Kiva: Innovations in Microfinance
Final Project for OIT 356

Prepared by:
Mbwana Alliy
Kit Arunanondchai
Brian Fearnow
Inna Pak

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I. Executive Summary

Kiva is an early-stage, non-profit organization founded with the goal of providing a new way for people in developed countries to provide charitable loans to proprietors of small enterprises in developing African nations. Kiva's approach to micro-financing has the potential to revolutionize the industry by enabling person-to-person transactions between lenders and entrepreneurs across the world. Kiva's technology platform offers an unprecedented degree of richness and transparency in interactions between these parties by allowing lenders to choose loan recipients based on their business and personal profiles. Frequent updates from the beneficiaries on the progress of their ventures and on the impact of loans on the everyday lives of their families and communities drives the powerful appeal of Kiva's model.

Kiva has met early success in its start-up stage, but as a young organization with a big addressable market, the company also faces several challenges as it looks to take advantage of its growth opportunities. The founders of Kiva are considering multiple strategic directions for their young business, and asked our team to provide our views on the best course of action. Following a careful analysis of the micro-finance industry, the economic landscape in Africa and Kiva's business model, we conclude that Kiva should focus its efforts on rapidly building its base of lenders, partnering with as many credible MFIs as it can, and minimizing its technology licensing activities. We believe this approach will improve Kiva's ability to take advantage of the network effects that should be available them as the first mover in the industry.

Structure of our analysis

To best understand Kiva, it is helpful to know a bit about the microfinance industry in general, as well as how it applies to Africa. We present a brief history of how microfinance evolved, describe sources of capital available to today's microfinance institutions, and highlight Africa's need for these services. We also touch upon how the state of technology in Africa impacts development of the microfinance industry there. We then provide an overview of Kiva today, describe challenges it faces and provide recommendations for the future.

II. Microfinance Industry Overview

Credit Facilities for the poor- Before Microfinance

The world's poor, often defined to include the 3 billion people surviving on less than two dollars a day[1], have few options for accessing financial services, and particularly credit services, in order to fund their small businesses. Traditionally, they have had access only to local money lenders as a source of capital; these lenders can charge exorbitant interest rates ranging from 10 - 100% per month. This compares with monthly rates of 2-5% for high-risk loans offered by commercial financial institutions.[2] Accessing commercial banks and other mainstream financial institutions can be excessively burdensome for the poor as many simply cannot afford to travel to distant

[1] http://www.unitus.com/wwd_whatismf.asp

[2] Microfinance Revolution: Sustainable Finance for the Poor, 2001- ISBN 0-8213-4524-9 "Chapter 1:Supply & Demand in Microfinance"

branch locations and lack the collateral and credit profile to make them attractive customers for these institutions.

The developed world, both through governments and donor funded nongovernmental organizations ("NGOs"), does provide some subsidized credit to the poor, and in many areas this is still the most attractive source of capital to small, impoverished entrepreneurs. However, these programs often suffer from capital constraints, which limit their ability to sufficiently address the demand for capital among the poor. Additionally, most of these programs are not self-sustaining and rely on continued donations for capital.

Grameen Bank- A new model for lending to the poor

Grameen, started by Professor Muhammad Yunus, Head of the Rural Economics Program at the University of Chittagong in Bangladesh, launched an action research project in 1976 to study the feasibility of providing banking services to the rural poor. Grameen charged borrowers effective annual interest rates of 20% and used 8% savings deposits to fund its capital requirements. The project was extremely successful and Grameen became a profitable, self-sustaining financial institution. As of July 2004, Grameen had 3.7 million borrowers, 96% of which are women, with a loan recovery rate of over 97%. At the heart of Grameen's success is its group lending methodology. Borrowers are arranged into small homogenous groups to facilitate social pressure that leads to very high loan repayment rates.[3]

The Microfinance Revolution

The success of Grameen helped spur a paradigm shift away from the delivery of government and NGO subsidized credit, and gave rise to the development of microfinance intermediaries ("MFIs") as a source of funds. These institutions were designed to provide small loans (and in some cases other financial services) to low-income borrowers at interest rates sufficient to make the MFIs self-sustaining. The microfinance revolution gained momentum throughout the 1980s and came of age in the 1990s. Today MFIs serve more than 80 million poor people in developing countries with over $7 billion in outstanding micro credit loans.[4]

MFI Capital Needs

While much of the exuberance around microfinance was driven by the hope that MFIs would be able to generate sufficient returns to maintain and grow their lending operations without recurring outside aid, this is still often not the case in practice. The US Agency for International Development (USAID) developed a scale for categorizing MFIs in terms of the sustainability of their capital funding. This scale categorized MFIs into three basic categories:

1. Institutions in which revenues from interest and fees do not cover operating costs,
2. Institutions in which revenues cover operating costs but do not cover the commercial costs of raising loanable funds, and
3. Fully self-sufficient institutions that cover all costs and risks and generate profits.

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[3] http://www.grameen-info.org
[4] http://www.unitus.com/wwd_whatismf.asp

A majority of existing MFIs exist in the first and second category. Both of these categories of MFIs need some form of subsidized capital and/or donations to be sustainable.[5]

MFIs in the third category provide evidence that this model is self-sustainable for some institutions. These groups have shown an ability to successfully mobilize savings, leverage domestic and international capital, and considerably increase in scale. BancoSol of Bolovia, which became the first MFI to gain significant capital from international investment firms, demonstrates that this model can access capital markets. However, because MFI loan portfolios fundamentally consist of unsecuritized debts, investors still view them as high risk investments and international capital markets fund raising windows may only be cyclically open to even the most successful MFIs.

Alternative sources of capital for MFIs

There are many individuals and organizations in developed countries that are looking to provide capital to the microfinance industry. Social venture funds and socially responsible mutual funds have emerged with charters to provide capital to socially minded organizations, including MFIs. MFIs funding has also arisen as a result of philanthropic efforts of successful entrepreneurs in the US. In October 2005 Google announced the formation of a charitable foundation that will receive $1 billion in funding over the next 20 years, a large portion of which will go toward fighting poverty.[6] In November 2005, Pierre Omidyar, the founder of E-bay, announced his intention to donate $100 million to a Tufts University endowment to be invested in international microfinance.[7]

<u>Calvert Social Investment Foundation</u> – Calvert, a mutual fund company with over $10 billion in assets, has established investment alternatives for socially-responsible investors. Through a variety of Community Investment Notes and other options, people can invest capital in programs that finance affordable homes, small and micro business development, and other community services. Financial returns are 1-3%, and Notes come in 3-, 5-, 7-, and 10-year terms. Calvert requires a minimum investment of $1,000.[8]

<u>Unitus</u> - In early 2000, a group of successful friends with expertise in finance, management and venture capital in the US founded Unitus, a charitable organization with the goal of finding a way to fight poverty in a more meaningful way. Unhappy with the limited impact from their past donations to NGOs, Unitus structured their organization as a venture fund to provide capital to MFIs. The fund invests in high potential MFIs, focusing on accelerated and profitable growth. The fund provides customized financing for MFIs using grants, equity and debt; connects MFIs to commercial funding sources; and provides MFIs with consulting and capacity building services.[9]

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[5] Microfinance Revolution : Sustainable Finance for the Poor, 2001- ISBN 0-8213-4524-9- "Chapter 2: Shifting the Microfinance Paradigm
[6] http://www.usatoday.com/tech/news/2005-10-12-google-charity_x.htm
[7] http://www.tufts.edu/microfinancefund/
[8] http://www.calvert.com/sri_650.html
[9] http://www.unitus.com/aboutus_missandstrategy.asp

Geographic Dispersion of MFIs

Accessing microfinance services potentially entails costs for the entrepreneur that can exceed the mere cost of interest, as time spent away from the business represents lost income, indirectly increasing the cost to borrow. Due to a lack of a cheap transportation infrastructure in many rural areas, traveling even short distances can be very time consuming for the rural poor. Thus, it is particularly important for MFIs focused on rural entrepreneurs to operate as closely as possible to their targeted base of clients to keep the total cost of the service low for borrowers. MFIs often locate their offices in the poorest neighborhoods and villages of a region to minimize costs for those most in need. This need for provision of service in a geographically decentralized fashion has led to the proliferation of small, regionally focused organizations in the microfinance industry. While the majority of MFI volume still goes through the largest 3% of MFIs, which represent 80% of current borrowers, there are also thousands of small microfinance institutions operating worldwide to reach more rural areas.[10] While it is difficult to find data to support this, it would seem likely that these smaller, more geographically dispersed institutions are those least able to take advantages of economies of scale and create self-sustaining operations.

