

Acknowledgments

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More than twenty organizations that have been involved in developing or supporting the deployment of shared platforms participated in interviews and hosted us for site visits. These organizations are listed in the appendix to this report. We would like to thank each of the individuals who gave their time and shared their experiences with us.

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Overview

More than a decade ago, in their groundbreaking work on access to capital markets for the CDFI industry and pathways to scale in community development, Kirsten Moy, Greg Ratliff, and Alan Okagaki identified the potential role of shared platforms. Shared platforms - defined as technologybased structures that provide shared tools or services that enhance the capacity or efficiency of players in an industry — have long been used in the private sector to drive standardization and growth. Moy, Ratliff, and Okagaki profiled several platforms in the private and nonprofit sectors, and posited that platforms could be an important tool in building the scale of an industry, such as the community development industry, that was comprised largely of smaller, locally-based players.

A decade later, several players have worked to build platforms that support scale and efficiency in the microenterprise and financial capability fields. These include:

- LiftFund's Microloan Management System (MMS), a comprehensive, online system for loan origination;
- Association for Enterprise Opportunity's TILT Forward, an online portal that (among other services) connects microenterprise organizations to potential loan clients;
- MicroMentor, an online program that matches small business mentors with entrepreneurs aspiring to grow;

- Mission Asset Fund's social loan platform that originates and services loans for Lending Circle participants; and
- FIELD's microTracker, an online data portal and set of tools that support the collection and use of standardized performance metrics across the microenterprise field.

Each of these platforms addresses a key area of need or potential growth within the field. Yet some have struggled to reach the hoped-for levels of scale and utilization. As they have sought to grow the platforms, the managers of some platforms have needed to fundamentally change the business models. The developers and managers also have been challenged, in most cases, to both understand and raise the level of resources needed to finance their ongoing development and growth and to manage the integration of a very different line of business into their overall operations.

With support from Sam's Club Giving Program and Northwest Area Foundation, FIELD at the Aspen Institute researched 20 shared platforms serving microenterprise and asset building organizations. We have distilled their experience into a suite of three papers: Lessons for Platform Users, Lessons for Platform Developers, and Lessons for Platform Funders. Each is intended as a stand-alone document. Consequently, a substantial amount of common material appears in all three reports.

Across these three papers, six critical lessons emerge:

- Platforms, while enabled by technology, are not primarily about technology. They are about business processes, business strategies, and organizational mission.
- 2. Decisions about funding, developing, or using platforms must be grounded in choices about strategy, mission, and business model.
- Organizations considering using a platform need to recognize that capturing value from the platform will require significant organizational change.
- 4. Practitioners seeking to develop and sell platforms to other practitioners need to understand that selling a platform is a fundamentally different business than delivering credit or business assistance to entrepreneurs, and that successfully operating that new business requires different skills, a different business model, and often a different culture.
- 5. Developers of platforms need to focus first on potential customer needs, the value proposition, and the market size.
- Funders need to push potential platform
 users to consider their business strategy and
 contemplate using platforms for areas of the
 organization that are not core to their value
 proposition and mission.

We conclude that shared platforms can be a valuable tool for accelerating growth and improving efficiency and productivity. But shared platforms are not a silver bullet, and their successful implementation requires serious commitment from both users and platform providers. Platforms are most effective in helping catapult a solidly-performing but mid-size microfinance organization towards excellence and larger scale. They are generally less successful working with entities that are organizationally weak or very small in scale.

This paper is organized into four sections, of which this is the first. In the next section, "What is a shared platform?" we present definitions, background information, and a typology of shared platforms appropriate to the microenterprise and asset building fields. The core findings of this paper are presented in the third section, "Lessons." In the final section, we present short case examples of four platforms and some of the issues they faced.

What is a shared platform?

For the purposes of this research, we define shared platforms as technology-based structures that provide shared tools or services that enhance the capacity or efficiency of players in an industry. In this sense, our definition of platforms is similar in concept to other terms used to describe tools, services, and functions accessible to multiple players in an industry – terms such as "shared infrastructure," "shared services," or "shared utilities."

For-profit and nonprofit businesses have used shared or outsourced services for many years to reduce costs or increase their capacity and efficiency. However, in recent years, advances in technologies (particularly cloud computing) and the emergence of new business models have shifted the model of outsourced or shared services in fundamental ways, so that they can be operated as platforms rather than simply as independent firms. The two central new business models that have opened the door for new platforms are the "software as a service" and the "marketplace" business models.

Software as a Service

The advent of the software as a service (SaaS) business model has had critical implications for scale and innovation in the microenterprise and nonprofit sectors. The model makes it possible for organizations that have developed strength in the delivery of a product or process to make systems and expertise easily and broadly available. Rather than purchasing hardware and software needed to support a particular function, a customer can access the software through a web-based interface, typically paying on a subscription or use basis. Some for-profit companies, such as Cloud Lending and Mirador, offer cloud-based business lending platforms to

smaller banks and credit unions, as well as CDFIs and microlenders. In other instances, nonprofits in the field are building their own platforms, making them available to other organizations.

