



## Integrating Technology into CDFI Small Business Lending: The Real Deal – Transcript

Hosted by the Business Ownership Initiative at the Aspen Institute

Wednesday, August 3, 2022

### Description

The last decade has seen a strong push to integrate new financial technologies into CDFI small business lending — a push exacerbated by the advent of the COVID-19 pandemic. Most CDFI small business lenders have begun the integration process, but found it challenging to fully access and reap the benefits of technology in finance (not to mention fintech). This shouldn't be surprising — experiences with technology across other industries and sectors could have predicted the hurdles to wide-scale adoption and successful implementation. This session identifies the critical issues the CDFI industry — and, crucially, its funders and investors — must address if they are to create value from/reap the benefits of technology:

- What is Total Cost of Ownership and why does it matter for technology tactical and strategic planning?
- Policy, process, or technology — which comes first and why?
- Why/how is scale important in realizing the benefits of technology?
- How do private and public funding practices create challenges, and what can be done to improve?

This webinar was developed as part of the Global Inclusive Growth Partnership, a collaboration between the Aspen Institute and the Mastercard Center for Inclusive Growth.

Learn more about this event on our website: <https://www.aspeninstitute.org/events/integrating-technology-into-cdfi-small-business-lending-the-real-deal/>

## Speakers



**Joyce Klein**

Senior Director, Business Ownership Initiative at the Aspen Institute

Joyce Klein is the senior director of the [Business Ownership Initiative](#), which works to expand the role of business ownership in generating economic opportunity. Ms. Klein assumed the leadership of BOI (formerly FIELD) in 2012, after working as a senior consultant since the program's inception in 1998. She is recognized as a leading expert on microlending in the US, speaking at national and regional industry conferences and being quoted in a variety of news media, including The New York Times and NPR's "Marketplace." Joyce has more than 20 years of experience studying and supporting microenterprise and entrepreneurial development programs in the US, and she has authored or co-authored numerous publications, including funder brief and strategy guides, evaluation and research reports, case studies, and policy briefs. She has also designed and managed grant programs aimed at supporting innovation in the practice of microenterprise development in the US.

Under Ms. Klein's leadership, BOI launched the [Microfinance Impact Collaborative](#) and helped to create the [Entrepreneur Backed Assets Fund](#) and the [Responsible Business Lending Coalition](#). A central focus of BOI's work includes examining the potential role of business ownership and the microenterprise field in addressing the challenges of racial inequity and the racial wealth gap.

Ms. Klein also has worked as a consultant in the microenterprise field, providing assistance to clients including the Community Development Financial Institutions Fund of the US Department of the Treasury and CFED (formerly the Corporation for Enterprise Development). Prior to her work with BOI, Ms. Klein led CFED's work in microenterprise development. She holds a master's degree in public policy from the University of California, Berkeley, and a bachelor's degree in economics from Boston College.



**Tim Ogden**

Senior Fellow, Business Ownership Initiative at the Aspen Institute

Timothy Ogden is a senior fellow with the Aspen Institute's Business Ownership Initiative and its Financial Security Program. Tim also serves as Managing Director of New York University's Financial Access Initiative (FAI), coordinating FAI's research, communications, and operations. His previous work experience encompasses the private and nonprofit sectors. Prior to joining the Financial Access Initiative he was the Chief Knowledge Officer at Geneva Global, Inc., an international philanthropy advisory company, and founding editor of Gartner Press. He founded and currently leads Sona Partners, a thought leadership communications firm, where he has helped develop more than 20 books for major publishers. Tim is co-author of *Toyota Under Fire*, and author of *Experimental Conversations*, a collection of interviews with economists conducting field experiments on poverty alleviation interventions. Tim also serves as chairman of GiveWell.

## Transcript

### Joyce Klein (00:00:05)

Hello, and welcome to today's webinar on Integrating Technology into CDFI Small Business Lending: The Real Deal. We're pleased that you've joined us today as we delve into some of the key elements that we believe are important to consider as CDFI small business lenders pursue the use of technology to support their work. And thanks to those of you who have persisted with us despite our change in dates for this event. And I'm seeing that folks are still joining. So I'm going to say that once more for those of you who it's taking a little while to get in. Hello, and welcome to today's webinar. We're glad that you're here with us today as we talk about the question of how CDFIs are integrating technology into their small business lending.

I'm Joyce Klein, and shortly my codiscusser Tim Ogden, and I will be introducing ourselves. But first I'm going to do a bit of background and housekeeping for today's event. So first as I think may be obvious to you, but in case it's not, we are recording today's session and we are going to be making the recording, the audio and the transcript available later this week on the BOI website and we'll share that link a little bit later with you. A few other things to share. To view closed captions, there is a button on the bottom of your screen, it says, "CC" or "live transcript." So you can click on that if you'd like to see them.

I think that should get you through that. So, making sure the slides go. Here we go. All right. Oh, sorry. Again, welcome everyone. My guess is that most folks who have joined us today heard about us via our emails. So you know who BOI is, but just in case, I'll share a little bit of background. The Business Ownership Initiative at the Aspen Institute works to expand economic opportunity in the US through business ownership. And in that work, we work closely with micro and small business practitioners, including very closely with CDFIs. We also work with the institutions that invest in these practitioners and our work centers on building and sharing knowledge to strengthen practice by those who are working on the ground with small business owners. In the past couple of years, we've placed a special emphasis on practices that have been effective in reaching business owners of color.

And we've been doing this work at the Aspen Institute for more than 30 years. In that time, we've focused on a range of different areas related to micro lending and micro enterprise development practice. We've looked at issues of marketing and outreach, products, underwriting, business coaching and TA, organizational elements of scale and more. And in our work in both our parent program, the Economic Opportunities Program at Aspen and in the Business Ownership Initiative, that work has included a focus on the role that technology can play in helping CDFIs and my micro enterprise organizations to reach more clients with both financing and with business development services.

This slide gives you a taste of some of the work that we've done that sort of builds up to our conversation today. So about 15 years ago, Kirsten Moore was the director of the Economic Opportunities Program and she led a set of work focused on new pathways to scale for community development finance. That work included a look at how digital and communications technologies could advance scale and sustainability in the CDFI industry as a whole. Then almost a decade ago, the team at the Business Ownership Initiative, which at the time was called FIELD at the Aspen Institute, partnered with the Opportunity Finance Network as part of the CDFI Fund's Capacity Building Initiative on capacity building work on the topic of scaling up microfinance.