Africa's Need for MFIs

While Africa is the world's second largest continent, with 54 independent countries and a population estimated to be 900 million in 2005, it ranks among the poorest regions in the world, with over 290 million living on less than $1 per day.[11;12] While aggregate statistics aren't available for all of Africa, several countries have a disturbingly high proportion of their population living at these poverty levels. In Uganda, 85% of the population lives on less than $1 a day, as does 70% of Nigeria and 64% of Zambia.[13] Most disturbing is the fact that on average, Africans are poorer today than they were four decades ago[14]. Such widespread and lasting poverty is an obvious indicator of the huge need for a financial catalyst to spur growth in this region. Not surprisingly, numerous MFIs have sprung up to support entrepreneurship in Africa. While the exact number of MFIs in Africa is difficult to estimate, there are thought to be between 10,000 and 20,000 MFIs globally, with a large percentage operating in Africa.[15]

Technology Implications for Microfinance in Africa

Because of the large geographic breadth of rural Africa, MFIs operating in this part of the world face a significant challenge as they attempt to balance the need to place branch locations in close proximity with borrowers while also minimizing the number of branch locations they need to support. While the Internet has made the world smaller and financial institutions more accessible for those in more developed nations, Africa has not yet been able to benefit significantly from these technological developments. Given the impoverished state of much of the population, it is understandable that Internet adoption in Africa has lagged other regions. One of the main impediments to Internet adoption is the lack of a widespread communications

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[10] http://www.ifpri.org/divs/fcnd/dp/papers/fcnbr114.pdf
[11] Entrepreneurship in Africa, David S Fick
[12] http://www.paris21.org/betterworld/poverty.htm
[13] 2005 African Development Indicators, from the World Bank Africa Database
[14] Entrepreneurship in Africa, David S Fick
[15] 2001 World Bank Statistics

infrastructure. Current telephone line density is extremely low, with only five telephone lines for very 1,000 people in Sub-Saharan Africa[16]. Current Internet penetration in Africa is less than 3%.[17] That being said, adoption is taking place. Albeit from a small base, Africa features the fastest-growing mobile, fixed-line and Internet markets in the world.[18]

The mobile market looks most promising. Due to the lack of a fixed line infrastructure, mobile phones are playing the most important role in the development of Internet infrastructure in Africa. The rapid spread of mobile phones has been aided by pre-pay options that allow users to control their spending. Even for the poor, a cell phone is now viewed as a must-have asset. This year Motorola will be offering handsets for less than $30 to wholesalers that cater to emerging markets including Africa.[19] Current mobile phone penetration has reached 10% and mobile users constituted around 80% of all African telephone subscribers in early-2005.[20]

Another impediment to extending the efficient reach of MFIs is the lack of acceptable electronic payment systems. Such payment systems have been inhibited not only by the lack of a strong Internet infrastructure, but also by restrictive regulatory regimes.[21] Payment system innovations are appearing on the horizon, however. Visa has been developing a new payment technology that would allow mobile phone users to make credit card payments via SMS transmissions. HP has partnered with major MFIs to develop a remote transaction system designed to lower transaction costs in Africa. In Kenya, Safaricom has partnered with the Commercial Bank of Africa and a micro-finance company (Faulu) to design and test a micro-payment platform that allows customers to use their phone like a bank account and debit card. (Please see <u>Appendix B: Internet Innovations in Africa</u> for more information.)

III. Kiva: Company Overview

Kiva is an early-stage, non-profit organization founded with the goal of providing a new way for people in developed countries to provide loans to proprietors of small enterprises in developing African nations. Unlike traditional charity organizations that provide donations or grants to impoverished people, or traditional microfinance organizations that rely on institutional funds to provide small loans, Kiva's goal is to enable a direct link between individual lenders and individual entrepreneurs. Kiva believes it is the first organization to enable this type of person-to-person lending interaction in the microfinance industry.[22]

Kiva's Lender Base

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[16] <u>Entrepreneurship in Africa</u>, David S Fick
[17] http://www.internetworldstats.com/stats1.htm#top
[18] The Times, November 4, 2005
[19] http://news.bbc.co.uk/1/hi/business/4285638.stm
[20] http://www.theallineed.com/news/0502/179987.htm
[21] <u>Entrepreneurship in Africa</u>, David S Fick
[22] Kiva is not the only Internet company to enable person to person lending. There is also a startup in the UK called Zopa (www.zopa.com) – see Appendix C for a brief overview of Zopa.

Kiva's customer base consists of socially-minded individuals from developing nations that want to help entrepreneurs from developing African nations obtain the funding needed to grow their small businesses. Unlike other lending alternatives, Kiva allows lenders to provide funding to individual borrowers and to receive relatively rich information about how their money is being used to help others. Potential borrowers can log on to the company's website (www.kiva.org) and search through a database of enterprises that are in search of a small loan.[23] The user can then use either their credit card or Paypal account to provide a small loan (in increments of as little as $25) to the specific entrepreneur of their choosing.

Once the loan has been distributed, Kiva's system sends the lender periodic emails detailing the progress made in developing the borrower's enterprise and in repayment of the loan. These emails may include pictures of the entrepreneur, pictures of capital equipment purchased, or messages from the entrepreneur. They also provide updates on the repayment progress of the loan.

As principal is returned to Kiva, the lender has several options. Lenders can choose to roll the funds over into another loan, to convert the funds into a tax-deductible donation to Kiva, or to simply withdraw the funds. As will be discussed in greater detail below, the company relies on a large portion of its lenders to either roll funds into new loans or make donations. In essence, Kiva believes that many lenders ultimately have charitable aspirations for their funds, and will choose to loan rather than donate initially as a way to give their contribution a longer life cycle rather than with the intention of getting repaid. Indeed, even for lenders that choose to withdraw their funds after the loan has been repaid, Kiva does not provide any interest payments to the lender. Only the collected amount of the initial principle is repaid. Additionally, loans are not given a strict repayment schedule, and borrowers are simply expected to repay the loans as they are able.

To date, Kiva has relied on word of mouth and free marketing channels (primarily the blogosphere) to generate leads for new lenders. While paid advertising programs may ultimately be required to acquire new lenders, for now the company has been able to generate several thousand hits a day to its website.[24] Still in its 'Beta' stage, Kiva currently has 35 loans outstanding with an average loan amount of nearly $500.[25]

Kiva's Borrowers

Kiva is focused on providing loans to small enterprises in developing African nations. Kiva's entrepreneurs typically have small, but struggling, operations already established. In most cases these individuals need less than $1,000 in capital to grow their businesses to a successful level. Typical business endeavors include retailing, restaurant development, produce or livestock wholesaling, and farming. To date, all of the loans have been made to entrepreneurs in Uganda, but the company expects to branch out to the Congo, Sierra Leone, and Kenya in the near future.

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[23] As Kiva is still in its "Beta" phase, it is not currently accepting new loans.

[24] The company was experiencing an average of 10,000 hits per day in early November 2005 before it closed off its Beta round of loan fund raising. Traffic has fallen to about 800 hits per day now that no new loans are being accepted. It remains to be seen whether Kiva can once again generate the higher levels of historical interest with free marketing efforts when it goes live with new lending opportunities in 2006.

[25] Interview with Kiva founders, November 13, 2005.

In aggregate, the microfinance industry claims to have 95% - 97% repayment rates. Although Kiva does not have a long track record of loans, it has not yet had to write down the value of any loans and has had a few loans already repaid in full in less than a year.

Kiva's Partner Organizations

The company has developed a relationship with the Village Enterprise Fund ("VEF"), a charitable organization that provides grants and training to poor entrepreneurs in East African rural villages. Under this relationship, VEF employees act as Kiva's 'on-the-ground' presence in Africa. Specifically, Kiva pays a small stipend to a few VEF volunteers in return for several services, including identification of qualified potential borrowers, distribution of loans, collection of repayments, and the provision of content about the borrowers that Kiva can post to its site. VEF typically sources borrowers from a pool of entrepreneurs that have already received grant money and training their organization, resulting in very little overhead expense for this service. Most of the stipend provided by Kiva is intended to compensate VEF employees for the additional time spent collecting rich content about and repayments from these borrowers, two tasks that are new to the VEF.