In the microenterprise field, we found three different types of SaaS platforms.

lending functions associated with a microfinance or small business lender. The fundamental purpose of core lending platforms is to help business lenders run their existing lending operations more efficiently or at larger scale. These lending operations are built around five functions: 1) finding potential customers (borrowers); 2) soliciting and receiving a complete loan application package; 3) underwriting and approving or denying the loan request; 4) closing the loan; and 5) servicing loans in its portfolio. These functions are executed sequentially as shown in this value chain.



Examples of core lending platforms include LiftFund's Microloan Management System, Community Reinvestment Fund's SPARK, Accion Network's platform for its four US affiliates, and for-profit platform operators such as Mirador and Cloud Lending. Each of these platforms performs at least one of these core lending functions. At present, none of them will do all five, but some are building additional or related value components or tools that address other elements of the lending value chain.

- Platforms that enable organizations to "add on" new products or services. Instead of "making" this additional product, the customer organization "buys" the product and the servicing of the product from the platform. These platforms allow an organization to deliver a new product or service at a lower cost, by providing tools, training, systems, or other infrastructure. Examples of product and service delivery platforms include the Mission Asset Fund's social loan platform, The Financial Clinic's Change Machine platform, the AEO TiltForward partnership with OnDeck (through which it enables CDFIs to license OnDeck's origination platform), and Businessadvisor.org. The critical point is that in most instances the products delivered by these platforms are, in fact, "add on." They augment or supplement the customer organization's existing suite of services.
- Platforms that support ancillary organizational functions, rather than the direct delivery of products and services. These include platforms that support capital raising or the collection and use of data. Several of these platforms are built to support the CDFI industry more broadly, but they also have some applicability or utility for microfinance organizations. Examples of such platforms include CapNexus, Aeris, and microTracker.org.

Marketplace Platforms

Marketplace business models create value by facilitating exchanges between two or more interdependent groups, usually consumers and producers. In contrast to SaaS, marketplace businesses do not themselves make products or deliver services to customers. Rather, they provide the venue in which exchange between buyers and sellers can take place. EBay, dating websites (e.g., Match.com), and crowdfunding websites such as Kickstarter are examples of a marketplace business. In the microenterprise world, at least one microfinance lender, Kiva U.S. (formerly Kiva Zip) has adopted this business model. Kiva U.S. is platform through which entrepreneurs can find financing for their businesses, typically provided by multiple individuals, not by traditional lenders. Similarly, MicroMentor and BusinessAdvising.org — two leading organizations that match entrepreneurs to experienced business experts both operate on marketplace business models. Microfinance organizations are also partnering with marketplace platforms. In these arrangements, such as the AEO-Tilt Forward partnership with OnDeck, and Opportunity Fund's partnership with Lending Club, the microfinance organizations are attempting to utilize the platform lenders' technological capabilities (in customer acquisition, underwriting, etc.) to expand market reach or product offerings. Consequently, we interviewed several marketplace platforms as part of our research so that their experiences could inform our work.

Lessons

Lesson 1: Recognize that offering a shared platform to other organizations is a completely new line of business that will likely require different staffing, funding, business models, and potentially even a different organizational culture.

Virtually all the platforms we researched for this study — with the exceptions of Mirador and CloudLending were created by organizations that started as either direct service providers or some type of intermediary or association. For these organizations, building and offering a shared platform represents a new and fundamentally different line of business that, to be successful, requires the development of new organizational capacities, roles, and behaviors related to product development, technology development and management, and sales and product support. The challenges in making this transition should not be underestimated, as relatively few companies manage this type of transition well. Those that succeed do so only because they recognize the need and dedicate their focus to a complete reinvention of their organization.

Lesson 2: Finding the right value proposition for a shared platform is critically important, but can be surprisingly difficult. Platform builders must have an in-depth understanding of the true needs of their potential customers.

Platform operators that have emerged out of the micro and small business development organizations have often struggled to find a clear and strong value

proposition. For a shared platform to succeed, it must provide a solution to a problem that is wellrecognized and that an organization is struggling to address, fitting their products and services to what value proposition theorists refer to as "customer jobs, pains and gains."1 For most of the shared platforms we researched, the customers are the staff of the practitioner organization, rather than their customers or clients, and it is frontline staff who must use the platform effectively to receive value. Our interviews indicated that if potential users have an entrenched (even if not optimal) way of addressing the problem that a platform seeks to solve, then effective use of the platform is often inhibited. In these instances, users often struggle to successfully implement the changes that are required to fully capture the value of the platform. Platforms that are most directly tied to an organization's core business seem to face the greatest challenges, as users will have established ways of doing all the core tasks related to their work.

The example of LiftFund's Microloan Management System is illustrative. Key elements of MMS's value proposition include access to the only databased CDFI risk model and to skilled underwriters with extensive experience looking at and analyzing microenterprise and small business loans. Most small microlenders that seek to use MMS to increase their efficiency, however, have already developed systems — typically using loan officers and loan committees, rather than a dedicated underwriter — to analyze and structure loans. To use MMS effectively, loan officers need to change their roles to be more focused on sales and document collection, and less on analysis and structuring. Of course, team members at other levels

 $^{^{\}rm 1}$ See Alex Osterwalder, Yves Pigneur, Greg Bernada, and Alan Smith, Value Proposition Design. (Hoboken, New Jersey: John Wiley and Sons, Inc., 2014).

must also be willing to make changes in their roles. But if loan officers and loan committees are not willing to change their roles and levels of engagement in the analysis and decision-making process, then using MMS may simply add an additional layer of underwriting rather than streamline the process.