And we, as part of that we presented a set of trainings and webinars on how CDFI micro lenders were using technology. And that work was based on interviews and some case studies with CDFIs that were using technology to scale their work. And then about five years ago, we published the results of research on how the micro enterprise industry was creating and using shared platforms. And finally, at

present, we're working with three different learning communities and collaboratives. Our Microfinance Impact Collaborative, our Microlending Accelerator Program, and a global learning community that we lead for the MasterCard Center for Inclusive Growth, working with their grantees who are working globally on issues of financial inclusion. And all of those learning communities and collaboratives included focus on how technology and digital tools can strengthen the work of organizations that are serving micro and small businesses.

And so our event today draws from some of the observations and lessons across that body of work that we've been engaged in for a while. So because today's session is really drawing across sort of a range of work that's been done and is being done now with BOI. Today you're going to be hearing from two members of our team, which is myself and also Tim Ogden. So in terms of our formal titles. I'm senior director of BOI and I've been doing this work at the Aspen Institute in various roles for most of the 30 years that it's been around at Aspen. Tim is a senior fellow at the Aspen Institute working with BOI and also our Financial Security Program at Aspen. His main job when he's not a senior fellow with us is as the managing director of the Financial Access Initiative, which is a research center based at NYU Wagner.

And so we're both researchers in approach, but we also want to give you a sense of what we bring to today's conversation. We thought we'd actually do that by introducing each other. So I'm going to talk a little bit about Tim. The reason I like working with Tim is that he has a pretty strange or unusual background for someone who's running an academic research center, but that strange background aligns really well with our topic today and with BOI's work on technology. So early in his career, Tim spent six or seven years working at Gartner. Many of you've probably heard of Gartner. It's a technology market research company. It advises companies big and small on buying and implementing technology.

And then Tim spent about 10 years editing and ghost writing business books that were particularly focused on the intersection of technology and business strategy. And then for some reason, I don't know why, he started studying topics like global philanthropy and microfinance, and poverty. And so for his time at the Financial Access Initiative, Tim's been an observer and a researcher of the global microfinance industry. So he can bring insights and experiences from that work at BOI, sorry, from that work to BOI's work here in the US, which is super helpful. So I'm going to turn it over to Tim and he's going to introduce me.

### **Tim Ogden (00:07:19)**

Thanks Joyce. And I enjoy being described as strange. I feel strange often fitting into some of these various conversations. Joyce and I first met when I was starting to present some work called the US Financial Diaries that we had done at the Financial Access Initiative tracking the financial lives of households living at, or near poverty in the United States. And of course, that was really relevant to Joyce's work. And she came up to me after one of the presentations and we started having a conversation about the challenges of lending at scale to entrepreneurs of color and communities of color in the United States. And I learned very, very quickly that Joyce has a lot of insight on the actual practical challenges. And so in my world, more academia, I get to talk a lot about theory about how to deploy capital and uses of capital, and capital constraints, and even theory of financial systems.

But I don't get to talk a lot about what it actually takes to do the work. And Joyce has spent 30 years working with every actor imaginable in that process of doing the work. And so I've learned a tremendous amount from her on what it means to be a CDFI in the United States and reaching excluded communities. And it's really broadened my view and helped me understand a lot of things and enriched my work a great deal. And so I'm really proud to be part of the Business Ownership Initiative where there is this real focus on actually getting on the ground and figuring out how do we deliver more capital to excluded communities and deal with the practical challenges of it. It's not just

enough to throw money at the problem. It's a organizational institutional problem and as I said, I've learned a tremendous amount from Joyce. Looking forward to this conversation today.

**Joyce Klein (00:09:28)**

So a little bit next about our sort of approach and our agenda for today. So in the webinar announcement, we shared some teasers about the focus of today's event. So just a little bit of context about why we wanted to talk about this today and what we want to focus on. I think the COVID pandemic forced CDFIs like businesses, like government institutions to move to adopt technology quickly in order to figure out how to interact virtually with customers or in the case of government with constituents. And in the past couple years, CDFIs have made a lot of progress in adopting technology, but we've also saw technology first lenders or Fintechs make significant strides in lending to our markets, particularly in terms of delivering loans via the PPP. And I think that experience over the past two years has created a lot of focus, a lot of expectations, in some cases, some pressure on CDFIs to do even more to adopt technology, particularly for CDFIs that are doing micro and small business lending.

And I think at the same time as we hear sort of this pressure or these calls for CDFIs to do more with technology, a lot of the narratives around technology use and implementation as it relates to the work of CDFIs are somewhat simplistic. So for example, some of the things we hear in conversations on this topic are things like, well, CDFIs just aren't very good at this or technology cuts costs and therefore is the solution to financial inclusion. We also hear technology makes you fast. And we also hear things like, someone should just build one common core platform for all CDFIs and they can just all adopt it, and that is going to solve our technology problems in the CDFI sector. In reality the story is a lot more complicated, especially for nonprofits and for organizations who are serving or trying to serve the customers that you serve. I think what we've seen is that CDFIs can be good at technology, but it is the fact that the nonprofit and the CDFI business model make it hard to be good at technology.

I think one of the reasons, I think we think that one of the reasons that Fintechs are fast is not because they're special in some ways, but because they're new and they don't have to deal with the challenge of putting new technology on top of legacy processes and legacy systems. I think we've also seen that while digital tools and technology can absolutely help to increase financial inclusion, it's pretty clear that reaching the most excluded or the most expensive to serve customers doesn't happen with digital solutions or tools alone. You still need people involved in that process. I think we've seen that technology can lower marginal costs, but maybe it increases total costs. And then the reason that you can't build a single platform that works for all CDFIs is because CDFIs offer different products, use different processes and have different goals. And that means their technology choices are going to differ.

So our goal for today isn't so much to rebut narratives, although we're going to go deeper into some of the narratives I've just raised, but what we wanted to do was to sort of put out and explore concepts we think can be helpful to CDFIs as they think about how to plan for, identify, select and implement technology. And our goal is to share those with you today through a conversation between Tim and myself, and then get your take on how they relate to your own experiences in thinking about, or working to adopt technology. Would be great to hear from funders or investors who have been trying to support CDFIs in this space. And we'd like to get your feedback and input as we think about what other types of content or information, or resources on this subject might be useful in your work. So here's how we're going to do this.

