

The DIF: Designing for lasting impact that goes to scale

Design Iteration Form, Rainer Arnhold Fellows 2014

Impact is all about behavior change, and a good impact model is one that describes an efficient, systematic process to drive the necessary behavior changes. The DIF is a design tool to give you the best shot at a model that will create real impact that can get to big scale. It will help you to identify exactly what impact you want, understand what behaviors must change to get it, and formulate the interventions that will drive those behaviors – all in the context of a vision of lasting impact at scale.

The DIF is about designing an impact model, not a business model. The business model for a given venture may be perfectly aligned with or completely unrelated to the impact model, but for impact at scale, the business model should be in service to the impact model, not the other way around.

Scalability is not some vague, can-only-know-it-when-you-see-it concept; it can be designed systematically. As you design toward your vision of lasting impact at scale, it is essential to keep the key elements of scalability in mind and let them guide you through the process. These elements are:

1. Real impact: Identify exactly what you're designing toward, be clear about what behaviors will get you there, and make sure that your model will be sufficient to change them for good.
2. Cheap: The cheaper it is, the more scalable it will be. Strip away everything you don't need, look for revenue where you can, and strive for elegance – the quality of achieving the most impact with the smallest number of steps.
3. Replicable: Simple. Systematic. Minimal moving parts. Design your model so that others (perhaps not as smart or capable as you) could deliver it successfully.
4. Lasting behavior: To drive a behavior, you need the conditions so that it can happen and the incentives so that it will happen. For behavior to last, both conditions and incentives must be constant and durable.
5. Designed for the right way to scale: Imagine what it will take to get to a million people. Who is actually delivering your model at that scale? You? Others? Governments? Businesses? Identify it, and design it so that it will fit the players who will deliver it at real scale.

Part One of the DIF is focused on the design of a model that can go to scale; Part Two is about the design of a big-picture strategy and an organization that can deliver that model to scale. The two parts are equally important and interdependent.

So, with those elements echoing throughout the process, the best way to use the DIF is to:

- Read through the whole thing quickly to get a sense of the process.
- Think long and hard about your mission. Everything depends on getting it right. If you're uncertain, run it by us via email or phone.

- Do the same with impact. This is the end point that you're designing toward. It needs to be right.
- Be very inclusive with your list of behaviors, even if you end up with stuff that you won't – or can't – do anything about.
- When you're finished, go through it again. You may see it differently after having gone through the process once.
- Relax. You're probably going to change most of it anyway.

We'll illustrate the DIF process with the fictional work of a guy we'll call Fred. Follow him as he staggers through the process.

PART ONE: Designing a model

Example DIF: Fred throws nets out of a plane

Imagine this: our flight delayed, we meet a guy named Fred in the airport bar in Kampala. He's a garrulous guy in his 60's, made a bunch of money in his 40's and wants to "give back." Fred was a pilot in the Vietnam War and still flies a lot. He caught the Africa bug on a safari trip, and his adored grandkids have left him obsessed with the well-being of children.

Fred says he's started a project in a remote part of southwest Uganda. We brace ourselves. We think we've heard this on before. "I'm throwing mosquito nets out of a plane!" We sigh. Fred can see that we think he's nuts, so he starts telling us about the Poverty Action Lab study demonstrating that free distribution of nets is the best way to get kids under them, and how his analysis of the area showed him that lots of people are out of reach of government services or even roads. We perk up. Just then the loudspeaker announces that we'll be in the bar for four more hours, so we persuade Fred to be a guinea pig and go through the DIF process with us.

1. Mission

Decide on and say exactly what you're trying to accomplish with your big idea. This is what everything you do will be designed *toward*. Capture it in **eight words or less**, and include a verb, a specific target population or setting, and a big outcome that implies something to measure. The mission is about **what** you're going to do, **not how** you're going to do it. A good mission statement is generic – even kind of boring – but specific, like this:

- "Get African one-acre farmers out of extreme poverty" (note: "extreme poverty" means not enough to eat.)
- "Prevent HIV infection in Brazil"
- "Save coral reefs in the South Pacific"
- "Educate slum kids in West Africa"

Notice how specific these missions are about the target populations/settings. That is absolutely essential to a useful mission statement. Also note modifiers like “extreme” that focus the mission further.