Value propositions may also be weak if they solve problems that potential users do not realize exist or value insufficiently. For example, another core value of MMS is that it provides tools, processes, and access to expertise that strengthen a lender's risk management and compliance. For smaller-scale lenders, systemizing and codifying their work may not be a central part of their business strategies. Lenders that have grown significantly may, through experience, understand the value of these elements of the lending process because they will have experienced the greater numbers of delinquencies and problem loans that invariably occur with a larger portfolio,² and thus can realize the value that strong and well-organized documentation can play in the collections process. However, given the structure of the microenterprise industry, many potential MMS users have not experienced substantial growth in their portfolios, and so may not fully appreciate the critical value of strengthening an organization's risk management and compliance functions as the level of originations and size of the portfolio grow.

Finally, although a shared platform may theoretically address a clear organizational need or problem, the value proposition must fit supportively and positively into the day-to-day work-life of the staff members who will use the platform. Otherwise, staff members may choose to revert to older patterns or behaviors. Thus, a successful platform requires a highly granular operational understanding of its potential customers.

The AssetPlatform, created by the Aspen Institute Economic Opportunities Program (EOP), struggled because it did not have a clear understanding of the day-to-day work lives of its users. While EOP identified a clear need, the platform it designed and launched lacked features and functionality to be readily useful for its target users, counseling staff at asset building organizations. In contrast, The Financial Clinic's Change Machine platform was built upon the Clinic's decade of experience in delivering financial coaching. Thus, it understood in a very detailed way the problems with existing tools used by financial coaching programs, the value in having simple tools for tracking client outcomes, and the value that could come from connecting coaches to a network of peers who could help answer questions regarding specific coaching issues or challenges.

Lesson 3: The cost of building a platform is substantial, typically hundreds of thousand dollars. Equally important, however, a platform must continuously evolve and improve in response to customer needs to be successful.

Building and maintaining a platform is difficult, time-consuming, and expensive. The shared platforms examined for this research include those based on customization of existing software products or platforms (e.g., Salesforce), as well as those that were built "from scratch." The initial development costs for a platform built from scratch can be quite expensive: \$500,000 or more. Platforms based on existing software can sometimes be accomplished for less money, for example between \$50,000 and \$200,000. Two factors seem to influence development cost:

 Whether the platform principally manages a straight-line process or requires a lot of logic

 $^{^{\}rm 2}$ A larger portfolio will have higher numbers of delinquent and bad loans, even if the rate of delinquencies and loan losses stay constant.

(decision-making based on rules) that must be custom-programmed; and

 Whether the platform will be used only by program staff, or also by program clients.
 Typically, program clients will be less sophisticated users who will be less willing to deal with the idiosyncrasies or difficulties with the platform. Therefore, the customer experience must be of much higher quality.

Investment in a platform does not end once it has been built. Continuing investment is required to refine, upgrade, and further build out the platform as the number of customers grow and needs evolve. Platform operators have used a variety of approaches to inform and sustain the development of their products. Platforms can be built to enable and continually solicit user feedback, for example by having feedback buttons on key or even all pages. Some platform operators that still engage in direct product or service delivery have internal management structures that utilize their service delivery staff in the content and capacities of the platform. For example, The Financial Clinic retains its direct financial coaching program partly as a source of in-house expertise that can contribute to the coaching practice content that is a core part of its platform. The Clinic has restructured the roles of its financial coaches so that their responsibilities include time spent contributing content to the social network of financial coaches that is part of its platform.

Some shared platforms we studied have added a "data scientist" position. This individual works to analyze and interpret feedback from analytics built into the platform that can be used to improve the user experience and the effectiveness of the platform. For shared platforms that support core lending functions, the role of data scientist is also key in supporting the development of algorithms and risk models that can help to inform lending decisions.

Lesson 4: While most technology development functions can be outsourced, platform operators must have a base level of technical expertise in-house. Decisions on what to outsource, to whom to outsource, and the right relationship between nonprofit and technology vendor are critical.

Given the central role that technology plays in shared platforms and the need to continually improve the technology that power the platform, most platform operators decide that they need to have some technical expertise in-house. At a minimum, platform operators must have a staff person who understands the engineering and technology sides well enough to delineate and communicate the specifications for what needs to be done to an out-of-house engineering or software development team.

Those organizations that choose to hire software engineers face challenges in recruiting and retaining skilled individuals, especially in regions where such expertise is in high demand and highly compensated. In addition to budget stress, organizations that are not solely platform providers face the challenge of integrating these relatively highly-paid staff within the salary structure of a nonprofit organization. Most shared platform providers elect to outsource much of the technology development and maintenance — given the level of expertise required to bring this work inhouse — but there are clearly challenges to outsourcing as well. Some platform operators have chosen to work with smaller, newer technology development firms that are eager to build their client base. These providers can be more flexible and responsive to their needs and may be less expensive. On the other hand, the providers may also be more subject to capacity challenges if staff leaves or the firm faces financial challenges. Platform operators that choose to work

with larger, more established firms sometimes find that they take a back seat to larger, more lucrative customers.

