytic innovation instead of the traditional business objective of competitive advantage advocated in the resource-based theory literature (Wernerfelt, 1984; Barney, 1991).

1. Operational Innovation for deploying new ways of performing fundamental business

processes, commonly referred to as “reengineering”.

2. Information Technology (IT) to reduce high delivery costs and manage portfolio risk
3. Human Capital Management (HCM), a factor that can make or break manpower-intensive organizations like MFIs.

To set the context for our analysis, it must be noted that door-step banking was the crux of the SKS model to reach the unbanked poor in remote rural areas. This drove up operational costs, however, since loan officers had to travel to villages for meeting customers, making loans, and collecting repayments. SKS built on Grameen’s group-lending model to reduce this cost by increasing the number of customers handled by a loan officer. A Center was formed by combining 4 to 12 of the self-selected groups of five women serving as guarantors for one another. SKS made the Center also responsible for the payment of all the groups, creating in effect a joint liability model. A loan officer is assigned to each Center as the point of contact with the customers of the Center, thus enabling him to handle as many as 60 customers in a village at the weekly meeting.

Focus on Poor Customers

The social goal of reaching the poor influenced *all* facets of SKS operations right from the selection of the villages, the targeting of poor clients in the selected villages and the delivery system. Customer focus on the poor was ingrained “in everything we do...even if it means operating against our short-term interests.” (Akula, 2008, p. 56) The semi-arid drought-prone Telangana region where SKS launched operations was not covered by other MFIs since villages in such regions are farther apart, making travel costs to these remote villages higher. Within Telangana itself, the most impoverished villages were selected where over half the population lives on less than a dollar a day; less than 30% of women are literate compared to 61% for the

state; and infrastructure is poor with some villages being connected only by dirt roads. Within the selected villages, SKS targeted the “Very Poor” households where per capita income is less than \$1 a day and who have *no* assets, and the “Poor” households whose per capita income is \$1 - \$2 a day and who have *some* assets, in keeping with its social mission to reach the lowest tiers at the BOP.

The customer focus was factored even in the methodology devised for the village survey to identify members who met the eligibility criteria. An innovative technique called Participatory Rural Appraisal that uses highly-visual group exercises was used to get information from villagers, most of whom are illiterate (Akula, 2004). For example, a pictorial diagram of different items, say, goats and buffalos, was used for respondents to indicate how many of each they have by placing the corresponding number of stickers on that item. The visual nature of the exercise made the information captured transparent and easily understood, whereas a written survey would make the respondents fearful about what was being written down and for what purpose.

The customer-first philosophy of SKS dictated door-step banking despite the high cost of loan officers travelling to villages on mopeds on rough dirt roads and braving the vagaries of the hot summer and monsoon seasons. The deliberate choice of the most impoverished region for the SKS operations exacerbated the high travel cost. Another aspect of the SKS model is that weekly meetings were scheduled during the *short window* of time from 7 a.m. to 9:30 a.m. when the women were available so as to not disrupt their work schedule in the fields. These features contrast with traditional microfinance in India that requires borrowers to come to Branches and make monthly repayment.

The size of the loan was based on information about the borrower collected during the formation of the group. It ranged from \$50 to \$300, to be repaid in 50 weekly installments from

the weekly cash flows. A cost-plus pricing model was used to set the interest rate for yielding a fixed profit of 2%. In states where SKS has attained scale, an average 24% APY was charged compared to the over 55% rate of moneylenders, who are the main source of informal borrowing for the financially excluded rural poor (Basu, 2004). SKS also provides interest-free emergency loans to tide over unexpected distress situations despite SKS having to pay commercial rates to banks for the funds borrowed for these emergency loans. This again underscores the focus on poor customers in its business model.