We know it can be hard to get really interactive in a webinar format and we have about 150 folks who've joined us today. But we do want to hear about your questions and experiences, and there are two ways to do that. First, you can use the Q&A button on the bottom of the screen to pose questions that you hope we'll address during the session. You can also use the upvoting feature. If you see someone else pose a question that's useful that you want us to, that you are enthusiastic about having

us answer, you can upvote that and we'll use that. The other thing is that we're also hoping that you will use the chat feature to share your perspectives or experiences on some of the issues that we raise. You can share those directly with Tim and me, or you can share them with the whole group.

We can make it interactive in that way. And we'd love to hear your perspectives and we think others will value that as well. So the final thing I just want to share briefly before we get into the content is just to say a thank you to the MasterCard Center for Inclusive Growth. Today's webinar is supported as part of the Global Inclusive Growth Partnership, which is a partnership between the Aspen Institute and the Center for Inclusive Growth. So with that we're going to dive in. And our first topic is, we said we'd dive into this question of, policy, process or technology, which comes first and why? And Tim, we sort of gave this away because we put them in this order on purpose. But tell us your thoughts on this question from your experience.

**Tim Ogden (00:15:11)**

Sure. And this harkens back to when I first came into the technology industry, was at a time of a tremendous amount of change within sort of IT infrastructure. So in the 90s was really the time where everybody was finally deploying PCs to everybody, not just certain people who had certain kinds of jobs, but deploying PCs, and then often deploying laptops across organizations. But it was also a time where companies were moving towards something called enterprise resource planning, which was a way of integrating their finance, their HR, and their operations and control technology, particularly for the manufacturing industry. And so there was a whole lot going on about this question of, how do you deploy technology across an organization effectively? And just to start us off, I thought I might add to the proper tone of this conversation, which is really just the conversation of.

For those of you who are my age you may remember the Underpants Gnomes from the cartoon South Park who have this plan for world domination that includes three phases, collect underpants and profit with a big question of how they were going to get from one to the other. And a common problem since the 90s, I'm sure extending even further back, in industry, as it applies, technology is the idea that technology is going to fix the problems. And once we deploy technology what we get is this output, is that we cut costs, we scale, we improve service, even we become more attractive in raising capital, without that sort of real hard thinking of the phase two. And that comes not from necessarily naivete, but that's the logic that the industry, the technology industry got very, very good at selling. Is technology fixes your problems and it makes you more agile and nimble, and increases your returns.

And as a consequence of that, as I was mentioning, that enterprise resource planning transition is, when I cut my teeth in the industry, there was this thing happening called business process reengineering, which was as ugly as that slide looks. So I throw that slide up there not to say like, this is a good idea. This is the problem with the Underpants Gnomes approach. Which is, what it means is that after you've made technology decisions, you suddenly have to go through this huge phase two to re-engineer processes to match the technology that you have. And it's always ugly, it's always vastly more expensive than anybody anticipated. And ultimately is always suboptimal and gets in the way of achieving any of the goals that people had with technology. So part of the first point here is that technology is not a solution to problems.

Processes are solutions to problems, and technology is a tool. If you allow the tool, the technology to drive the process, you can get into enormous amounts of trouble. Because ultimately what that looks like at the top of this slide is, you buy technology, technology then drives process because you have to adjust your processes to what the technology is capable of. Or the process of changing the technology to match your processes is way too expensive and time consuming that it's easier to actually change your process.

And process drives policy, if you let it, and policy drives identity, and you get this incredible backwards process. That technology which is supposed to be helping you achieve your mission, changes your mission, slowly, incrementally, imperceptibly. But if you let technology drive your process, then your process is going to drive your policy and your policy is going to drive your identity, and you end up being not what you want it to be. Not necessarily even solving the problems you set out to solve, but solving entirely different problems as it goes along. And so the real goal here for technology in something like the CDFI industry is starting with identity.

And I think the identity piece is really important, particularly for this sector, because the identity of the technology industry is really, really different from the identity of a lot of organizations who are doing this work. So to say that at the most basic level. Many of the people in the technology industry come at the world with an idea of, why would you talk to a human being, unless you absolutely have to? Let me interact with a computer. But most of the people in the CDFI industry come to this with a, why would you interact with a computer when you could talk to a person? And that's a fundamental mismatch of identity. Who is it that we want to be? And identity is really important because putting technology in place that doesn't allow you to be who you are is never going to realize the value that you want it to.

And thinking through the challenges of who are we, are we an organization that's trying to reach as many people at low cost as possible, is different from, we are an organization that's going to find the hardest to serve people no matter how difficult that is, to make sure that they can participate on an equal footing. And answering those identity questions then leads to policy questions, helps you design process, and then choosing technology based on what is actually going to improve our processes, as opposed to what processes do we need to a place to get value from our technology is the basic fundamental starting point. And many organizations struggle with that because of the external pressure of, technology is going to fix things, or questions from funders or board members that are saying, why can't you be more like that FinTech that reverse this and go technology to identity rather than identity to technology? But Joyce, you've seen a lot of this on the ground and that process play out over the last 30 years. What have you seen in the way that technology drives process and ways that process can drive technology?

### **Joyce Klein (00:22:40)**

Yeah. So I think the way that I think about this in terms of examples of where we've seen like CDFIs think about and choose technology is that, that technology choices should probably vary in part by the products offered by CDFIs and by the scale they're trying to achieve. And I think both your product offering and your scale are choices that are motivated by identity or strategy. So who am I trying to reach? What products do they need? How big do I need to get? Where is some level of scale standardization really critical to having me achieve my mission? So just to give us some examples. So for organizations that are micro lenders and who are trying to do a large volume of microlending. If you're, for example, making loans that are based largely on cash flow, on credit history and requiring minimal levels of collateral or flexible approaches to collateral, because you're really trying to reach deep into folks who don't have high wealth levels.

If you're trying to compete against for profit lenders, of whom there are a lot in the smaller dollar, small business lending space that offer products online, easy applications, fast turnaround. Then you may look at a technology that allows you to pretty quickly sort of upload, pull in bank statements or other information that's going to give you a picture of cash flow. Allows you to pretty quickly upload and look through a credit report. That allows you to do identity verification, fraud checks really quickly. Populates a streamlined pretty standardized credit manual that allows you to get to a decision pretty quickly. On the other hand, if you're a CDFI small business lender, and you are more doing sort of larger business loans to someone who's in a growth mode as a small business. You're doing maybe 50 loans a year, 100, 150 loans a year. Your loans are collateralized, they're larger.