The National Federation of Community Development Credit Unions (NFCDCU) is taking another approach to technology development. It is co-investing with a credit union service organization and an Italian technology firm to develop a new core processing platform that can be used by its member organizations. By taking the role of a co-investor, NFCDCU has the influence to be ensure that the technology firm is focused on the needs of its members. At the same time, the technology firm benefits as it can build upon the capacities and features of the system built for the credit union service organization to offer products to other clients.

Lesson 5: A successful platform developer and operator must adopt at least some of the organizational characteristics of a for-profit technology company.

The marketplace lenders that we researched — including Kiva U.S., Lending Club and Funding Circle — are technology companies first and financial services companies second. They follow in the footsteps of Amazon, which is a technology company first and a seller of books and other consumer products second. Other platforms that originated from outside of the microenterprise and CDFI sector have similar tech company organizational cultures.

This raises an important question for nonprofit organizations who build shared platforms. Can a nonprofit sufficiently replicate the technology company operating culture to be a successful platform developer and operator? Some of the characteristics that nonprofit service providers may be lacking are:

- Lean thinking and orientation to build (and abandon) minimum viable products. The technology world rolls out prototypes quickly, tests their viability, and goes to market. The cycle is rapid. Failure in the testing phase is acceptable. Such failures are viewed as opportunities to learn, redesign, and test a better product.
- Responsiveness in resolving customer problems, particularly technology-based issues. This can be an issue if the organization lacks in-house technology expertise.
- Continuous innovation and improvement.
 These are base-level expectations that people have for technology-based platforms. Nonprofit platforms must meet these expectations.

To some extent, these cultural differences are due to the nonprofit funding environment and their mission-based work. Philanthropic and governmental funding sources are less accepting of failure than venture capital investors who know that many or most of their investees will fail or underperform expectations. Also, nonprofits in the community development sector are serving vulnerable populations. They have a strong desire not to harm their clients. Testing new products that might fail can seem callous and contrary to mission.

Nonprofit platform operators must develop a sales and customer service culture and capacity focused on their new customer base of nonprofit organizations. Such organizations usually have established marketing and sales skills and processes for reaching entrepreneurs, but a platform's clients are other nonprofit organizations, not entrepreneurs, which require different messaging, market channels, and sales strategies. Most of the platforms designed for the microenterprise and CDFI small business lending market examined in this research were still experimenting with and refining their marketing and sales processes.

Lesson 6: Platforms that perform core lending functions can be harder for customer organizations to implement and are more likely to engender resistance from staff. Platforms that "add on" a supplemental product or service rather than displace existing core functions can be implemented with less disruption and thus can be easier to sell.

Core lending platforms require a base level of standardization. Shared platforms gain their power by leveraging economies of scale – doing the same task in the same way repeatedly. Systems and processes can then be built to repeat the task at large volume in fast, cost-efficient ways. But if each potential customer has a different product or requires the task to be done in a different way, then processes cannot be standardized and there are no economies of scale. Without standardization, the potential volume of customers is insufficient to justify the launch, growth, and expansion of a platform.

The CDFI industry is largely comprised of small organizations each offering its own products underwritten and delivered in its own idiosyncratic way. In fact, one of the underlying cultural values of the CDFI industry is customization of products and services to local needs. Through much of the industry, there is both an absence of and bias against standardization.

Nevertheless, certain loan products common to CDFIs lend themselves to platforms because regulatory compliance and reporting requirements externally enforce standardization. Two prominent examples are home mortgage lending and Small Business Administration 7(a) small business lending, such as the Community Advantage program. The regulatory

and compliance burdens for these products are sufficiently large that outsourcing to a platform is the only reasonable alternative for many organizations. Consequently, one can find examples of successful platforms built around these loan products.

Fahe, a network of approximately 50 housing organizations primarily located in Central Appalachia, services loans for 36 organizations with a total portfolio of approximately 7,000 home mortgages. Fahe made investments in technology far beyond the reach of small nonprofit housing organizations and can service loans at much less cost and with greater discipline and rigor. Fahe's competitive advantage over other mortgage servicing companies is its skill in working with low-to-moderate income homeowners and in servicing complex loan packages that bundle subsidies with conventional FHA or USDA mortgages.

For many years, Community Reinvestment Fund (CRF) has offered SBA 7(a) loan origination services for partner organizations that lacked the infrastructure, processes, and staff expertise to originate 7(a) loans cost-efficiently. Like home mortgage lending, SBA 7(a) loans have a high degree of standardization and compliance burden. Until 2014, CRF provided the service through old-style referrals: telephone follow-up calls to interested borrowers with no automation. In 2015, CRF launched SPARK, an automated platform for receiving and processing 7(a) loans that builds upon the back-end platform CRF had already built for its own needs. Potential customers can access SPARK directly through CRF's website or through the websites of partner organizations. The transition from a partner website to SPARK is seamless and invisible. In effect. SPARK allows the partner organization to "white label" the 7(a) loan product, making it appear as though it is part of its own brand.

Thus, in home mortgage and SBA lending, externally-imposed compliance requirements force standardization. The compliance burden also raises the entry barriers for organizations that wish to deliver those products. The compliance requirements have the effect of creating greater market demand for Fahe's and CRF's platforms. However, microenterprise lending does not have regulatory and compliance burdens of this nature. There is no external driver for standardization and less market demand for shared platforms.