The customer-first philosophy also influenced the way SKS recruited the “right type” of loan officers who could effectively deal with poor customers, and their performance evaluation. The loan officers are recruited from the *same* poor villages as the customers. This makes it easy for them to connect with the customers they have to serve. They also possess some knowledge about the customers to facilitate their interactions with them. The salaries of loan officers are not tied to repayment rates or the size of their loan portfolios. Otherwise, the pressure to meet targets could foster a tendency to hound borrowers in a difficult situation, or loan them more than they need. (Akula, 2008)

Operational Innovation

Our analysis identified two distinct areas for reengineering the business processes of an MFI: standardization for scaling operations and financial compliance that becomes important with scale. We discuss each in turn below.

Before starting SKS, Akula had learned from his experience of working as a loan officer for a not-for-profit MFI in India that microfinance operations were inefficient due to lack of standards in processes, and hence not scalable. He identified areas where processes could be standardized starting from the selection of areas to open Branches, and covered every aspect of

an MFI's operations, including the training program for loan officers.

A standard methodology was established for selecting the underserved region and villages for opening Branches as well as conducting the survey to select the targeted customers. An Operations Manual laid out the details of the "how to" procedures for the tasks that loan officers have to carry out before starting financial operations. These tasks included forming groups and Centers, and conducting a five-day "Compulsory Group Training" program of hour-long sessions to educate members on the processes of SKS. The manual also covered the procedures for conducting the weekly Center meetings, disbursing loans and collecting repayments, and making checks of loan utilization. Guidelines for how to deal with problems of non-attendance and non-repayment, or issues raised by customers, were also provided in the manual.

The process for conducting the weekly Center meeting was also standardized to increase the efficiency of the loan officers. A fixed weekly repayment for each customer in round numbers of 25 or 30 rupees, i.e., multiples of five rupees (the smallest bill in India), cut the time in counting coins and making change. The Center meeting was scheduled at a fixed time and location in the village to ensure attendance by all members without loan officers taking the time to track them down. The fast turnaround enabled a loan officer to visit three villages instead of one in the limited open window in the morning. Other opportunities for standardization to speed growth were taken from the best practices of global giants. The factory-style training model used by McDonalds for the low-skilled workforce of its franchises was utilized for training SKS loan officers. The standardized training program cut the time for training loan officers to two months from the norm of four to six months in most MFIs. The goal is to cut it to one month. (Akula, 2008) The decentralized hub-and-spoke model of Starbucks was used in the expansion strategy

of SKS, where Centers were created in clusters under the umbrella of Branches. Opening multiple Centers in one Branch helped build the SKS name among customers. It also enabled experienced staff from an existing Center to train the staff in a new Center. The minute attention that SKS paid to identify areas with the potential for standardization was instrumental in achieving its 200% annual growth, adding 50 Branches, 500 loan officers and 160,000 new customers every month.

The fast pace of scaling operations brought to surface the need for financial compliance and accountability making internal audit an important function that required strengthening and training the audit staff. The quality of the rigorous audits done by the staff of 235 in March 2008 across the 771 Branches in existence at that time earned the distinction of SKS being the first MFI in the world to get the ISO 9001:2000 certification. An important initiative undertaken by the internal audit group was to grade all Branches for the purpose of instituting staff incentives based on parameters like documentation, loan repayment and disbursement, fund management, fixed asset verification, etc. The audit staff strength was increased to 350 by early 2009 to improve the efficiency of audit processes by setting up separate audit teams for Branches, Head-Office, individual loan products, internal audit training, quality assurance (ISO audit) and risk management. KPMG, an accounting consultancy, was also appointed to review the processes and suggest improvements.

Information Technology (IT)

SKS was a pioneer in using IT from the very start because of Akula's conviction that IT was an imperative to cut transaction costs, a significant barrier for scaling microfinance. An Internet-enabled Management Information System (MIS) was developed in-house as early as 2000, within two years of the company's launch, connecting the Head-Office to the Branches.

The transaction data on loans, collections, etc. was entered for each customer by the loan officers in the PC at each Branch after their morning field meetings. The system was custom-designed for ease of use by inexperienced field staff with no more than a 10th grade education to independently handle transactions for up to 600 borrowers. The training required for them to enter the data in the system had to be minimal to realize the cost advantage of using readily available, low-wage staff for data entry. Another constraint created by the inadequate infrastructure in the region where the Branches were located was the availability of power for only two hours a day. The user interface of the system was simple enough to enable a loan officer to enter all the daily transactions in less than 30 minutes.