Maybe they have an SBA guarantee. Then you want a system that's going to interact with the SBA scoring system. That's going to make sure that you're collecting and storing all the documents you need to secure that collateral to perfect the guarantee. If you're doing even fewer, like really highly customized deals that involve a lot of creativity and underwriting and building a capital stack, you may even want different things out of a sort of loan, origination loan management system. So you may not need an online application if that's the sweet side of your lending. So that's a way that even across different types of CDFI small business lenders, you might think differently about what you want from technology. That's really, again, stemming from product. The other thing I'd say, like on the servicing side from a scale perspective, we've seen servicing systems that are relatively cheap and that work fairly well.

A lot of CDFIs use that work fairly well for less than 100 loans or a couple 100 loans. But after that point, if you've got hundreds or thousands of loans in your portfolio, they're sort of simply too clunky. They require a lot of people to do that sort of monthly posting, pulling, reconciling payments. And at that point, that's when you may want to switch to a technology, maybe you're outsourcing to someone who does some of your servicing tasks that are pretty routinized, that has better technology than a CDFI can even buy.

But again, that's partly a function of identity. Like how scalable, how big a scale do we want to reach and how important that is to our mission. So that's sort of how I think about, like how I've seen that issue sort of play out. But again, thinking again, first about, what's the identity and what's the process. All right. So we talked a bit about the process of sort of selecting or thinking about where technology comes in and that sort of flow of how an organization builds its processes. Let's talk a little bit now about a second key concept that we wanted to raise, which is total cost of ownership. So talk to us a little bit about what TCO is and why it matters.

### **Tim Ogden (00:27:06)**

So total cost of ownership was something developed by one of my very first mentors, a guy named Bill Kirwin. And I mentioned sort of entering the industry at this time of wide scale personal technology, personal computer deployment. And it really was sort of a perfect encapsulation. The total cost of ownership idea expands well beyond technology, of course, or certainly well beyond PCs, but that's where it originated. At a moment where people were like, oh, deploying PCs across the organization is a process of counting how many people we have, multiplying that by \$800 or \$1000 for the cost of buying the equipment and that's our budget. And as this simple little graphic shows you, that budget is just that tip of the iceberg. And Bill's insight was, the process, the total cost of deploying technology has to include a lot more than the cost of buying the technology.

And that has continued to be a challenge for many organizations as they think about technology projects in terms of the cost of the software, the cost of the hardware, the literal technology cost. Maybe they start integrating service contracts, but even still, that's not what the cost of ownership of technology is. The cost of ownership of technology includes the cost of deploying, the costs of training, the costs of support, the costs of security, the costs of retraining every time there's a change to the application that you're using. The cost of tech support, the cost of all of these other upgrades and service that go along with deploying and using technology. And the technology industry is very invested in providing a narrative that focuses people on the oh, your annual license costs are only this big and think of all the benefit. And not thinking through or encouraging organizations not to think through the rest of the total cost of deploying and using technology.

And that then creates ongoing problems for organizations when they don't budget appropriately. And we'll talk some about this a bit later too, is this is a problem, not just a lack of sophistication from CDFIs or people in the nonprofit sector, it's a problem coming from the funders. That they don't want to see budgets that include maintenance, upgrades, service, training. They just want to see the budget that includes the capital cost, and then expect that, well, that's going to drive down your long-term

operating costs because technology always cuts costs. And it doesn't always, and doesn't take into account all of the other costs. So just to put some real specifics on this. Thinking through just the cost of deploying Microsoft Office to a group of people who hadn't used it before, just to provide this framework.

It wasn't just teaching people how to use Word. It was also recognizing that once you taught people how to use Word, not only were they going to use it, they were going to spend a lot of time changing fonts and changing type size, and redesigning their documents. Documents they never would've thought of designing in the era of typewriters. But now every document, well, yes, it's much faster to type it on the computer, but it's much slower to do all of the design work that then you do because you can. And that's a really simplistic example. But when we think about things like, underwriting software or loan servicing packages. There's a lot of training that goes into it, often to a lot of people who aren't necessarily all that comfortable with automated processes. And so you do have to do a lot of handholding, but then there's a whole lot of customization that goes along with it.

And people do more when they have the technology that then sort of the work expands the fill of the time. And so realizing some of those time savings can be quite difficult. And for organizations heading into thinking about technology deployments, it's really, really critical to think about not just the cost of purchasing, but the rest of the cost that go along with that. And when are cost savings and where are cost savings going to be realized and budgeting appropriately and raising funds appropriately to actually get the value of IT because they've accounted for those full costs.

**Joyce Klein (00:32:03)**

Great. Tim, I think the other thing I would just add here is it also, there's a, one of the huge costs or areas where you may not see the benefits if you don't invest in this is the whole sort of change management. Like, how do you help people ensure that people are using the technology in the way that's most efficient? And that's where again, I think going back to the previous slide where we said sort of identity, policy process, technology is that often what's key is getting people bought into the process, as well as that you're trying to drive with the technology. Because often if people aren't comfortable with that process, that's where they start not using the technology or doing workarounds, or you're not seeing those improvements that you're hoping to see.

**Tim Ogden (00:32:49)**

And that adds tremendously to costs is when you have, a lot of the idea of the cost savings of technology is you're replacing this slow manual process with this other process. But if you're just adding another process and some of your work is being done manually, because people aren't comfortable with the technology or comfortable with the way the process has changed. Now you're running two processes and that is inevitably dramatically more expensive than the idea of the cost savings from technology.

**Joyce Klein (00:33:22)**

Right. And I think one of the places we've seen this is where we've seen some lenders leveraging a credit model that was developed someone else to do their underwriting. And then saying, we don't like the outcome of this underwriting decision, maybe because we're trying to serve customers that fall out of their credit model, but our mission is to serve them. And then they end up sort of double underwriting everything because they don't like the way that credit outcome. So then the question becomes, did we really select the right, A, did we select the right credit scoring tool or credit model that we're leveraging

or do we want to have to force people to not be underwrite because this is the direction we're going? But that again is an identity question of who do we want to be lending to. Great.