Lesson 7: The structure and characteristics of the microenterprise industry present market challenges to growth.

The CDFI and micro and small business development market is a challenging customer base because it is dominated by many small players with limited capacity and vision for growth. While there are many opportunities for platforms and technology to increase efficiency, most players' ability and willingness to adopt platforms are challenged by their very low levels of resources and capacity and the fact that they have already developed ways to complete the functions that a platform offers. The early experiences of platform operators suggest the following:

- The organizations that are most likely to elect to use and remain with a platform are those with a strong leadership orientation toward change and growth.
- Midsize organizations appear to be the most likely and able to adopt platforms. They have the necessary staff capacity and volume to generate efficiencies from the platform, yet lack sufficient resources and capacity to build their own solutions.

The challenge within the US microenterprise field is that the number of organizations that fit this profile is not large. Data from FIELD's US Microenterprise Census indicate the microenterprise development industry has a few high-performers, a slightly larger set of mid-tier programs, and a much larger number of very small organizations. Of 77 organizations reporting at least one microfinance loan originated in 2014, 43 percent made 20 or fewer loans and another 29 percent originated between 21 and 50 loans. Thus, nearly three-quarters of microfinance organizations averaged four loans per month or less. A similar pattern exists when examining organization staff size. Roughly two-thirds of microenterprise organizations had a staff size of four or less. Given their budget and staffing levels, and the nature of current funding for the field, it seems unlikely that many microenterprise development organizations have sufficient resources and the drive to grow that are the prerequisites to successful migration to a shared platform.

The fact that microenterprise organizations have very few staff, who therefore play multiple roles, and are highly vertically integrated also seems to inhibit the choice to use platforms. For these organizations, while a platform may introduce some efficiencies, it may not necessarily fully replace the full set of roles played by a single staff person, enabling the organization to eliminate that role entirely. Thus, migrating to a platform may not reduce staffing costs. Even if the platform did enable an organization to reconfigure its staff to improve efficiency, some microenterprise development organizations are uncomfortable or unsuccessful in making these changes if they require eliminating or making significant changes in the roles of existing staff.

While larger microenterprise development organizations, particularly larger microlenders, tend to have more experience with outsourcing, they constitute a relatively small market. Also, the largest and most

sophisticated organizations have a level of resources and capacity that enables them to build their own systems or to partner with for-profit players that have superior technology capacities. For example, the four members of the Accion US Network are currently working to build their loan origination platform, as is the Intersect Fund.

Lesson 8: Nonprofit organizations that have developed and operate shared platforms have had difficulty perfecting their financial and business models.

Many nonprofit platforms have found it challenging to perfect a financially-viable business model that achieves or nears financial self-sufficiency through earned revenues. Self-sufficiency depends on reaching a threshold volume of business with services priced appropriately. As volume grows, fixed costs are spread over a larger number of customers and economies of scale can be captured. To date, few if any nonprofit platforms have grown their customer base sufficiently to attain break-even sales volume.

A critical issue for some platforms has been learning to target the right customer and find efficient and effective market channels. As discussed above, not all organizations are good candidates for platforms. It likely makes little sense, for example, for a microenterprise organization that closes 15 to 20 loans annually and has no plans for growth to incur the cost and organizational disruption of moving onto a shared lending platform. In addition to having or aspiring to sufficient volume, a customer must have a high level of commitment and a base-level of institutional capacity to successfully utilize a platform. Not surprisingly, some operators have become more stringent in screening out organizations that will not be well-suited to their platforms.

MicroMentor has also significantly revamped its business model. MicroMentor's original business strategy was to identify mentee businesses through partnerships with CDFIs and other small business-oriented nonprofits. While MicroMentor was able to add new partner organizations, they did not yield many mentee customers. Samantha Albery, MicroMentor's former executive director, said,

"We were putting a lot of energy into each partnership and the result was maybe 10 matches. We were self-critical. We thought the problem was related to our technology. So we built new functionality, got feedback, and tried to roll it out and sell it — and got no traction. We were barking up the wrong tree. The MDOs don't have the scale for us to achieve scale. They don't plan on dedicating the resources to grow, which would allow us to grow."

MicroMentor shifted its marketing to much larger customers — "enterprise sales" — that could deliver many more businesses that desired mentoring. Its first two customers were the HP LIFE Program. an entrepreneurship training started by Hewlett Packard, and Empire State Development (ESD), New York State's chief economic development agency. ESD wanted a state-wide business advising program to augment existing loan and grant programs to help small businesses recover from the devastation of Hurricane Sandy. MicroMentor and its web development team worked with ESD and its stakeholders — primarily Small Business Development Centers (SBDC) and Entrepreneurial Assistance Programs (EAP) — to design a customized mentoring system that leveraged the state's existing, on-theground small business resources.

In its first year, the system matched 645 entrepreneurs with mentors, an exponentially larger scale than most of its nonprofit CDFI partners. The mentoring service is

highly customized to the partner's needs and carries the partner's branding. Pricing for the MicroMentor service starts at \$50,000 for set-up with annual licensing thereafter of \$25,000.