While the VEF relationship appears to have worked well to this point, as discussed above it is difficult to measure the success until more time has passed and a track record of loan repayment has been established. Due to VEF's lack of experience in servicing loans, Kiva is developing the VEF relationship cautiously and has only established operations in two villages in Uganda. The VEF has a presence in other East African countries, including Tanzania and Kenya, and Kiva expects to extend operations to these areas over time.

In addition to the relationship with VEF, Kiva is actively working to develop a network of MFI partner organizations to help it source new entrepreneurs in need of loan capital throughout Africa. Kiva plans to develop relationships similar to the one it has with VEF, but hopes to be able to maintain fewer touch points with each partner. Kiva wants to position itself as a source of inexpensive capital that it will provide to microfinance organizations in Africa in return for loan generation, loan servicing, and content generation services. This model should allow Kiva to focus on its core competency of developing a rich, interactive website that appeals to potential lenders and donors.

The Kiva Website

Kiva believes its core competency is the development and maintenance of a website that provides a transparent, data-rich online presence for lenders and donors. The basic functionality of the current site has been described above. Users can search through a database of businesses that contains a description and photo of the entrepreneurs in search of funding, make a loan to a specific borrower, and then receive update messages about the progress of funded business. The current system allows active lenders to receive these updates either via email or by visiting the Kiva website.

While the current system provides a rich user experience, the current site requires a heavy amount of oversight from Kiva's founders. Currently, Kiva employees must manually upload content they receive from VEF about each borrower to the site. Additionally, because it is important that the Beta round of loans has a high repayment rate, Kiva employees spend a significant amount of time monitoring the VEF relationship. As Kiva expands, this level of oversight by US employees will not be scalable given the company's lean operating budget.

To address this concern, Kiva is actively developing a new version of the site ("Kiva 2.0") that should allow it to scale operations more efficiently. Importantly, the new site will include administrative functionality that will allow partner organizations to directly upload new content about borrowers to the site. It will also provide reminders to each partner organization when it is time to provide update journal entries about the progress of each business. Additionally, Kiva 2.0 will include content rating functionality that will allow users to provide feedback about the richness of the interaction each partner organization provides. It is Kiva's hope that this rating information, coupled with data about each partner's average repayment rates, will remove much of the policing overhead burden from Kiva employees. (See Appendix D for a sample of the content currently available about a Kiva borrower)

Financial model

As Kiva has virtually no financial history, its financial model is clearly a long way from being proven out. However, the current model is fairly simple. Kiva provides capital without interest to its partner organizations in return for loan servicing and content provision. The partner organizations are allowed to charge a low interest rate to the actual borrower, but it must be below 10% (which is very low relative to the rest of the microfinance industry). The partner organizations use the interest charged on the loans to cover their operational expenses.

Because Kiva does not collect any interest from its loan portfolio, it must generate other sources of revenue. Currently, the primary source of revenue is from outside charitable donations intended to cover Kiva's operating expenses. While Kiva believes this can be a recurring revenue source, it would prefer not to rely on this form of income to sustain its operations. As such, Kiva will encourage lenders who have been repaid to consider donating a portion of these funds to Kiva rather than withdrawing them in full. Additionally, Kiva is exploring the possibility of charging an up front transaction fee for each loan. Kiva may also be able to generate a small amount of revenue by selling personalized placards or magnets to lenders with pictures and descriptions of the funded businesses. Finally, Kiva is working to establish a software license agreement with Shurush, a non-profit organization looking to establish a Kiva-like organization for the Middle East (more on this below).

When we first spoke with Kiva's founders, they had not yet developed a sophisticated model to help them project their financial needs. To help them think about the levers in their business, we developed an operating model (see Appendix A) that would allow Kiva to achieve a break-even cash position that does not require outside donations to sustain operations in 2010. We also provided them with a sensitivity analysis of the key levers in their business. It should be noted that because of Kiva's early stage of development, the predictive capabilities of our model are likely quite limited. However, it was designed with the intent of helping Kiva's founders understand what it would take to achieve a self-sustaining operation. Our key assumptions in building the model were:

- 2005 and 2006 are beta-mode/start-up years: Kiva broadly releases the web site and establishes its first few relationships with new MFI partners; administrative staff in the U.S. is not paid in 2005;
- Kiva adds on one MFI partner a month from 2007 through 2010; each MFI originates approximately 125 new loans per year, with an average loan size of $500;
- Average repayment term of a loan is 9 months, with an estimated default rate of 3%;
- Kiva collects 0% interest on loans;
- Upon loan repayment, 15% of funds are withdrawn by lenders, 75% are re-loaned to new businesses and 10% are donated to Kiva for operating expenses;
- Average loan amount per lender is $50;
- Each new lender is charged a $2.00 transaction fee;
- Kiva employs one person in Africa for each MFI partner to monitor the quality of loans and compliance to reporting requirements for $75 per month, or $900 per year;
- Kiva pays PayPal a 3% fee on transferred funds (both for contributed and withdrawn amounts by lenders);
- MFI partners pay for the wire fees from and to Kiva;
- Administrative staff in the U.S. spends approximately 2 hours per week to communicate with each Kiva representative and/or MFI at a cost of $0.12 per minute;
- Kiva uses Google Adwords to attract new lenders to the web site (~10% of new lenders); the majority of PR and marketing is accomplished through word-of-mouth, blogosphere and favorable press articles (~90% of new lenders);
- In 2008, Kiva leases office space.

We calculated the net lifetime value of each loan to Kiva at approximately $27, taking into account the lender acquisition cost through Google Adwords, transaction fees from new lenders, monthly operating income contribution (in this case, operating expense) and amount of funds donated to Kiva by lenders upon loan repayment. At this level, Kiva would need to disburse approximately 6,200 new loans per year in order to cover its cash overhead costs of $174,500 and eliminate the need for donations. Our sensitivity analyses to help Kiva determine potential alternatives to expedite the breakeven cash flow can be found in Appendix A.

III. Kiva's Strategic Dilemma

In October 2005, Kiva published a press release to launch its service to the general public. Within days, 30 new businesses from Uganda raised loans from third-party individual lenders. Kiva received interview inquiries from several news publications and the organization was discussed and touted in more than 200 blogs[26]. Following the publicity, several small microfinance institutions expressed interest to partner with Kiva. Some preferred to utilize Kiva's online platform to post loans in their regions in need of funding, while others wanted to license software from Kiva to set up their own web sites to access lenders on-line.

[26] Based on an internal Kiva document from December 2005.

The management of Kiva is now faced with a challenging decision to determine what kind of business model to pursue. On one hand, it licensing its software to various microfinance or lending institutions would help Kiva cover overhead expenses and reach financial sustainability in a shorter timeframe. On the other hand, Kiva would like to maintain control over the connection between lenders and MFIs, especially in Africa. One of the options that Kiva is currently considering is to develop partnerships with credible MFIs in Africa and grant them access to the Kiva's web site platform, but to license its software to organizations with operations elsewhere in the world. Kiva is also exploring the potential of setting up 'sister' web sites to kiva.org to coordinate lending to other world regions, while maintaining their separate identities to appeal to different lender groups. In order to capitalize on the high level of current interest in Kiva and pre-empt competitive entry, the management has a sense of urgency to proceed on one of these routes in the near future.

IV. Recommendations

Strategic Recommendations

Kiva's approach to micro-financing is innovative and intriguing. In the world where donors are increasingly demanding greater accountability and performance measurement from non-profit organizations, Kiva provides complete transparency in charitable lending, allows for an unprecedented amount of person-to-person connection and channels 100% of funds designated for loans to entrepreneurs in need. The organization enables small business owners in Africa and, potentially other developing countries, to reach an incredible number of prospective individual lenders in more prosperous parts of the world. At the same time, the concept offers an extraordinary richness of content to the lenders through detailed business descriptions, pictures and frequent updates from entrepreneurs on the progress of their ventures and impact of loans on everyday lives of their families and communities. In effect, Kiva leverages the e-commerce P2P model that has been very successful in commercial businesses such as eBay to facilitate 'emotionally-rich' charity-oriented transactions that can derive even greater benefits for participants of this network marketplace.