**Tim Ogden (00:34:13)**

And another example of that, Joyce, is it's not just two internal systems. Again, for the identity of who CDFIs are, the customers they serve don't necessarily want to be digital. And I often hear funders talk about, oh, look how cheaply we can do this if we go in a FinTech model and why can't CDFIs or others adopt those models. And the reality is CDFIs are going to have to maintain two customer facing processes if they want to serve underserved communities. That's not to say that people in underserved communities don't want to use technology. Many of them have realized tremendous gains from technology because not having a human interaction we know actually can benefit a lot of people of color because they don't face human discrimination. But we also know that they have good reason to distrust automation because some of that discrimination gets built into the systems. And so on an ongoing basis, it is implausible that anybody who cares about reaching people in communities of color can go one way or the other. You have to do both.

**Joyce Klein (00:35:35)**

Great. Thank you Tim. I'm seeing folks start to answer questions. We're going to start getting to those. I'm sorry. Start to ask questions. We're going to get to some of those. But please keep queuing them up, because we're going to get to them in a little while. So thank you for that. Also, again, feel free to share reflections, reactions in the chat to everyone or just to us. So thank you. Okay. The next thing we wanted to talk about a bit and we're going to, I think we'll come back to this concept of total cost of ownership. But before we do that, we also said we would talk about why and how scale is important in realizing the benefits of technology.

And at the beginning, and we started to talk about this issue. Like, we hear technology is critical to financial inclusion because it drives down the cost of transactions for serving folks who have been excluded, serving folks who are expensive to serve. So it's been enabled to be able to reach many more folks, reach folks who haven't been reached. But in part, because you do have to think about this total cost of ownership, not just the marginal cost of a single transaction. Scale in terms of number of transactions is really key to realizing many of the benefits of technology, at least from the financial perspective of the CDFI. So tell us a little bit about why that's the case.

**Tim Ogden (00:37:01)**

So I put on my old IT consultant uniform here to put me back in the frame of mind. And another way of thinking about that question is achieving business value from technology. How do we take a technology investment and turn it into outcomes, outputs, however you want to sort of use your logic model or your log frame, or your theory of change to, we don't just care about the cost of transactions. We care about outcomes. So how do we go from the cost of a technology to an outcome? And this conversation enabled me to reach far back into my past. Achieving Business Value From Technology on the left side, that's the cover of the very first book that I worked on that came out in 2002. It was published by a Gartner consultant who specialized in this.

And you see on the right a chart from Gartner that's from last week that says, hey, we wrote a book on this 20 years ago, and still only 7% of our most technology savvy people are consistently successful in demonstrating the business value of their IT budgets. And so, the reason I throw this up here, Joyce, is just, I am very sensitive to the wrongheaded idea that people in the nonprofit industry are bad at technology and need to learn lessons from the for-profit sector or learn lessons from the technology

industry. Because the fact is nobody is good at this, which should cause us all to sort of reflect back. It's really hard. It's not that it we're bad at it in the nonprofit sector. It's that it's so hard that 93% of people in the for-profit sector on the leading edge of technology find it difficult to do this.

So why is that so hard? And I think it's helpful to have something of a framework for, what are the ways that we sort of in this amorphous way, talk about IT improving operations or improving business outcomes, or delivering value? Because there's a lot of different possible ways that it does. And this framework of economic impact, agency costs, transaction costs, organization and behavioral impact, often those just get sort of muddled into technology saves money. And you can't design and go into this with just sort of that amorphous idea. It does sort of require thinking through where do we expect technology investments to help us save money. One of those places is agency cost and agency cost is the economic theory term for just the cost of monitoring processes, external and internal actors. And technology can lower those agency costs by making it a little bit more transparent to see what's going on.

But of course that requires the investment in people who understand the technology enough, that it is transparent and not a black box. And I have heard from you plenty of stories of people struggling as you, sort of the idea you raised before of underwriting algorithms, that nobody agrees with the outcomes, and nobody really understands how it got there. And that definitely means you're not realizing business value from your technology deployment. In other places that it lowers the cost of transactions. It is absolutely true that technology can lower the marginal costs of transactions. And by that means, we mean the cost of each additional transaction. And by transactions here, I don't just mean the exchange of funds. I mean just any interaction between two people in an organization or a customer and the CDFI. Any of those transactions can get cheaper.

If you think of email. Email is a lot cheaper and faster for each email than it is to write a letter and mail it. But to get there requires tremendous capital investment, fixed costs, to be able to have the infrastructure to make your marginal costs go down. And many of the, sort of the evangelism around technology just focuses on the low marginal transaction cost and ignores the fixed costs of capital and the policy and process changes that go along with it. That when you add it all up, really complicates the question. Technology at its best is that value is realized in those lower transaction costs. But to get there, you have to do a lot of transactions. Because the fixed costs are there, the fact that you can take transaction costs from a dollar to a penny only matters if you're doing enough transactions that that 99 cents savings adds up to cover the million dollars that it cost you in capital costs to enable the infrastructure to have transactions that cost a penny.

And that's the kind of thinking through that starts from identity and policy through process. Are we going to end up with a process here that's enable us to get everybody doing, to using the technology, to have enough transactions to cover the costs that dose total costs of having the infrastructure to do this. And that is not an open and shut case. So the last concept I want to touch on here is just this last bullet in the lower right hand corner. Is that there is this pervasive idea that IT enables change to happen faster. And sometimes it does, but IT also can radically increase the costs of change. There is this idea of digital concrete that I think many of the people sitting out on this call will have encountered. Which is once you deploy a technology, it is so hard and so expensive to change it that you can't change your processes.

You just have to keep doing. There's an old skit from a British comedy show that's way too profane to show. It's even worse than the Underpants Gnomes. But it comes to this point of, there's a customer service representative who has a customer coming up to them with an obvious error and asks the customer service person to change the problem, and the person says, "Computer says no." And we see that a lot with technology problems is they create such digital concrete that actual change is harder. And making sure that doesn't happen starts with identity and properly designed processes, and then an appreciation of total cost of ownership in the first place. So those are really core features of ultimately achieving business value and understanding the impact of IT on an organization.