Among the other shared platforms researched, some, including Change Machine, have focused their revenue-generating strategies on seat licenses similar to a Software as a Service (SaaS) model. Mission Asset Fund and AEO's partnership with OnDeck relies largely on fundraising to cover the cost of connecting new organizations to the platform. At present, MMS and MicroMentor, two of the oldest shared platforms in the field, aspire to achieve self-sufficiency in the next few years; others have longer trajectories or are not intending to be fully self-sufficient.

Case Examples

LiftFund Microloan Management System (MMS)

LiftFund originally developed the MMS platform for its own needs. In 2008, it began offering the platform to outside organizations. The first users were industry leaders who acutely needed a platform like MMS to grow their production, either because the platform offered an online loan application, because its underwriting services could supplement a customer's in-house capacity, or both. The latter feature was important to some organizations whose application volume grew more rapidly than the capacity of their internal underwriting staffs; they could turn to LiftFund for support until they could hire and train new staff. As LiftFund reached out to more organizations, it encountered challenges at two ends of the customersize spectrum. It found that lenders with the largest portfolios wanted to build their own systems, which could be customized to their own processes and needs. At the other end of the spectrum, some existing customers who were lending at lower volumes were less willing or able to adapt their processes to the MMS platform and therefore did not fully realize its benefits. Thus in 2012 and 2013, facing the attrition of some customers and lower-than-expected levels of utilization among others, LiftFund created a strategic plan for MMS and assessed the market.

With the help of consultants with expertise in the CDFI small business lending sector and financial analysis, LiftFund segmented its market into three buckets:

1) CDFIs that are still emerging and not ready for a platform; 2) CDFIs that have reached some maturity, but are not committed to growth; and 3) CDFIs that are eager to grow and intent upon doing so. LiftFund also discovered that its pricing structure was hurting smaller customers while not helping the larger ones,

not incentivizing customers to grow their lending. Realizing the realities of the market, LiftFund now focuses on supporting organizations on the platform to systematize their processes and on diversifying the use of MMS, instead of seeking to attract a substantially higher number of new users. At the core of this strategy is the recognition that the goal of MMS is not simply to provide technology, but to combine access to technology with expertise that is essential for organizations seeking to improve their lending processes. LiftFund also revised its pricing structure, so that as customers do more volume on MMS, they move up to a higher payment tier. LiftFund believes this approach will enable MMS to move closer to self-sufficiency.

As part of its revised strategy, LiftFund acquires new customers through word-of-mouth and careful vetting. Initial conversations with customers focus on a set of questions that enable LiftFund to understand: 1) the organization's operations and growth objectives; 2) whether it is ready for MMS; 3) if not, what steps it needs to take to become platform-ready; and 4) whether it aspires to do that work with sufficient intensity. With an ever-hanging market and as technology has become more democratized, MMS has upgraded the MMS system and integrated automation as part of its commitment to serving the customers who see documentation and speed of processing as key barriers. However, it continues to find that some CDFIs are still hesitant to take the chance on the technology and process changes that come with the use of MMS and the use of data (rather than loan committees) to drive their credit decisions.

AssetPlatform

In 2007, the Aspen Institute Economic Opportunities
Program noted that more and more nonprofits were
getting into financial counseling, including many social
service agencies. Many of the financial counselors

were not well-prepared and quality was highly uneven. Market research suggested that some 15,000 – 20,000 nonprofits were doing some form of assetbuilding counseling. Given that scale, it would seem that a shared platform that made training, tools, and other resources available to counselors would have had a large and ready market.

EOP was able to raise funding from philanthropic sources and launched a platform for asset building counselors, AssetPlatform. Much of the content was innovative and well-received. The site had several state-of-the-art, simulation-based training tools whereby counselors could practice and be coached on delivering certain services in an interactive, virtual environment. A cartoon-like, interactive map on buying cars helped counselors show their clients a prudent decision-making process when applying for a car loan. Many practitioners printed out a simple chart that compared terms and attributes of different debit cards and pinned it to their wall.

Nevertheless, AssetPlatform did not reach the desired level of take-up. One of the major flaws turned out to be the difficulties users had in finding the information they needed. One user described the Asset Platform to be like a great thrift store: "great stuff but you had to look hard to find it." The site lacked a good introduction and navigation tools. At its launch, the AssetPlatform did not have sufficient content. Later, it had too much content, cluttering the ease with which users could locate the particular information they needed to solve an immediate problem.

Two lessons emerged from the AssetPlatform experiment. First, the platform's designers lacked a detailed understanding of asset building counselors and their organizations. As Kirsten Moy, EOP's director, said,

"None of us were counselors. We should have had day-to-day counselors in the design process. We would have seen how chaotic their lives were, how little bandwidth they had to learn new stuff. When people have days and lives like that, they aren't going to search for better ways to do things."

Second, while EOP had sufficient funding to launch the platform, it lacked the resources to continue its development and refinement into a robust, user-friendly platform. EOP recognized the platform's deficiencies but did not have the funding to do the necessary corrections and continuous improvement. In July 2014 the Aspen Institute transferred the platform to Seedco, which has since redesigned it. The later platforms that have been successful have built the cost of improvement and upgrades into their budgets and have been able to fundraise accordingly.