We think that, similarly to eBay, Kiva has a network-effects business model that would create disproportionate value from an increased number of lenders and MFIs/small businesses participating in its platform. Consequently, we recommend that Kiva aim to reach a critical mass as soon as practically possible to become the front-runner platform for charitable P2P lending. Kiva would serve as a marketplace for MFIs to gain access to capital. As Kiva recruits more partners who originate loans and becomes synonymous with direct lending online, more potential lenders will be drawn to the web site, reiterating the virtuous cycle of network expansion. Another advantage of Kiva becoming a portal for non-profit MFIs is that it will have to spend less effort on conducting due diligence and monitoring those organizations in Africa, instead 'delegating' that responsibility to the users of the web site who will select to fund loans from organizations with good track records in loan performance and quality of online communications. Kiva can also create and promote the online community of charitable lenders through featuring certain success stories and encouraging lenders to share their experiences of involvement with Kiva with their families and friends, thus further re-enforcing the lenders' commitment to the organization.

We believe that licensing Kiva software to other organizations is to a large extent contradictory to the network-effects business model. If many non-profits try to raise their own capital online, the charitable P2P marketplace will become fragmented. Without sufficient scale, the disparate lending-capable non-profit web sites will continue to appeal mostly to their historical donor bases without reaching out to new potential lenders who might only become interested in charitable lending when a lot of publicity is generated and credibility and trust are established for a clear leader in the space. Therefore, we recommend that Kiva maintain complete control over its technology for raising money for MFIs in Africa and focus on recruiting new partners to increase the pool of loans available to lenders. Since Kiva currently has no expertise in micro-finance in other world regions, it can license its software to select non-profits outside of Africa to raise money for its operating expenses. If the business platform in Africa proves to be successful over the next couple years, Kiva can consequently endeavor to aggregate various MFIs in other regions onto similar 'sister' web sites to leverage the network effects. In the end, this process might be difficult to implement as the needs and profiles of local entrepreneurs vary greatly across countries and may not appeal as empathetically to a wide range of charitable lenders as do small business owners in the impoverished parts of Africa. Overall, we think that the software licensing should constitute only a small part of Kiva's operations as the core business of the organization does not reside in technology development but in bringing together lenders and borrowers across the world.

Financial Recommendations

Based on our analysis of Kiva's preliminary financial model, we believe that the following elements are critical to Kiva's long-term sustainability:

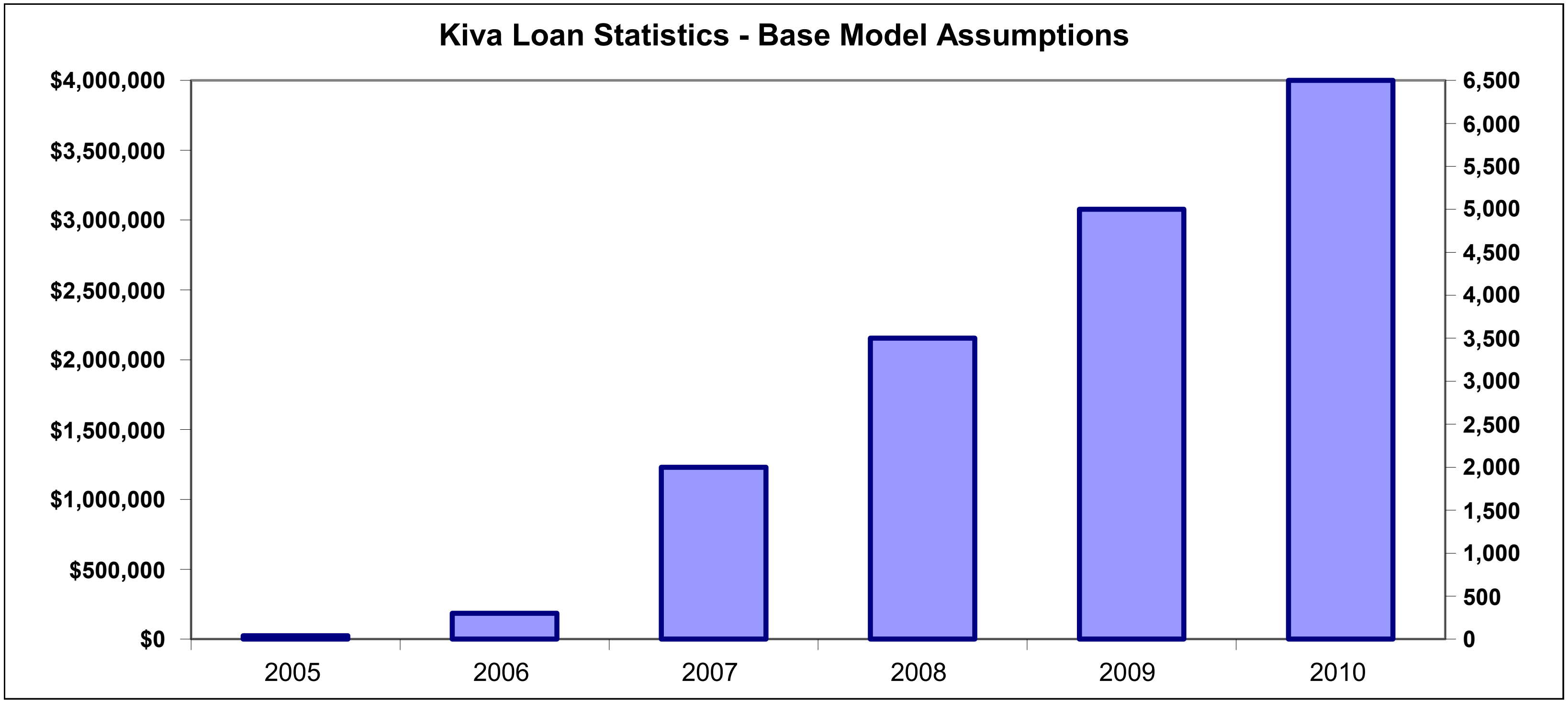
- Economies of scale: after the initial start-up stage, Kiva has to accelerate the rate of acquisition of new MFI partners and the number of loans that each MFI originates per year. In the short-term, the number of MFI partners is likely to increase slowly as Kiva needs to establish its reputation through excellent execution of the first few relationships;
- Average loan size: in true spirit of micro-finance, the founders of Kiva aspire to eventually raise loans as small as $100. We do not believe this will be economically feasible as each loan, regardless of amount, requires a considerable amount of direct service. Consequently, we maintained the average loan size at its current level of $500 in our model;
- Donations to Kiva: encourage/target a greater percentage of lenders to donate money to Kiva upon loan repayment; and
- Lender acquisition: generate free publicity for the business through word-of-mouth, blogosphere, favorable press articles and by building a strong community of lenders, who become third-party stewards for Kiva; negotiate a more favorable rate from Google for Adwords.