The core of the MIS system is the Portfolio Tracker module that captures all the transaction data input by the loan officers. A simple but telling example of the benefit of standardization of processes was the ability to *pre-populate* the fields for collections with data on the weekly loan repayments fixed for each client. The system generates the Collection Sheets for the loan officers showing the fixed amount to be collected from each client at the Center meeting. Only exceptions have to be recorded by the loan officers at the meetings, which in turn have to be entered in the Branch PC. This saves time at both the Center meetings and at the Branch, and reduces the incidence of data entry errors as well. All Branch level transactions are consolidated and compressed so that they can be sent over a dial-up connection in less than two minutes. Summary data is available in the Head-Office within hours after the morning field meetings. Corporate staff uses the extensive reporting capability of the MIS to respond quickly to any problems in the field. In particular, the system enables SKS to manage portfolio quality to diversify its risk. For example, a few years ago it noticed that as many as 80% of loans in some Branches were for buffalo purchases. A buffalo disease epidemic or a sharp decline in the price

of buffalo milk could create the risk of huge defaults. The portfolio was diversified by finding borrowers in other businesses such as tea shops, brick-making and tire retreading. (Bellman, 2006)

The fully integrated MIS entailed an initial investment of over \$250,000, a significant outlay for an MFI in its early stages of growth. But it delivered on the promise of reducing cost of operations through automation of transactions and better management of portfolio quality. The low operational cost enabled SKS to drop the annual interest rate charged to borrowers from 36% in 1998 to 24% in 2006.

SKS was also the first MFI in India to launch a smart card pilot project in October 2000 to automate the “last mile of delivery” in field operations. However, the high cost of a single Smart Card (\$3.30) at the time made the project unviable and put a hold on the rollout of the pilot. The positive outcome of the pilot was the interest of Visa International to collaborate with SKS to develop cell-phone based card readers. Customers could then use magnetic-stripe cards as cash substitutes and not just as an electronic passbook. The cash-free system would also be safer than a loan officer carrying a lot of cash to villages.

Human Capital Management (HCM)

Human Capital is a critical resource for an MFI that deploys a door-step banking to bring financial inclusion to the rural poor. Since the loan officers are the *sole* point of contact with customers in door-step banking, the recruiting strategy for getting the “right type of loan officer” and their performance evaluation are important areas of HCM for an MFI with a social mission.

SKS recruited the loan officers from the same poor villages as the customers since they had an inherent advantage of being able to deal effectively with their clientele. SKS also targeted the young, not much older than 20, yielding a cost benefit generated by the low-wage bill of a

young workforce. An additional benefit is the motivation of the loan officers to make the most of the job opportunity given to them. The salaries of loan officers were, unlike Compartamos, not tied to repayment rates or size of their loan portfolios.

The real HCM challenge for SKS is to manage retention rates and ensure that quality of staff is maintained during its rapid scaling. By July 2009 the employee strength had ballooned to 14,249 for serving 4.5 million customers. SKS has set an ambitious target of 15 million customers for 2012, which would require the workforce to expand to 39,000 employees. SKS is currently exploring avenues in both operational innovation and IT to address, at least in part, the HCM challenge facing it.

A pilot project was launched in December 2007 in 30 Centers to double the efficiency of loan officers by reducing the frequency of Center meetings from weekly to fortnightly. The concern that borrowers may find it difficult to meet fortnightly repayment commitments was allayed by the encouraging sign of no default in the pilot centers. The test is being extended to more Centers with plans to roll it out to all Centers in due course. An efficiency project was initiated in September 2008 to increase the productivity of loan officers in collaboration with Unitus whose affiliate, Unitus Equity Fund, has made an equity investment in SKS. The purpose of this project is to collect data on the time spent by a loan officer on performing his daily duties like pre-Center meeting preparation, Center meetings, and member acquisition process to identify bottlenecks and improve productivity.