MicroMentor

MicroMentor is an online platform that helps entrepreneurs to receive free business advice and support from experienced mentors. As originally conceived, the platform would be a tool to enable entrepreneurs to access specialized, often industryspecific business advice that could not be provided by microenterprise program staff who typically provided more general business support. Initially conceived and developed in 2001 by FIELD at the Aspen Institute, the original version, dubbed "MicroMentor 1.0," was built around a Microsoft Access database. While the site never reached large volumes, FIELD had enough success with the site to validate the concept. Recognizing that FIELD was not well-positioned to host and support MicroMentor, FIELD transferred MicroMentor to Mercy Corps in 2006.

Mercy Corps found that the MicroMentor 1.0 platform was not very robust and shut the site down for a period of time to make improvements, automating certain functions and integrating it with Salesforce. From 2007 to 2009, Mercy Corps worked with its technology development partner to clearly define what MicroMentor 2.0 should be and to raise funds for those improvements.

MicroMentor 2.0 launched in 2009. MicroMentor 1.0 had been built before the era of social media (LinkedIn, Facebook) and had obsolete systems to protect privacy. MicroMentor 2.0 rectified those deficiencies. A second phase of MicroMentor added more group functionality for partner organizations plus a Q&A section for the site's users. In the final year of MicroMentor 1.0, the platform made several hundred matches of entrepreneur to mentor. With MicroMentor 2.0, the match rate increased to between 800 and 1000 and stayed at that level for more than two years.

MicroMentor 3.0, launched in 2012, did not add many new features but brought an improved visual design of the platform and simplified navigation. MicroMentor experienced a significant initial boost in scale, which then plateaued at around 1,500 matches per year.

MicroMentor moved onto version 4.0 in 2015. Prior versions of MicroMentor had been based on "matching flow," whereby entrepreneurs created requests that acted like advertising, and mentors would make offers from which entrepreneur would select. MicroMentor 4.0 replaced matching flow with a process like LinkedIn, in which a more organic conversation could take place. In the first full year of MicroMentor 4.0, the platform hit nearly 3,000 matches. Currently, MicroMentor averages 10,000 connections a year.

Thus, MicroMentor's experience has shown that growth in volume happens in tandem with leaps in the functionality of the platform. MicroMentor cites this phenomenon as its biggest lesson learned. The next iteration for MicroMentor will be to provide a deeper array of mentoring services to entrepreneurs and mentors. MicroMentor will also make the technology available to more enterprise level clients such as large Fortune 500 companies, entrepreneur organizations, and public sector institutions, building on its success with companies, such as Hewlett Packard Enterprise, S&P Global, and PIMCO, and government organizations, such as the State of New York and the US State Department's African Women's Entrepreneurship Program.

Change Machine

Change Machine is a web-based financial coaching platform built and operated by The Financial Clinic, a New York nonprofit that builds the financial security of working poor. Change Machine provides a repository of tools and resources and a virtual learning community for financial coaching practitioners. Its value proposition is that it provides a tested approach and set of tools to support financial coaching and enables practitioners to stay informed about best practices and current trends in the constantly growing field of financial coaching. The platform itself has four parts:

LEARN is an interactive training platform
that enables financial coaches to build their
knowledge and skills. The curriculum is based
on Change Machine's six-part framework
for financial security, which has been peer
reviewed by field leaders and used by financial
coaches in the field for over eight years. The
curriculum is self-paced, and the Change
Machine platform also offers tools to enable
managers and supervisors to track their
coaches' progress through the curriculum.

- COACH provides financial coaches with a set of tipsheets and interactive tools that help support conversations with customers and measure their progress. COACH features an action plan that can be customized during the coaching process for each client and includes a calendar of future meetings. It provides a dashboard through which coaches can monitor progress, reward clients for achievement, and use gamified elements to show how various actions can lead to more rapid progress. It also includes more than 100 customizable and printable tools.
- SHARE is a virtual learning network through
 which coaches can learn about innovative
 ideas, find relevant content, and ask
 experienced financial coaches questions
 through a social network of professionals and
 practitioners. Members can post questions
 and generally receive answers within 24 hours.
 Users can also create and join specialized
 groups that relate to specific client populations
 (e.g., Victims of Domestic Violence, Foster
 Care) or geographies.
- MANAGE provides the management information and data systems that support the ability of the organizations that use Change Machine to track, report, and learn about their financial coaching work. Supervisors and managers can track information on client demographics, progress, and outcomes, and generate reports for internal use and external reporting. The portal can generate 150 preprogrammed reports; users can select among these to create and use the reports that are most useful to them.

The Financial Clinic offers Change Machine on a subscription (or software as a service) basis. Pricing is customized to users' needs, but typically users pay: \$9 per month per user for access only to the SHARE community, \$59 per month per COACH user for frontline staff meeting with customers, and \$129 per manager or funder user for access to account administration and reporting. The Financial Clinic has an internal technical support team and utilizes an external technology vendor for building out new features, customization to user needs, and system maintenance. As of February 2017, Change Machine had 929 users, including financial coaches and social service practitioners, from 99 organizations.