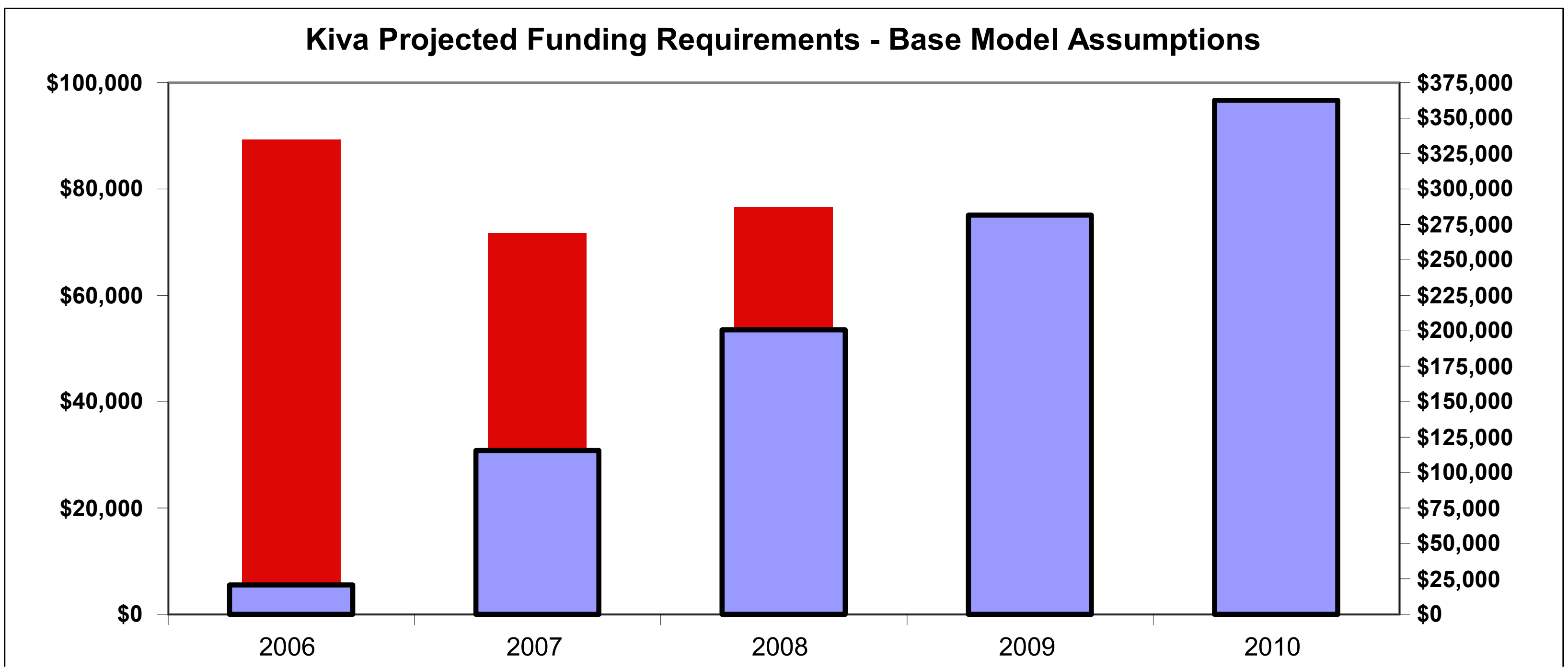
Appendix A: Kival Financial Analysis

Base Model Assumptions

- 2005 and 2006 are the beta-mode/start-up years: Kiva broadly releases the web site and establish first few relationships with new MFI partners; administrative staff in the U.S. is not paid in 2005;
- Kiva adds on average of 12 new MFI partners per year from 2007 through 2010; each MFI originates approximately 125 new loans per year, with the average loan size of $500;
- Average repayment term of a loan is 9 months, with an estimated default rate of 3%;
- Kiva collects 0% interest on loans;
- Upon loan repayment, 15% of funds are withdrawn by lenders, 75% are re-loaned to new businesses and 10% are donated to Kiva for operating expenses;
- Average loan amount per lender is $50;
- Each new lender is charged a $2.00 transaction fee;
- Kiva employs one person in Africa for each MFI partner to monitor the quality of loans and compliance to reporting requirements for $75 per month, or $900 per year;
- Kiva pays PayPal a 3% fee on transferred funds (both for contributed and withdrawn amounts by lenders);
- MFI partners pay for the wire fees from and to Kiva;
- Administrative staff in the U.S. spends approximately 2 hours per week to communicate with each Kiva representative and/or MFI at a cost of $0.12 per minute;
- Kiva uses Google Adwords to attract new lenders to the web site (~10% of new lenders); the majority of PR and marketing is accomplished through word-of-mouth, blogosphere and favorable press articles (~90% of new lenders);
- In 2008, Kiva leases office space.

Project Kiva





Project Kiva Operating Model

	2005	2006	2007	2008	2009	2010		Comments/Questions
# of MFI Partners	1	4	16	28	40	52	12	New MFIs each year after 2006
Avg. # of Loans per MFI	40	75	125	125	125	125		
Avg. Loan Amount	$500	$500	$500	$500	$500	$500		
Total # of Loans	40	300	2,000	3,500	5,000	6,500		
Total Loans Disbursed	$20,000	$150,000	$1,000,000	$1,750,000	$2,500,000	$3,250,000		
Period	Disbursement Schedule (% of Annual Loans Disbursed)							
Q1	15.0%	15.0%	25.0%	25.0%	25.0%	25.0%		
Q2	0.0%	15.0%	25.0%	25.0%	25.0%	25.0%		
Q3	0.0%	35.0%	25.0%	25.0%	25.0%	25.0%		
Q4	85.0%	35.0%	25.0%	25.0%	25.0%	25.0%		
Avg. # of Months to Repay	9	9	9	9	9	9		Select (3, 6, 9, or 12)
Default Rate	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%		
Loans O/S, Beginning	$0	$17,000	$127,500	$750,000	$1,312,500	$1,875,000		
Loans Disbursed	20,000	150,000	1,000,000	1,750,000	2,500,000	3,250,000		
Loans Repaid	2,910	38,315	366,175	1,151,875	1,879,375	2,606,875		
Loans Defaulted	90	1,185	11,325	35,625	58,125	80,625		
Loans O/S, Ending	$17,000	$127,500	$750,000	$1,312,500	$1,875,000	$2,437,500		
% Repaid Loans Withdrawn	0.0%	15.0%	15.0%	15.0%	15.0%	15.0%		
% Repaid Loans Donated to Kiva	100.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
% Repaid Loans Re-Loaned	0.0%	75.0%	75.0%	75.0%	75.0%	75.0%		
$ Repaid Loans Re-Loaned	$0	$28,736	$274,631	$863,906	$1,409,531	$1,955,156		
$ Raised from New Lenders	20,000	121,264	725,369	886,094	1,090,469	1,294,844		
Avg. Loan per Lender	$75	$50	$50	$50	$50	$50		
# of New Lenders	267	2,425	14,507	17,722	21,809	25,897		
Operating Revenue Assumptions								
Transaction Fee per Lender	$0.00	$2.00	$2.00	$2.00	$2.00	$2.00		
% Loan Interest to Kiva	10.0%	3.0%	0.0%	0.0%	0.0%	0.0%		
Operating Revenue								
Transaction Fees	$0	$4,851	$29,015	$35,444	$43,619	$51,794		
Loan Interest to Kiva	650	2,168	0	0	0	0		
Repaid Loans Donated to Kiva	2,910	3,832	36,618	115,188	187,938	260,688		
Technology Licensing Fee	0	10,000	50,000	50,000	50,000	50,000		Assumes licensing to other non-profits
Total Operating Revenue	$3,560	$20,850	$115,632	$200,631	$281,556	$362,481		
Other								
Total Max % Loan Interest	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
% Loan Interest to MFI Partners	0.0%	7.0%	10.0%	10.0%	10.0%	10.0%		
$ Loan Interest to MFI Partners	$0	$5,058	$43,875	$103,125	$159,375	$215,625		
$ Loan Interest per MFI Partner	0	1,264	2,742	3,683	3,984	4,147		
Operating Expense Assumptions								
# of Kiva Staff per MFI	1	1	1	1	1	1		
# of Kiva Staff in Africa	1	4	16	28	40	52		

Project Kiva Operating Model

	2005	2006	2007	2008	2009	2010	Comments/Questions
Annual Salary per Staff	$900	$900	$900	$900	$900	$900	