On the IT front, SKS announced in July 2008 a tie-up with Adrenalin eSystems, a subsidiary of Polaris Software (a prominent player in the Indian IT industry) to develop software for the human capital needs of SKS. This is the first of its kind solution for the microfinance industry to handle recruiting, training, performance management and payroll requirements for up

to 20,000 employees, according to its website. Presumably the software can scale to handle the targeted strength of 39,000 employees of SKS by 2012.

Social Entrepreneurship

Given that an MFI with a mission to bring financial inclusion to the unbanked rural poor is a social venture, it is obvious that social entrepreneurship has to be the overarching factor in the proposed framework to provide a compass for the other factors.

According to Zahra et al. (2009), social entrepreneurship refers to “activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures or managing existing organizations in an innovative manner” (Zahra et al., 2009, p. 519). Social entrepreneurs are “driven creative individuals who question the status quo, exploit new opportunities and refuse to give up.” (White Rose CETL Enterprise Presentation, date NA, slide 15) Akula, the founder of SKS, fits these criteria for a social entrepreneur. He made a childhood resolve to eradicate the jarring poverty that he (born in India but grew up in the US) saw when visiting India for the holidays. He began his career in microfinance as a means for dealing with this poverty and worked as a community organizer at a not-for-profit MFI after graduation in 1990. He found that microfinance had the greatest impact on poverty since it provided the base for other interventions like health and education. After finishing graduate school at Yale University in 1995, he returned to India as a Fulbright scholar to coordinate a project on providing microfinance loans to marginal farmers at another MFI. He learned from this experience that the traditional MFIs would never scale to reach all of India’s poor.

Akula crystallized his ideas for creating a scalable model after returning to the U.S. to pursue a Ph.D. at the University of Chicago on the impact of microfinance. He identified three

constraints to scaling: “what I call the three “C’s” -- lack of capital, lack of capacity, and the high cost of delivery;” and developed his business model to deal with them: “a for-profit model to overcome the capital constraint, best practices from the business world to overcome the constraint of capacity, and technology to overcome the cost constraint.” (India Knowledge@Wharton, 2008, p.2) He pioneered door-step banking which not only gave the poor access to financial markets but brought it to their doorsteps. Interestingly, his business model did not impress the big donor agencies like the Rockefeller Foundation and Ford Foundation who thought he was too young and lacked the experience. Undeterred, he raised \$52,000 from 357 relatives and friends, including \$10,000 from a small volunteer Indian American organization to launch SKS as a not-for-profit in 1998.

Social entrepreneurship often involves combining resources in new ways for creating social value (Mair & Marti, 2006). Akula’s business model combined various resources to create financial inclusion for the rural poor such as using IT to cut costs, hiring local people in the same poor villages as the customers, and partnering with an external firm like KPMG for internal audit.

Akula was featured in the CETL presentation referred to earlier as one who has “brought social change amongst poor women in villages” (slide 13) in the traditionally male-dominated Indian society by offering them an opportunity to become economically self-reliant. This also helps to boost the confidence of the SKS women customers, raising non-financial wealth in the form of social capital in rural India. Akula’s passion to serve the poor led to commercial partnerships with investors to overcome the constraint of capital for scaling. Sumir Chadha, a partner in Sequoia Capital who we interviewed in February 2008, listed three attributes that Sequoia uses for selecting companies to invest which were met by SKS. Passionate

entrepreneurship was one of the three.

Vijay Mahajan, a veteran in microfinance in India and the CEO of the first for-profit MFI, BASIX, acknowledged Akula's contribution as a catalyst of innovation and change in the Indian microfinance industry. He is quoted in an interview as saying that: "Vikram is passionate about what he does and is committed to the poor. He has achieved a breakthrough in terms of scaling up, entered difficult geographies...and showed the sector its unrealized potential." (Sharma, 2008, p. 152)

In summary, Akula's social entrepreneurship has brought about socio-economic change through a game-changing solution for the nagging problem of financial exclusion in rural India.