**Joyce Klein (00:44:32)**

Great. And I just want to point out your point, Tim, about digital concrete and how few companies have realized the business value of IT. I'm just going to take back to this point. We get this thing, like Fintechs are good at technology. CDFIs are bad at technology. Banks have really struggled with new technologies and to keep up with Fintechs. And it's partly because of the digital concrete issue, not just digital, they've also struggled with branches and physical concrete and which may not be as necessary in a digital world and what that does to their cost structure. But it's not just CDFIs that have struggled with this question. And part of it is the digital concrete thing. I think the other part that we want to talk about gets a little bit to the question of, there's a bit of a market question here when it comes to building and selling technology, and adopting technology in a nonprofit context versus a for profit context.

So I'm going to take us to that last question, which is, how do funding practices, but also to some extent, how do market dynamics around the adoption of technology in the nonprofit sector really affects the ability and some of what CDFIs confront in trying to use technology? And this is something you've written about, not just in your work, what you've done with us at BOI, or you done on microfinance institutions, but also just generally looking at technology use in the nonprofit sector.

**Tim Ogden (00:46:16)**

Yeah. And I'll touch on this briefly and I sort of referenced it is, I am a big believer that systems are big drivers of outcomes. And the system that we have created in the nonprofit sector around technology drives poor outcomes. And we've got a comment to this point from Brian in the chat, who's a CTO at a nonprofit and notes that he's one of a very small group of CTOs in nonprofits. And that's absolutely right. CTO, by the way for people who don't know is chief technology officer is distinct from a chief information officer. And you very rarely see it in the nonprofit sector. And often the distinction is the chief technology officer is the person who's really in charge of thinking through where technology can improve an organization. What are the features of technology evaluating new technology, where chief information officers are just about sort of maintaining the IT infrastructure. Which is such a huge job that they rarely have time to sort of look over the horizon on where we could get better, which is part of why there are few.

I'm going to skip over a quick slide here and we can sort of return to it if we can. But some of you may be familiar with a book from the 90s called Crossing the Chasm, and it introduced this idea of a technology adoption life cycle. That there are organizations and people who love technology, love new stuff, and are willing to adopt just about anything, no matter how painful it is just to try out the new thing. And then there's this group of people in the middle, the majority who are willing to adopt it once they understand it and know that there's help out there and that other people have used it and it works. And then you've got a group of type C people who are always sort of trailing behind.

And the Crossing the Chasm idea was aimed at the technology industry to say, your big challenge is how do you go from your early adopters to that early majority? And the nonprofit sector, what we see is that the mix of early adopters, middle adopters and late adopters is radically different and so the chasm is in a different spot. It's not in that transition from your early adopters to the majority in the middle, it's from the middle adopters to the late adopters. And the fact that the mix looks like this is primarily a function of what funders are willing to fund.

It's not that people in nonprofits aren't that interested in technology. It's that funders typically radically undervalue the cost of technology and particularly the skills of managing and implementing technology. And so nonprofits are starved both of capital budget to invest in technology, but most especially, they're starved of budget to hire CIOs and people who understand how to manage,

implement, deploy, and get value from technology. So right before the pandemic, I did this little project and I will confess I haven't updated it. So I'm not 100% confident in whether this is still the case. But that system then plays out in all sorts of ways, starving nonprofits of the skills and experience they need. As I took a look at the 20 largest nonprofits in the United States and their board of directors, and I looked for CIOs from for-profit organizations that were known to be great and effective users of technology.

And what I found was that only one of the top 20 nonprofits in the United States had a CIO on their board from a leading for-profit company using technology. If people are interested, that was Habitat for Humanity and the CIO of Walmart was on the board. And if you think about an organization that was really good at technology, Walmart is a really good, not at inventing and being cutting edge, but about getting value from technology. And that's a tragedy. Nonprofits CDFIs need CIO experience on their boards if they are going to get what they need out of technology. They need people with the experience of really understanding total cost of ownership, of understanding deployment, of avoiding the pitfalls of digital concrete. And that's a two way street. Funders need to encourage that. They need to encourage the funding for CIOs inside of nonprofits. Nonprofits need to be looking for that expertise on their boards and the for-profit companies need to be thinking about how can we help the world by making sure our best technology people are contributing their expertise to the nonprofit sector.

**Joyce Klein (00:51:49)**

Yeah. Thank you Tim. We're getting a lot of questions and so I want to transition to those. Again, folks, take a look and upvote if there are questions you particularly like and you want to hear the questions for. Tim, you've sort of gotten into this but one thing I wanted you to do is just two pieces of advice. What would you advise CDFIs to do short term to try to improve on their ability to deploy and use technology effectively? And what would you suggest they do in the long term?

**Tim Ogden (00:52:21)**

Yeah. Certainly part of this long term is that question of, how do you increase your technology management? And I don't mean technology innovation. I mean, technology management, expertise. How do you bring more of that talent in? And like I said, I think that really starts with recognizing that those skills are different and unique and they have to be part of boards. Second, I think being honest. And I run a grant funded research center, I understand the challenge of raising funds and what funders want to hear. And I think as a whole, the sector needs to start being more honest with funders about what technology really costs.

And I know how frightening that is to write those grant proposals where you know like, there's no way they're going to fund as much money as I need. But continuing to stick things together with duct tape is not going to work. Continuing to ignore actual costs is not going to work. The more that funders hear collectively, this is what it costs to achieve business value from technology. Don't expect me to deliver on something less than that. The better off we are all going to be. So those are two particular things that I would say.

**Joyce Klein (00:53:50)**

Yeah. And just as note, from a very practical perspective, like you as an organization hire a CIO or a CTO, and they're not cheap because they have skills and they're in demand. And that's part of your overhead, which your funders are always telling you, I'm not going to pay more than 10%. I'm not going to pay more than 15%. It's not direct program delivery costs and so they're not going to want you to comment there. Forgetting all the other things that go into your TCO matrix on the bottom half of the

iceberg that are also probably many of them going to land in what you look at as an overhead cost. So I'm going to transition us to some of the questions.

**Tim Ogden (00:54:36)**

We got some really great questions here.

**Joyce Klein (00:54:38)**

I know. Well, do you have one you want to start with Tim?

**Tim Ogden (00:54:42)**

So there's one question that sort of gets us a little bit more into specifics about cloud first or software as a service versus what some might call legacy where you purchase license package software and deploy it internally. And this is a big issue across of nonprofits and for-profits. And coming out of the technology industry, I can tell you that the technology industry has always been really excited about cloud and software as a service, because it means a permanent revenue stream from them. Not because it was necessarily better for the customers.