Appendix

Platforms Researched

The platforms researched for this paper include the following:

ORGANIZATION	PLATFORM	TYPE OF PLATFORM	FUNCTIONS/COMMENTS
Association for Enterprise Opportunity (AEO)	Tilt Forward	SaaS: Core Lending, Add-on Product/Services	License and distribute products and services to MFIs Capital raising; capital sharing with MFIs Lead Acquisition/Screening/Channel to Capital Provider
AEO	Project Cue	SaaS: Core Lending	Provide "warm" referrals from banks to CDFI small business lenders
Accion US Network	Accion Modernization Project (AMP)	SaaS: Core Lending	New technology platform that enables cost reductions/ reduces bottlenecks in the lending process For Accion US Network members only
Community Reinvestment Fund	SPARK	SaaS: Core Lending or Add-on Product/Service	Comprehensive platform for originating SBA 7(a) loans Can be customized to other types of small business lending
Credit Builders Alliance	CBA Reporter, CBA Business Reporter	Add-on Service or Ancillary Function	Enables and provides support for low-to-medium volume business lenders to report borrower payment histories to credit reporting agencies
EARN	Savings by Design	SaaS: Add-on Product/ Service or Ancillary Functions	Tools to increase effectiveness of matched savings programs
Fahe	Just Choice	SaaS: Core Lending or Add-on Product/Service	Deliver home mortgage products through partner relationships with CDFIs, CDCs, other nonprofits Fannie Mae seller/servicer; Sell loans to JP Morgan Chase
Fahe	Loan Servicing	SaaS: Core Lending	 Loan servicing for home mortgages Customers include CDFIs, state/local housing entities Specialize in mortgage packages with subsidy sources
The Financial Clinic	Change Machine	SaaS: Add-on Product/ Service	Web-based financial coaching platform Provides a tested approach and tools to help asset building organizations perform financial coaching functions Program management and reporting functions
Kiva	Kiva U.S. (formerly Kiva Zip)	Marketplace	 Matchmaking: borrowers to lenders/investors Max loan of \$10,000 Sourcing through website, partners, volunteer "fellows"
Kiva	Kiva.org	Marketplace; Ancillary service	Matches individuals interested providing loans to entrepreneurs across the globe with microfinance institutions (MFIs) Provides MFIs a tool to raise additional capital No longer working with MFIs in the US; only operating the marketplace model linking entrepreneurs directly with individual lenders
LiftFund	Microloan Management System (MMS)	SaaS: Core Lending	Complete lending and portfolio management platform Online loan application, underwriting, document upload and storage, decision-making, closing documents, loan servicing, risk management

ORGANIZATION	PLATFORM	TYPE OF PLATFORM	FUNCTIONS/COMMENTS
MicroMentor	MicroMentor	Marketplace	Match businesses with mentors Large-scale governmental and corporate partnerships; customizable for user branding but franchise-like arrangement International
Mission Asset Fund	Lending Circles	SaaS: Add-on Product/ Services	Franchises Lending Circle program to local entities Provides technical assistance to set up and run program, access to platform, standards, loan servicing
Opportunity Fund	Partnership with Lending Club	Partnership with marketplace lender	Lead acquisition; take declines from Lending Club Seamless online experience for borrower (not referral)
Pacific Community Ventures	Business Advising	Marketplace	Match businesses who need assistance on specific business issues with advisors Leads acquired through website and through partners (government agencies, chambers, CDFIs)
REDF	REDFworkshop.org	Add-On Services; Ancillary Functions	Tool suite for employment social enterprises Learning resources Social network, shared learning for members

For more information

To learn more about microenterprise in the United States, visit fieldus.org or aspeninstitute.org.

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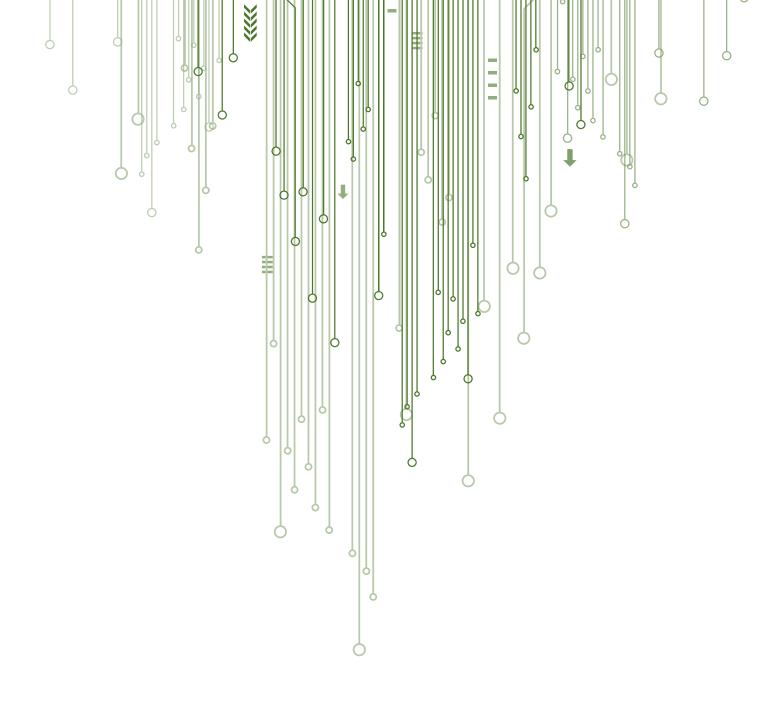
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