Validating SKS as a Catalytic Innovator

We outlined in an earlier section our rationale for selecting SKS as the research site for our study based on data as of 2006. Having discussed the five factors in our framework for catalytic innovation, we examine here whether SKS has continued to meet the criteria for a catalytic innovation in microfinance in terms of scalability, commitment to social mission, and financial sustainability (Christensen et al., 2006). We proceed to address the following three key questions for SKS using available data up to September 2009:

- (a) Was SKS able to scale?
- (b) Did it achieve its social mission?
- (c) Is it financially sustainable?

The J-shaped growth trajectory of SKS through March 2009 shown in Figure 2 establishes the scale achieved by SKS. The momentum is continuing unabated. Within the span of one month, outreach grew from 5.01 million in August to 5.31 million in September 2009.

FIGURE 2. The J-shaped Growth Trajectory of SKS



According to the latest available Microcredit Summit Campaign Report, 96% of the total SKS clientele of 1.5 million as of December 31, 2007 were verified as poor living below the poverty line of \$1 a day (Daley-Harris, 2009). Social performance should be seen not only as the *end result* (the impact) but as a *process* of achieving that result, according to Sinha (2006). This process should include “improving the *social responsibility* of the MFI towards its *employees*, its *clients*, and the *community* it serves” (p. 5). In the case of SKS, 76% of its clients as of March 2008 belonged to castes defined by the Indian Government as marginalized communities. At the same time, the employee-base was also primarily drawn from these marginalized communities – 65% out of the 6,424 employees.

The exponential expansion of SKS has been fueled in large measure by funding from venture capital firms, including two rounds from Sequoia Capital and Kismet Capital, and an investment of \$50 million by Sandstone Capital, the largest investment in any MFI, in November 2008 in the midst of a global meltdown in the financial industry. The large infusion of \$135 million in equity capital in SKS raises a legitimate question about its effect on the social mission. Akula’s response to this question in an interview essentially gave the following argument (Nath,

2009). Customer retention data show that the large base of SKS customers is extremely loyal because of its focus on poor customers. Loyalty builds trust that is essential for a long-term healthy business, which is what commercial investors want. Akula hence believes that social return is not incongruent with financial return. He takes issue with Yunus, Grameen Bank's founder, who believes that microfinance should be a "social business", i.e., merely self-sustaining with *no* profit. Akula questions this concept by pointing out that Grameen Bank took 35 years to scale to 7 million customers. At that rate it would take generations to scale to the 120 million people facing financial exclusion in India. In this context, SKS is all set to overtake Grameen with an outreach of 8 million customers in 2010, within 5 years of becoming a for-profit in 2005. On the question of the interest rate charged by SKS, the average 28% APY rate in 2008 breaks down as follows: 12.5% cost of funds for SKS from banks, 8.5% staff cost, 3% for overheads and other administration costs, 2% for loan loss provision, leaving 2% for profit. In states where SKS has attained scale, the interest rates are lower at 24%. If processes are made more efficient, the interest rates could be reduced further since the profit margin is fixed by SKS at 2%. Although banks charge on the average a lower interest rate of 12.5% for borrowing, a World Bank study on access to finance for India's rural poor showed that longer processing times for loans together with bribes varying from 10% to 20% could result in a higher effective cost to borrowers (Basu, 2004).

SKS has received a host of awards from 2000 right up to 2009 for the organizational innovation engineered through the various factors in the framework in Figure 1 except for HCM. These awards are listed in Table 2 and provide a form of external validation for our analysis.