Now, that being said, there are some important advantages is, cloud and software as a service does tend to minimize cash flow and capital investments, cash flow challenges, and cash flow management, because you get to pay less on an ongoing basis. But of course it is also an example of digital concrete. Once you've adopted software as a service, you are in fact chained to the long term viability, the long term priorities of that software vendor and you can't economize. You stop paying them, you can't do your job anymore. And that is a real trade off that I think needs to be considered. But I'd also relate it to, Joyce, to our discussion from the beginning about identity. I worry a lot about software as a service and cloud based services because of that process of changing identity when you turn over control of process to someone who doesn't think the same way that you do.

**Joyce Klein (00:57:00)**

Great. Sorry, I'm looking at the questions. I'm trying to see which one to queue up next. This is sort of, I think going to take us back to the identity question. We have someone asking and I totally get this question. It's one of those questions that's super hard to answer. Which is, can you share some examples of these technologies in different groupings? How do we know, it's helpful to start in the right place when trying to think about which technologies to be investigating.

**Tim Ogden (00:57:38)**

I mean, Joyce, you absolutely know as much about this as I do and sort of the rubber meets the road. We have done some work on referral platforms and other sort of deployments of technology. But I would start with your expertise on what we've seen from some of the CDFIs that you've worked with at scaling on where they're seeing technology possibilities. I know there's been a lot of pressure on CDFIs around customer acquisition platform, servicing platforms and underwriting platforms.

**Joyce Klein (00:58:17)**

Yeah. So this is one of those things that's really hard because you really do have to start with identity and policy. And a lot of the CDFIs that we've worked with are micro lenders and they're looking to scale substantially. And so they have a microlending product that's very cash flow based, credit based. One of the things I've noted is that, and they tend to use different systems. So there are a couple of them, and I will just note, like we've worked with a vendor called LoanWell that couple of our CDFIs and our collaborative work with. I'm also the board chair of EBA Fund. We've used them as our vendors. But I want to be careful not to endorse particular technologies, because it really does depend on particular vendors, because it really depends on what you're trying to do.

But even though a couple of those organizations have used that one vendor called LoanWell, across those six, they all have different systems. And part of it's a function of digital concrete, and part of it's a function of what problem are they trying to solve for in terms of what they're trying to do in terms of their scaling journey and what the pain points are in their process. One of the things we've seen a number of them do as they've grown. So one thing we've seen is that they sometimes will use multiple sort of loan origination, loan management systems, depending on what product they're using. So they may use one product if they're doing like a community advantage or an SBA guaranteed loan. And a different one if they're doing a micro lend loan, that's very, very sort of low doc, fast turnaround because they just don't want a lot of documents.

They want something that's going to do something really different. For them they want something that has a really good online loan application potential. Another thing we've seen on the servicing end is that folks moving towards outsourcing parts of their servicing as they get to a certain level of scale. Because they've been using something like DownHome, which a lot of CDFIs use and they find at a certain level of scale it becomes really problematic for them to get the information and sort of get through all they need to do when they're servicing. There aren't a ton of great servicing options out there. But sometimes what they do is outsource to a bank who may be willing to do it at sort of low cost and do certain parts of the servicing process for them. You have to get to a pretty large scale to go to a vendor that's just a servicer.

So those are some examples. But I think the other thing I would say is it really does go to go back to this question of like, what's what are your challenges from a process perspective as you're trying to get to the identity and the outcomes you want. So do I really need like an, a really good online application or do I not need a really good online application? Like, do I need to get to a fast decision because I'm competing against someone else or do I not need to get to a fast decision? Do I really need to do something else? So it's a, that's, that's the other piece where I really hesitate to sort of make recommendations around technologies. Cause it really just depend on like, what am I trying to do? What, what part of my process do I need to fix? And as I fix it, where does technology support that? And then what are the options out there to look at?

**Tim Ogden (01:01:52)**

Yeah. And Joyce, that makes me think of a conversation we had that had a big impact on me around a person who was being pressured to automate more of some of their underwriting decisions and participate in some other information flows. That important to the identity of this CDFI was, they considered whether a person had ever not just been convicted, but charged with domestic violence and, or had it been delinquent in child support payments that they wanted to know like, what is really happening here before they ever, and it wasn't possible to get those questions answered automatically. And they were perceived then as really slow dinosaur like because that was a core part of their identity. And there was no way to automate those sorts of things into, particularly into any of the platforms that they were being pressured to adopt so that they could be faster and lower their costs.

And so thinking through those pieces, as you were saying, the process and the identity, and being able to really explain where technology improves process or where it's not going to yield savings because of the unique and very important processes that are part of the identity of a particular CDFI. Did see two questions here, Joyce, that are kind of interrelated. The lack of training follow up and the, how do we ever get people to stop using the shadow books in Excel? And I do think those things are interrelated and very real challenges. Part of the reason for talking about total cost of ownership is this exact problem that the person is identifying of the, there's two trainings, and there's never anything again. That is a recipe for not getting value out of your technology deployment, building in the ongoing cost of training and retraining.

And this relates to that software as a service question a bit ago is that technology companies pay people to change things. And when you go into software as a service or cloud based, that means that you're with an organization who has a bunch of coders around who wants something to do. And I am old enough now as someone who grew up in the technology industry to get incredibly frustrated every time a button moves on my phone, because I just want to be able to use it. I don't want to have to think about where that button went or what they're calling it now. But why do buttons change on our phones?

Because Apple and Google have people that have a job to change things around. And so that is a part of the software as a service. And then that for means you have to have lots of ongoing training because the vendor is going to keep moving things around and changing their systems. So there isn't a better answer to that than just, that's got to be part of the budget. It's got to be part of the technology deployment process. The training never stops.

**Joyce Klein (01:05:20)**

Yeah.

**Tim Ogden (01:05:21)**

If training doesn't stop, I think that does help understand why do those shadow Excel workbooks exist and it's not just because people are resistant to change. It is because people see that the system is not doing something that they need to do. And if you're not putting in the work to understand why, what it is that the person, and sometimes there's an innocent explanation. The system does do it. They just don't understand it because they don't have the training to do it. But often it's because there's something the system can't do that is really important to that person in doing their job. And so if you're not doing ongoing training and interaction and feedback, then you're not going to find that. And you're never going to get people off of those shadow Excel worksheets.