Project Kiva Operating Model

	2005	2006	2007	2008	2009	2010	Comments/Questions
# of Wires per MFI (two-way)	6	16	16	16	16	16	
Total # of Wires	6	64	256	448	640	832	
Cost per Wire to Kiva	$30	$10	$0	$0	$0	$0	Assumes MFIs should pay for wires
Funds from Lenders	$20,000	$121,264	$725,369	$886,094	$1,090,469	$1,294,844	
Funds to Lenders	0	5,747	54,926	172,781	281,906	391,031	
Total Funds Transferred w/ PayPal	$20,000	$127,011	$780,295	$1,058,875	$1,372,375	$1,685,875	
% PayPal Fee Paid by Kiva	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
# of Int'l Call Hours per MFI per Week	2	2	2	2	2	2	
Total # of Int'l Call Hours per Year	104	416	1,664	2,912	4,160	5,408	
Cost per Minute	$0.12	$0.12	$0.12	$0.12	$0.12	$0.12	
Google Adwords Estimate							
# of New Lenders	267	2,425	14,507	17,722	21,809	25,897	
% Acquired - Free Publicity	0.0%	90.0%	90.0%	90.0%	90.0%	90.0%	
% Acquired - Google Adwords	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
# of New Lenders - Google Adwords	0	243	1,451	1,772	2,181	2,590	
Conversion Rate	0.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Google Clicks	0	4,851	29,015	35,444	43,619	51,794	
Cost per Click	0	$0.50	$0.50	$0.50	$0.50	$0.50	
Operating Expenses							
Staff Salaries in Africa	$900	$3,600	$14,400	$25,200	$36,000	$46,800	
Wire Fees	180	640	0	0	0	0	
PayPal Fees	600	3,810	23,409	31,766	41,171	50,576	
Bank Account Fees	60	60	60	60	60	60	
Telephone Fees	749	2,995	11,981	20,966	29,952	38,938	
ISP & Domain Fees	215	215	215	215	215	215	
Equipment	450	450	1,800	1,800	1,800	1,800	
Travel	2,000	5,000	5,000	5,000	5,000	5,000	
Advertising (Google Adwords)	0	2,425	14,507	17,722	21,809	25,897	
Total Operating Expenses	$5,154	$19,196	$71,372	$102,730	$136,008	$169,286	
Kiva Overhead							
Staff Salaries (incl. IT)	$40,000	$81,000	$106,000	$131,000	$131,000	$131,000	
Rent	0	0	0	30,000	30,000	30,000	
Utilities	0	0	0	3,500	3,500	3,500	
Legal Services	10,000	10,000	10,000	10,000	10,000	10,000	
Accounting Services	4,000	4,000	4,000	4,000	4,000	4,000	
PR/Marketing Services	2,500	2,500	2,500	2,500	2,500	2,500	
Total Overhead	$56,500	$97,500	$122,500	$181,000	$181,000	$181,000	
Donated In-Kind							
Staff Salaries (incl. IT)	$40,000	$0	$0	$0	$0	$0	
Rent	0	0	0	0	0	0	
Utilities	0	0	0	0	0	0	
Legal Services	10,000	0	0	0	0	0	
Accounting Services	4,000	4,000	4,000	4,000	4,000	4,000	
PR/Marketing Services	2,500	2,500	2,500	2,500	2,500	2,500	

Project Kiva Operating Model

	2005	2006	2007	2008	2009	2010	Comments/Questions
Total Donated In-Kind	$56,500	$6,500	$6,500	$6,500	$6,500	$6,500	
Kiva Cash Overhead	$0	$91,000	$116,000	$174,500	$174,500	$174,500	

Project Kiva Operating Model

	2005	2006	2007	2008	2009	2010	Comments/Questions
Cash Flow Summary							
Operating Revenue	$3,560	$20,850	$115,632	$200,631	$281,556	$362,481	
Operating Expenses	5,154	19,196	71,372	102,730	136,008	169,286	
Kiva Cash Overhead	0	91,000	116,000	174,500	174,500	174,500	
Total Cash Surplus/(Deficit)	($1,594)	($89,346)	($71,740)	($76,598)	($28,951)	$18,696	
Funds to be Raised	**$1,594**	**$89,346**	**$71,740**	**$76,598**	**$28,951**	**$0**	
(Private Donations/Foundations)							
Lifetime Loan Value to Kiva							
Assumptions							
Avg. Loan Amount	$500	$500	$500	$500	$500	$500	
% from New Lenders	100.0%	80.8%	72.5%	50.6%	43.6%	39.8%	
$ Raised from New Lenders	$500	$404	$363	$253	$218	$199	
Avg. Loan per Lender	$75	$50	$50	$50	$50	$50	
# of New Lenders	7	8	7	5	4	4	
Transaction Fee per Lender	$0.00	$2.00	$2.00	$2.00	$2.00	$2.00	
% Loan Interest to Kiva	10.0%	3.0%	0.0%	0.0%	0.0%	0.0%	
Avg. # of Months to Repay	9	9	9	9	9	9	
Default Rate	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	
% Repaid Loans Donated to Kiva	100.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
Cash Flow per Loan							
Lender Acquisition Cost (Google)	$0.00	($8.08)	($7.25)	($5.06)	($4.36)	($3.98)	
Transaction Fees	0.00	16.17	14.51	10.13	8.72	7.97	
Over Loan Term:							
Loan Interest to Kiva	36.38	10.91	0.00	0.00	0.00	0.00	
Operating Expense per Loan	(128.85)	(55.90)	(28.43)	(24.29)	(22.84)	(22.06)	
Contribution Margin	(92.47)	(44.99)	(28.43)	(24.29)	(22.84)	(22.06)	
Monthly Over Loan Term:							
Loan Interest to Kiva	4.04	1.21	0.00	0.00	0.00	0.00	
Operating Expense per Loan	(14.32)	(6.21)	(3.16)	(2.70)	(2.54)	(2.45)	
Contribution Margin	(10.27)	(5.00)	(3.16)	(2.70)	(2.54)	(2.45)	
Repaid Loans Donated to Kiva	485.00	48.50	48.50	48.50	48.50	48.50	
Loan NLTV to Kiva @ 10%	**$361.36**	**$9.92**	**$24.98**	**$26.77**	**$27.46**	**$27.83**	
Loan Contribution Margin to Kiva	**$392.53**	**$11.59**	**$27.32**	**$29.28**	**$30.02**	**$30.42**	
Cash Overhead	$0	$91,000	$116,000	$174,500	$174,500	$174,500	
# of Loans to Breakeven	0	7,848	4,246	5,961	5,812	5,736	
# of Loans Disbursed	40	300	2,000	3,500	5,000	6,500	
# of Loans Shortfall	0	7,548	2,246	2,461	812	0	

Project Kiva

Sensitivity Analyses

Current Model

# of New MFI Partners/Year	$ Loans Disbursed 2007	2008	2009	2010	Cash Surplus/(Deficit) 2007	2008	2009	2010	Loan NLTV to Kiva @ 10% 2007	2008	2009	2010
2	$375,000	$500,000	$625,000	$750,000	($63,113)	($107,677)	($99,736)	($91,795)	$21.48	$23.50	$24.62	$25.36
4	500,000	750,000	1,000,000	1,250,000	(64,838)	(101,461)	(85,579)	(69,697)	22.88	25.03	26.04	26.64
6	625,000	1,000,000	1,375,000	1,750,000	(66,564)	(95,245)	(71,422)	(47,599)	23.72	25.79	26.68	27.19
8	750,000	1,250,000	1,750,000	2,250,000	(68,289)	(89,030)	(57,265)	(25,501)	24.28	26.24	27.05	27.50
10	875,000	1,500,000	2,125,000	2,750,000	(70,014)	(82,814)	(43,108)	(3,403)	24.68	26.55	27.29	27.69
12	1,000,000	1,750,000	2,500,000	3,250,000	(71,740)	(76,598)	(28,951)	18,696	24.98	26.77	27.46	27.83
14	1,125,000	2,000,000	2,875,000	3,750,000	(73,465)	(70,383)	(14,794)	40,794	25.21	26.93	27.58	27.92
16	1,250,000	2,250,000	3,250,000	4,250,000	(75,191)	(64,167)	(638)	62,892	25.40	27.06	27.67	28.00
18	1,375,000	2,500,000	3,625,000	4,750,000	(76,916)	(57,951)	13,519	84,990	25.55	27.16	27.75	28.06
20	1,500,000	2,750,000	4,000,000	5,250,000	(78,641)	(51,735)	27,676	107,088	25.68	27.24	27.81	28.11