TABLE 2. Awards of Recognition for SKS: 2000 – 2009

#	Award	Year	Factor(s) Recognized
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1	CGAP Pro-Poor Innovation Award	2000	IT
2	Digital Partners Social Enterprise Laboratory (SEL) Award	2001	IT
3	CGAP Financial Transparency Award	2004	Operational Innovation
4	Unitus Accelerator Award	2005	Operational Innovation
5	Grameen Foundation USA Excellence Award	2005	Focus on the Poor Operational Innovation IT
6	CGAP Financial Transparency Award	2006	Operational Innovation
7	Planet Finance/ABN AMRO Microfinance Process Excellence Award	2006	Operational Innovation
8	Akula named to Time 100: The People Who Shape Our World	2006	Social Entrepreneurship
9	Social Entrepreneur of the Year 2006 in India Award of the Schwab Foundation	2006	Focus on Poor Social Entrepreneurship
10	Ernst and Young Entrepreneur of the Year Award 2006	2006	Social Entrepreneurship
11	Akula featured in the list of Young Global Leaders by World Economic Forum	2008	Social Entrepreneurship
12	Social Performance Reporting Award sponsored by CGAP, Dell Foundation and Ford Foundation	2009	Operational Innovation

FUTURE RESEARCH

Further research is required to validate the proposed framework for catalytic innovation. Good questions to investigate are: whether all five factors are *necessary* for a catalytic innovation? Or, are they, taken together, *sufficient*? And, if not, what are the *limitations*? Another interesting question is whether the framework will hold for SKS itself as it progresses towards its target of 15 million clients by 2012, especially in the context of news reports of SKS going for an IPO in 2010. We are in the process of applying the framework to newer entrants

such as Bandhan, Equitas Micro Finance and Ujjivan and to other large MFIs in India which were started before SKS as non-profits and later converted to a profit-model, including Share Microfin, BASIX and Spandana.

In this context, the economics of an MFI could be dramatically changed by viewing microfinance as a *platform*, and not as a product (Counts, 2008). This view asserts that the MFIs' most important assets are *not* their loan portfolios but their high-quality relationships with the BOP customers. MFIs can leverage these relationships as a platform to distribute a range of products and services, not just financial ones. The new perspective on MFIs becoming a distribution channel for a host of private-sector companies enhances the catalytic nature of innovation in an MFI. SKS has already put this concept into practice, and started in 2008 to provide "the last mile solution" for companies to tap the large potential market in the bottom tier. This new initiative leverages the human capital created by SKS for its microfinance operations through the vast network of Branches and loan officers reaching the poor at their door steps. By leveraging its existing resources, SKS can create a new revenue stream that can be used to further its social mission through lowering of interest rates on loans and charges for other financial services. SKS has partnered with Nokia and Bharti Airtel, the largest service provider. In a pilot test, Nokia's 1650 model with an Airtel connection and a loan from SKS to pay for the phone was offered to customers in selected clusters of villages with zero mobile penetration. The penetration jumped to 30% in just three months (Karunakaran et al., 2009). Another initiative of SKS was a tie-up with the German retailer, METRO Cash & Carry, to distribute their merchandise to over 500,000 SKS customers owning small provision stores. The commission from selling products is another revenue stream that adds directly to the bottom line, and has a social impact because of the potential to reduce interest rates on loans.

CONCLUSION

MFIs have emerged as a promising channel for providing financial services to the poor unbanked sector. Since most MFIs are small catering to less than 2,500 clients and reach only a fraction of the poor, scale is a pre-requisite for an MFI to reach the poor. SKS is an MFI that has scaled to reach over 5.3 million clients in just over a decade. Its social mission of “empowering the poor to become economically self-reliant” was not abandoned in its pursuit of scaling. Latest available data from an independent rating agency verified that 95% of its clients as of December 2007 were indeed poor.

The focus of our study was to identify the factors essential for an MFI with a social mission to achieve scale and sustainability, a catalytic innovation. Based on the insights gained from our longitudinal study of SKS from its inception through October 2009, we have proposed a framework for a catalytic innovator encompassing five factors. Two factors, customer focus on the poor and social entrepreneurship, are vital for the social mission. The other three factors, namely, operational innovation, IT and HCM, are necessary for scaling and financial sustainability.

NOTE

All data pertaining to SKS reported in this paper have been extracted from primary archival data in the time span of 1998 through 2009 on quarterly updates, monthly tracking and other documents posted on their website www.sksindia.com. We took the precaution of printing all the data points from the SKS website, which was fortuitous since the new website that we accessed in early December had deleted all the information we had accessed earlier.

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