Fred’s mission

Fred knows that children are the ones most at-risk of dying from malaria, and that anything that benefits children will also benefits adults. So, he formulates his mission as:

“Prevent childhood malaria in remote regions of Uganda”

2. Big idea

This is about your central, distinctive idea about **how** to accomplish the mission - the idea at the core of all you do, (some people might call this your “theory of change”). Usually it’s about how you drive behavior. Get your idea down to a sentence that captures your special sauce. Keep working on it until you really like it. Capture your idea first if it helps you sort out your mission. This isn’t a hugely important step, but it’s nice to distill your idea to its essence, both to help you communicate it and think about it. Some examples:

- “Design, market and sell money-making products that farmers can afford and will use”
- “Eradicate devastating invasive species from islands so that endemic species and ecosystems can recover”
- “Use existing community groups to provide poor farmers with the integrated delivery of farm education, credit and access to cash buyers they need to make a decent living”

Fred’s Big Idea

Throwing nets out of a plane: get kids under mosquito nets by delivering insecticide-impregnated bed nets in high-malaria regions that can’t be reached by road.

3. Impact

Identify the *single best* indicator – an outcome, not a behavior – that would let you know if you’re fulfilling the mission. This makes you focus in on a more specific, granular and practical outcome. Yes, it’s hard to narrow it down to one, but do it anyway. It needs to be at least theoretically observable and measureable, even if perhaps really hard to do in the real world. This is a critical step: *it defines what you’re designing for.*

Here are some examples from the missions above:

- “Increase in farm income”
- “Decrease in HIV infection rates”
- “Biological indicators of coral health”
- “Functional literacy and numeracy”

Fred’s impact

Decreased malaria rates in children under five

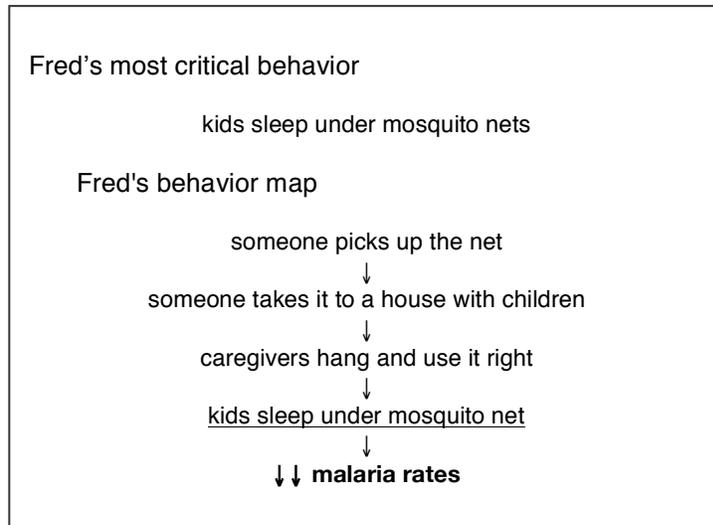
4. Behavior mapping

Impact comes from action, from someone doing something differently. What do you want people to do differently to create that impact? What are the end-user behaviors that will directly lead to the impact you’re looking for? Are there any behaviors that make an important indirect contribution to impact? Design for impact is focused on behavior – how to drive it and maintain the behavior(s) that create impact.

To start, put down the most critical behavior change that must happen for impact.

- “Farmers adopt new set of farming practices”
- “Teenagers practice safe sex”
- “Island communities guard reefs and maintain sustainable fishing levels”
- “Teachers use scripted curriculum”

Behaviors that directly create impact don’t happen in isolation, though – getting to impact usually requires a connected sequence of behaviors. To ensure maximum impact, you’ve got to “connect the dots” and run through all the behaviors necessary to get there. List them in sequence as a simple flow diagram of *who must do what* all the way to impact. Start with your key behavior and use it as the starting point for a list. It may be that not everything fits into a chain of sequential behavior, so just list any additional behaviors off to the side – that’s why we call it a map.



5. Interventions

Look at your list of behaviors. Figure out which ones would happen without you and take them off the list. Of those that remain, put down – in brief – what you’re going to do to make them happen. These are your *interventions*. This is the list of the things you have to do – the activities that you must craft into a scalable model.

Bear in mind that changing behavior is hard, and that ideas that require you to change more than 3-5 behaviors are going to be pretty complicated (i.e., not very replicable).

This is the step that often sends people scurrying back to do more research as it becomes clear that they didn’t think about some aspect of behavior change or don’t yet know the state of the art.

Here’s something worth doing once you’ve listed your interventions: Look at each at each necessary behavior in terms of **conditions and incentives**: are the conditions in place such that the behavior *can* happen, and are the incentives there so that it *will* happen? This is a systematic way of checking that the intervention is sufficient and it often suggests way of adding or modifying interventions. Can happen, will happen, can happen, will happen...and so on down the list. Even better: make it easy, make it desirable...