% Loan Interest to Kiva	$ Loan Interest per MFI Partner 2007	2008	2009	2010	Cash Surplus/(Deficit) 2007	2008	2009	2010	Loan NLTV to Kiva @ 10% 2007	2008	2009	2010
0.0%	$2,742	$3,683	$3,984	$4,147	($71,740)	($76,598)	($28,951)	$18,696	$24.98	$26.77	$27.46	$27.83
0.5%	2,605	3,499	3,785	3,939	(69,546)	(71,442)	(20,983)	29,477	26.73	28.51	29.20	29.57
1.0%	2,468	3,315	3,586	3,732	(67,352)	(66,286)	(13,014)	40,258	28.47	30.26	30.95	31.32
1.5%	2,331	3,131	3,387	3,525	(65,159)	(61,130)	(5,045)	51,039	30.22	32.00	32.69	33.06
2.0%	2,194	2,946	3,188	3,317	(62,965)	(55,973)	2,924	61,821	31.96	33.75	34.44	34.81
2.5%	2,057	2,762	2,988	3,110	(60,771)	(50,817)	10,892	72,602	33.71	35.49	36.18	36.55
3.0%	1,920	2,578	2,789	2,903	(58,577)	(45,661)	18,861	83,383	35.45	37.24	37.93	38.30
3.5%	1,782	2,394	2,590	2,695	(56,384)	(40,505)	26,830	94,164	37.20	38.98	39.67	40.04
4.0%	1,645	2,210	2,391	2,488	(54,190)	(35,348)	34,799	104,946	38.94	40.73	41.42	41.79
4.5%	1,508	2,026	2,191	2,281	(51,996)	(30,192)	42,767	115,727	40.69	42.47	43.16	43.53
5.0%	1,371	1,842	1,992	2,073	(49,802)	(25,036)	50,736	126,508	42.43	44.22	44.91	45.28

% Repaid Donated to Kiva	# of New Lenders (@ $50) 2007	2008	2009	2010	Cash Surplus/(Deficit) 2007	2008	2009	2010	Loan NLTV to Kiva @ 10% 2007	2008	2009	2010
0.0%	13,775	15,418	18,051	20,683	($107,991)	($190,634)	($215,010)	($239,385)	($19.87)	($17.95)	($17.22)	($16.83)
2.5%	13,958	15,994	18,990	21,987	(98,928)	(162,125)	(168,495)	(174,865)	(8.66)	(6.77)	(6.05)	(5.67)
5.0%	14,141	16,570	19,930	23,290	(89,865)	(133,616)	(121,980)	(110,345)	2.56	4.41	5.12	5.50
7.5%	14,324	17,146	20,870	24,593	(80,803)	(105,107)	(75,466)	(45,825)	13.77	15.59	16.29	16.66
10.0%	14,507	17,722	21,809	25,897	(71,740)	(76,598)	(28,951)	18,696	24.98	26.77	27.46	27.83
12.5%	14,690	18,298	22,749	27,200	(62,677)	(48,089)	17,563	83,216	36.19	37.95	38.62	38.99
15.0%	14,874	18,874	23,689	28,504	(53,614)	(19,580)	64,078	147,736	47.40	49.13	49.79	50.15
17.5%	15,057	19,450	24,628	29,807	(44,551)	8,928	110,592	212,256	58.62	60.31	60.96	61.32
20.0%	15,240	20,026	25,568	31,111	(35,488)	37,437	157,107	276,776	69.83	71.49	72.13	72.48
22.5%	15,423	20,602	26,508	32,414	(26,426)	65,946	203,621	341,296	81.04	82.67	83.30	83.65
25.0%	15,606	21,178	27,448	33,718	(17,363)	94,455	250,136	405,816	92.25	93.85	94.47	94.81

Project Kiva

Sensitivity Analyses

Current Model

Transaction Fee per Lender	Transaction Fee as % of Avg. Loan				Cash Surplus/(Deficit)				Loan NLTV to Kiva @ 10%			
	2007	2008	2009	2010	2007	2008	2009	2010	2007	2008	2009	2010
$0.00	0.0%	0.0%	0.0%	0.0%	($100,755)	($112,042)	($72,570)	($33,098)	$10.47	$16.64	$18.73	$19.86
0.50	1.0%	1.0%	1.0%	1.0%	(93,501)	(103,181)	(61,665)	(20,150)	14.10	19.17	20.91	21.85
1.00	2.0%	2.0%	2.0%	2.0%	(86,247)	(94,320)	(50,761)	(7,201)	17.73	21.70	23.09	23.84
1.50	3.0%	3.0%	3.0%	3.0%	(78,993)	(85,459)	(39,856)	5,747	21.35	24.24	25.27	25.83
2.00	4.0%	4.0%	4.0%	4.0%	(71,740)	(76,598)	(28,951)	18,696	24.98	26.77	27.46	27.83
2.50	5.0%	5.0%	5.0%	5.0%	(64,486)	(67,737)	(18,047)	31,644	28.61	29.30	29.64	29.82
3.00	6.0%	6.0%	6.0%	6.0%	(57,232)	(58,876)	(7,142)	44,592	32.23	31.83	31.82	31.81
3.50	7.0%	7.0%	7.0%	7.0%	(49,979)	(50,015)	3,763	57,541	35.86	34.36	34.00	33.80
4.00	8.0%	8.0%	8.0%	8.0%	(42,725)	(41,155)	14,667	70,489	39.49	36.89	36.18	35.79
4.50	9.0%	9.0%	9.0%	9.0%	(35,471)	(32,294)	25,572	83,438	43.11	39.43	38.36	37.79
5.00	10.0%	10.0%	10.0%	10.0%	(28,218)	(23,433)	36,477	96,386	46.74	41.96	40.54	39.78

# New Loans per MFI	$ Loan Interest per MFI Partner				Cash Surplus/(Deficit)				Loan NLTV to Kiva @ 10%			
	2007	2008	2009	2010	2007	2008	2009	2010	2007	2008	2009	2010
100	$2,273	$2,946	$3,188	$3,317	($74,735)	($96,827)	($62,667)	($28,506)	$21.00	$23.12	$23.95	$24.40
105	2,367	3,094	3,347	3,483	(74,136)	(92,781)	(55,923)	(19,066)	21.95	23.99	24.79	25.22
110	2,461	3,241	3,506	3,649	(73,537)	(88,735)	(49,180)	(9,625)	22.81	24.78	25.54	25.96
115	2,555	3,388	3,666	3,815	(72,938)	(84,690)	(42,437)	(185)	23.60	25.50	26.24	26.63
120	2,648	3,536	3,825	3,981	(72,339)	(80,644)	(35,694)	9,255	24.32	26.16	26.87	27.25
125	2,742	3,683	3,984	4,147	(71,740)	(76,598)	(28,951)	18,696	24.98	26.77	27.46	27.83
130	2,836	3,830	4,144	4,313	(71,141)	(72,553)	(22,208)	28,136	25.59	27.33	27.99	28.35
135	2,930	3,978	4,303	4,478	(70,542)	(68,507)	(15,465)	37,576	26.16	27.85	28.49	28.84
140	3,023	4,125	4,463	4,644	(69,942)	(64,461)	(8,722)	47,017	26.69	28.33	28.96	29.29
145	3,117	4,272	4,622	4,810	(69,343)	(60,415)	(1,979)	56,457	27.17	28.78	29.39	29.72
150	3,211	4,420	4,781	4,976	(68,744)	(56,370)	4,764	65,897	27.63	29.20	29.79	30.11

% Free Publicity	Google Adwords Expense				Cash Surplus/(Deficit)				Loan NLTV to Kiva @ 10%			
	2007	2008	2009	2010	2007	2008	2009	2010	2007	2008	2009	2010
100.0%	$0	$0	$0	$0	($57,232)	($58,876)	($7,142)	$44,592	$32.23	$31.83	$31.82	$31.81
90.0%	14,507	17,722	21,809	25,897	(71,740)	(76,598)	(28,951)	18,696	24.98	26.77	27.46	27.83
80.0%	29,015	35,444	43,619	51,794	(86,247)	(94,320)	(50,761)	(7,201)	17.73	21.70	23.09	23.84
70.0%	43,522	53,166	65,428	77,691	(100,755)	(112,042)	(72,570)	(33,098)	10.47	16.64	18.73	19.86
60.0%	58,030	70,888	87,238	103,588	(115,262)	(129,764)	(94,380)	(58,995)	3.22	11.58	14.37	15.87
50.0%	72,537	88,609	109,047	129,484	(129,769)	(147,486)	(116,189)	(84,892)	(4.03)	6.51	10.01	11.89
40.0%	87,044	106,331	130,856	155,381	(144,277)	(165,208)	(137,998)	(110,789)	(11.29)	1.45	5.65	7.90
30.0%	101,552	124,053	152,666	181,278	(158,784)	(182,930)	(159,808)	(136,686)	(18.54)	(3.61)	1.28	3.92
20.0%	116,059	141,775	174,475	207,175	(173,291)	(200,651)	(181,617)	(162,583)	(25.80)	(8.68)	(3.08)	(0.06)
10.0%	130,566	159,497	196,284	233,072	(187,799)	(218,373)	(203,426)	(188,479)	(33.05)	(13.74)	(7.44)	(4.05)
0.0%	145,074	177,219	218,094	258,969	(202,306)	(236,095)	(225,236)	(214,376)	(40.30)	(18.80)	(11.80)	(8.03)

Appendix A:

Internet Innovations in Africa

Through the collaboration of local merchants who sell pre-paid cellular airtime in Africa, possibilities are opening up to use cell phones to pay loans or make deposits, saving time and money for both MFIs and borrowers. Several technology vendors are working to develop innovative new solutions along these lines.