**Joyce Klein (01:06:10)**

Right. Just a couple things I would add to that. But before I do, I just want to let folks know we've got about 10 minutes left. We're going to keep going through questions. We would love some feedback from you on what additional sort of content information would be useful on this topic. We'll see if we can fill that or figure out someone else who might be able to fill that. You can share that in the chat. You can also share it, there will be a survey when you close out of the webinar. So either of those places. We really like that feedback, because we know this is a huge issue. We want to help people with it.

One of the things I either just wanted to note as an observation that gets back to this question of managing the selection and the deployment, and the use of technology is that, one of the things I've

learned from financial institutions that are trying to get better at deploying technology and also from sort of looking at FinTech to some extent and how they're doing this, is that in addition to sort of like buying or developing the tech itself, there are two other things that they really focus on doing. One is thinking about, taking a sort of user focused, customer centric, design thinking approach to product design and to process before they get to technology.

So they have a set of folks on their team who really think about, who's our customer? How do they behave? What do they need? How do we support them? How do we make this process easier for them? And technology can support that process, but it's not the only part of what makes that process better for the customer. So that's one thing that FinTechs, technology companies and others who are trying to be good about implementing technology really think about. And then the other thing is they spend a lot and they think a lot about change management and what's the role of different, and this is a cost to do change management, because it takes people's time.

But who's the champion for making sure that the training happens and we're reinforcing people's behaviors, and using the technology and figuring out where are people who are getting stuck and how to help them get unstuck. And how is that person who's the change management leader in the organization communicating with the senior leadership and telling them what they need to do to reinforce using this technology or doing this change is actually really important. So there's a set of practices that relate to this sort of technology management and development. But is broader than just what is the actual tech and what does it do or not do. Also just want to hear, just a couple things, really interesting people sharing. Just reinforcing in the chat that that experience of getting clear on what are the operational processes first, how do we get those right, and then identify how technology augments that has been something that's been useful in their practice.

#### **Tim Ogden (01:09:16)**

There's a comment here in the chat, Joyce, about an overall tech strategy and I absolutely agree. Things are better when you have an overall tech strategy. I think much of the challenge for CDFIs and having an overall tech strategy is they don't have the funding certainty to have a long term tech strategy. And that relates back to not being naive users of technology, but the reality of the systems that we live in. A tech strategy would be great if you can do it. But tech strategy is also one of these things that you have to update constantly because the environment changes, the technology tools change.

And I think many CDFIs are really daunted by the, if we go through a technology strategy process, how often do we have to update it? And how much resource are we going to have to put into continuing updating our tech strategy, given change? And then, how will we know if we will actually have the money to implement our tech strategy three years from now, because our grants are for three years? So what's the use of a long term tech strategy given change? And I'm very sympathetic to those challenges in the tech strategy.

#### **Joyce Klein (01:10:57)**

I want to just, a couple other questions. One question that I got an upvote. What unmet technology challenges are most blocking impact and process for organizations like ours? Is this the money funding question or is it something else?

**Tim Ogden (01:11:23)**

So my take on this, and Joyce and I'd be very interested in your take on this, because certainly from my perspective, a lot of the value from technology comes from scale and scaling in this space is hard. And so I'd love to hear your sort of thoughts on that piece of things. I do think often it comes back to money, but if I was to put my finger on the particular thing, it's the talent side of the question. And of course the talent side of the question comes back to, do you have the funding to hire the right kind of people? And I don't want to be the Debbie downer here, but one of my huge concerns over the next five years is I think the security environment where it comes to technology is going to get much worse and security, IT security, people are incredibly expensive.

Often you'll see that starting salaries for a topnotch security person is going to be more than an organization is paying their CEO. And that's just because they're super scarce and this is super hard. And I think that's something that as an industry as we deploy more technology around, security of that technology, CDFIs handle a lot of really sensitive information. And I do worry about the talent side of that. What happens when a significant CDFI gets hacked and the bad actor gets access to a bunch of entrepreneurs of color's bank accounts? That could be disastrous. And what will that do to the overall technology industry? And I hope the industry and the funders of the industry wake up to like, that's a very realistic scenario in the next five years.

**Joyce Klein (01:13:29)**

So I'm going to try to, because we have been a little bit of a Debbie downer today, but back to that question about what's my perspective on this. So I do think maybe part of this is about resisting some of the pressure on CDFIs to use technology in a big way. Because I do think the technology, that a lot of the benefits of the technology do come when you scale. And I don't think every CDFI needs to scale. I don't think every CDFI wants to scale. We focus a lot at our work on issues of scale, because we're always thinking about how do we get more money to folks who are underserved? We know there's a big capital gap. We're hoping that people with good products and services get in and fill that gap.

But I think in any industry, you have some players that get really big and you have some players that aren't that big and fill really important niches that we need to fill in this industry. They're in a community, they're serving certain kinds of business owners who may not be particularly faster with technology, or there's a lot of trust building involved that gets really hard to do in a solely digital way. So I think to some extent, trying to resist the pressure that says you have to use technology and you need to do a lot more with technology, and being much more focused on like, what are we trying to do? How do we deal with the process stuff first and get that right, I do want to emphasize that, and then where does technology support that? And I think a more concerted call to all funders and investors in this space to be really understanding of what it takes to actually allow nonprofits and CDFIs to use technology is really, really important. So I am noticing we are at 2:15. We didn't get to all the questions and I apologize for that.

Let me just say, Tony, if you could share, Tony and our team will share the slides again. If we go to the last, oh, I guess, if you can go to the last slide. Here's how you can find us, our website, our Twitter account. Feel free to reach out with additional questions, additional suggestions. The other thing you can do is if we didn't get your question and you want us to get back to you, we're going to download the chat. We can download the Q&A. But you can use the follow up survey at the end. If you share your question and your contact information, we can look at that as well and see if we can get back to you with an answer. But with that, I want to respect folks times. Thank you so much for joining us. We will have the recording audio transcript up on our website fairly soon, and we'll look through your feedback and see what else we might do on this subject. So thanks so much everyone. Thank you Tim. As always, it's been fun.

**Tim Ogden (01:16:32)**

Indeed. And I just want to sort of encourage people, we are trying to figure out what's the best way to deliver information like this. And so are definitely interested in any of your feedback on format and other questions. What else can we do to help CDFIs navigate this really complex space.

**Joyce Klein (01:16:53)**

Great. Thanks again everyone. Take care.