Visa & Fastlink

Visa International has been working with leading local operators such as Fastlink in the kingdom of Jordan to pioneer a mobile payment solution in the region. This launch represents a step forward for the future of electronic commerce in Africa. Visa Mobile Recharge Service (VMRS) allows prepaid mobile phone users to recharge airtime directly from a Visa card account simply by sending an SMS. The payments platform behind the solution was built by Paris-based mobile payments company Upaid, which also supplies the technology behind IBM's on demand m-commerce initiative. The platform interacts with both operators and bank systems to authenticate the end-user based on an MSISDN (mobile phone number) combined with a PIN used to initiate the transaction. It then handles the transfer of transaction authorization and top-up message requests between the bank and the operator. Currently Visa is expanding throughout Africa by partnering with local banks to introduce the service. While there appears to be potential for success in the region, and Visa is focused on spreading the service throughout sub Saharan Africa due to the high growth potential, the market is still complex with lots of bank in the e-payment consortium using different platforms. Ongoing consolidation in the financial services industry is changing the face of banking and there is pressure to ensure trust and confidence in the banking systems.[1]

HP & ACCION International

HP, together with a consortium of partners which include ACCION International and Grameen Foundation USA, is building a new infrastructure known as the remote transaction system ("RTS"), which was prototyped in Uganda in 2004. According to HP, "RTS combines an intelligent real-time mobile environment with a state of the art management engine, and rewrites the rules of micro-financial services".[2] The components of the system are a point of sale device designed to handle the low power and cost of ownership issues associated with remote locations, a server and backend systems, and standards based software able to run on low cost PCs, all supported by wireless connectivity. The focus of this system is to enable MFIs to integrate in a more compliant manner with the financial industry and to facilitate more efficient management of loan portfolios. While the systems are primarily geared toward larger for-profit MFIs, it may also be a viable solution for reducing overhead for smaller, rural MFIs as well.

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[1] Middle East Company News, AME Info FZ LLc, May 23, 2005

[2] http://www.hp.com/e-inclusion/en/project/microfinanceweb.pdf

Safaricom and Commercial Bank of Africa

In Kenya, Safaricom has partnered with the Commercial Bank of Africa and a micro-finance company (Faulu) to design and test a micro-payment platform that allows customers to use their phone like a bank account and debit card. The customer credits their account at their local air-time dealer and can then transfer the value to another person's phone, use it to make a loan repayment or redeem it as cash. The system will allow customers to pay for a wide range of goods and services without the need for cash. This system requires the collaboration of a number of partners (MFIs, network operators, local merchants), but builds on existing technology and exploits the network infrastructure already in place, with potentially large increases in scale and outreach.[3]

Mobile technology development in Africa

Third Generation (3G) mobile services are gaining a foothold in key African markets and are expected to spread across the continent as a substitute for poor or non-existing fixed-line and Internet access infrastructures. Major cell phone providers such as Vodafone have recently increased exposure to Africa's growth markets such as the Democratic Republic of Congo, Tanzania, Lesotho and Mozambique. Vodafone's recent acquisition of Vodacom reflects confidence in the commercial development and future potential of the African telecoms market. In addition, Vodafone launched a solar charger for mobile phones enabling users to recharge batteries anywhere the sun is shining to facilitate the mobility of cell phone usage in Africa.[4] The success of the African mobile phone industry has led to a sharp rise in the number of support businesses that sell mobile airtime cards and operate community mobile payphones, giving employment to many poor rural Africans. As anecdotal evidence of this trend, many low-income earners (some of whom may not even have official ID papers) own cell phones. Verizon Wireless, a join venture of Verizon Communications and Vodafone, announced the lunch of GlobalAccess[5], a new service that gives business travelers with a two-card solution that gives them secure connection to the Internet throughout the world including Africa.

African ecommerce platforms

E-commerce is taking off in Africa with new local players spurring development in the region. Africast, founded in 1999, offers a web-based email solution in 10 African languages. In addition it is establishing commercial Internet service centers across Africa in partnership with national post offices. One of Africast's services is a web-based money-transfer service called Africash, which allows African expatriates living in North America and Europe to use the technology to transfer money to relatives in Africa. The company also offers prepaid debit cards to credit-challenged Africans.[6] Online Uganda, a subsidiary of Africa Online (one of the premium Internet and communications solution providers in the region) has expanded its reach to organizations and individuals who

[3] Daily Nation Kenya, November 1, 2005
[4] ComTex September 7, 2005
[5] Internet Business News, September 15, 2005
[6] Entrepreneurship in Africa, David S Fick

depend on the Internet for work and entertainment.[7] Trueafrican.com launched its online music store with musicians as diverse as the long serving Afrigo Band to contemporary artistes like Babe Cool, Michael Ross and Pastor Okudi.[8]

[7] ISI Emerging Markets Africawire, October 18, 2005
[8] All Africa, October 17, 2005

Appendix C:

Zopa.com: Another Peer to Peer Lending Model

Zopa.com - A new peer-to-peer business model has recently emerged. Zopa.com is a UK-based online borrowing and lending exchange that matches people, rather than businesses. The site was founded by the founders of Egg financial services: Richard Duvall. The British start-up was funded by Germany-based Wellington Partners and Benchmark Capital, the Silicon Valley venture capitalist that originally backed internet trading giant eBay. ZOPA has been invited to launch in 20 more countries, including the United States.

Individuals can sign up with Zopa as either a borrower or a lender. On application, a borrower's credit rating is checked with Equifax, and Zopa undertakes anti-fraud checks. The borrower is then placed into one of two markets depending on their credit rating, one catering for applicants with a medium to good credit rating and one for individuals with a very good rating. The borrower then stipulates a rate at which they are prepared to borrow, the amount of the loan and the repayment period. Lenders choose which market they wish to lend in depending on their appetite for risk and the rate at which they are prepared to lend. Borrowers and lenders are automatically matched up based on each party's specified criteria. Zopa's charges an up-front fee of 1% of the borrowed sum on loans ranging from £500 to £25,000.[1]

[1] Independent.co.uk, October 1, 2005

Appendix D: Sample Kiva Website Content




















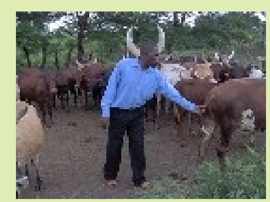

Loyo Clothes

Partner: Village Enterprise Fund
Partner Rep: Moses Onyango
Location: Tororo, Uganda
Entrepreneur: Lydia Omallo
Activity: Used Clothing (Mitumba)
Loan Amount: $300
Loan Use: Buy bells of used cloths
Start Date: December 1, 2005
Loan Repayment Term Range: 6-12 months
Status: loan has been raised

Lydia Omollo is a widow with seven children in her family.

Village Enterprise Fund (VEF) donated 100 Dollar grant to her in the year 2001. She started with a small business of selling greens, tomatoes, onions and cooking oil. Her business continued well for a period of eight months as she realized some profits.

Now, she is going to do a used clothing business. She is going to buy clothes in big quantities and then she will sell to the local people in the Mulanda market. She goes to Kampala to buy the clothes, they are less expensive in Kampala. This trip is around 300 KM each way and she takes a bus. The bus ride charges 18,000 shilling for the round trip and 2,000 shillings for each bell. She intends to buy 4 on each trip. This means that the transportation costs her around $30 US in total.

After selling all 4 bells of clothes, the approximate profit is about $200 US dollars, so this is a very good business to be in right now in Uganda.

These clothes are in many varieties. Skirt and blouse, t-shirts from america. Such T-shirts are pure cotton with pictures of American things -- University of Minnesota, Florida, baseball and football teams. They come in many varieties.

She is capable to handle the loan and to pay it back promptly.