We’re not going to get to it in this iteration, but know that your list of critical intervention – formulated so that they can be delivered in a systematic and replicable way – make up what we call *the model*.

Fred's interventions

Uh oh. Fred now realizes that isn't certain that any of those behaviors will happen if all he does is throw nets from a plane. He makes a desperate stab at some ideas:

Someone picks up the net:

- Initial mapping process, notification per social marketing campaign, bright packaging and well targeted drops to ensure visibility

Someone takes it to a house with children:

- Well-designed social marketing, targeted drops, saturation – excess nets til market is saturated

Caregivers hang and use it right:

- Social marketing campaign, effective instructions in packaging

Kids sleep under it:

- Social marketing campaign

6. Who's going to take it to scale?

To design a scalable model, you need to think about who is going to deliver it at scale: if it isn't designed for them, then it is unlikely to get there. A useful way to think about scale is to imagine what it will take to create profound impact in the lives of a million people. This is about how your *model* will create impact at scale, and not necessarily how your *organization* will scale; in fact, the big question is exactly *who* is going to implement your model at scale to create big impact. Your fundamental choice is whether you're going to a) do it yourself or b) get others to do it.

A) Do it yourself.

There are two ways to do it yourself. The first is to create a big organization, either a big company (if your model is for-profit) or a big NGO (if not-for-profit). The second option is to create and release open-source platforms and tools that other organizations and individuals can use to amplify their own impact.

1) A big organization

You may sell stuff, provide services on the ground, do media campaigns, lobby government, but whether a company or NGO, you'll have to raise a lot of money and build/manage an increasingly complex operation – and when you prioritize

impact, it can be just as hard to raise for-profit money as not-for-profit. The upside is that you'll be able to control the quality of implementation, which is especially important when your model is complex and/or requires very faithful execution of the original design. The downside is that very few organizations – with the exception of those who leverage the media – manage to grow big enough to drive impact in the lives of millions. There are simply too many hurdles.

2) Open-source platforms

Some impact models are based on open-source materials disseminated via the Internet or by physical means. Open-source, platform solutions must be designed with the eventual end-user in mind – businesses, NGO's, governments, individuals – because that user must be able to put them to good use. Open source solutions are very cheap to disseminate and have huge potential for scale but there are some big problems:

- There are very few zero-touch platforms that lead to big impact; most require at least some interaction with the client to yield maximum impact, which gets you back to some version of creating a big organization.
- You have zero control over quality.
- It's hard to prove impact.
- Few of these models have proven to have significant impact and often have a short half-life.

B) Get others to do it.

Getting others to implement your model can be a tricky business, but it's often the only way to make things happen at a scale that matters. The routes available to you depend on your target population and the nature of your impact model. Here are your choices:

1) The market

This is not the establishment of a single big firm; it's about spawning many businesses via an emerging industry, or leveraging existing businesses to deliver your business model, product or service. It depends on a profitable, easily replicable business model that can reliably deliver your impact model.

- Upside: essentially limitless potential infrastructure and capital
- Downside: relatively few interventions that benefit the very poor or the common good have sufficient potential for-profit; few business models are simple enough to be easily replicable.
- Best whenever someone can make money off key parts of the model without getting off mission

2) Governments

Scaling via government is complicated by the fact that there are three “pieces” to government implementation of a given model:

1. The doer: The one who establishes and administers the program to deliver the model
2. The infrastructure: The facilities and personnel needed to carry out the program
3. The payer: The ones who finance the program

Ideally, the government provides all three pieces. Things are rarely ideal. The government’s minimal role is to provide the basic infrastructure. In most cases, someone else provides one or both of the other pieces. The doers may be NGOs or private contractors; non-government payers are typically bi- or multi-lateral funders, and sometimes private funders. The end result at scale can be any combination of the above.

- Upside: leverages policy; extensive infrastructure and reach
- Downside: corruption, instability, and inability to implement complex interventions
- Best for the delivery of “public goods” – water, education, health and so on – via simple, bombproof interventions at big scale
- Models must be relatively simple and bulletproof

3) NGOs

There are a lot of NGOs out there. Replication of your model by other NGOs rarely can achieve the scale afforded by markets or governments, but they can be useful as either an intermediate step to scale or as delivery vehicles for models that, for whatever reason, don’t fit governments or markets.

- Upside: lots of them, sometimes with extensive distribution networks
- Downside: NGOs don’t often adopt or do a good job of implementing interventions developed by others
- Best for delivery of “public goods” if government is not an option
- Sometimes licensing or other agreements can help ensure quality delivery

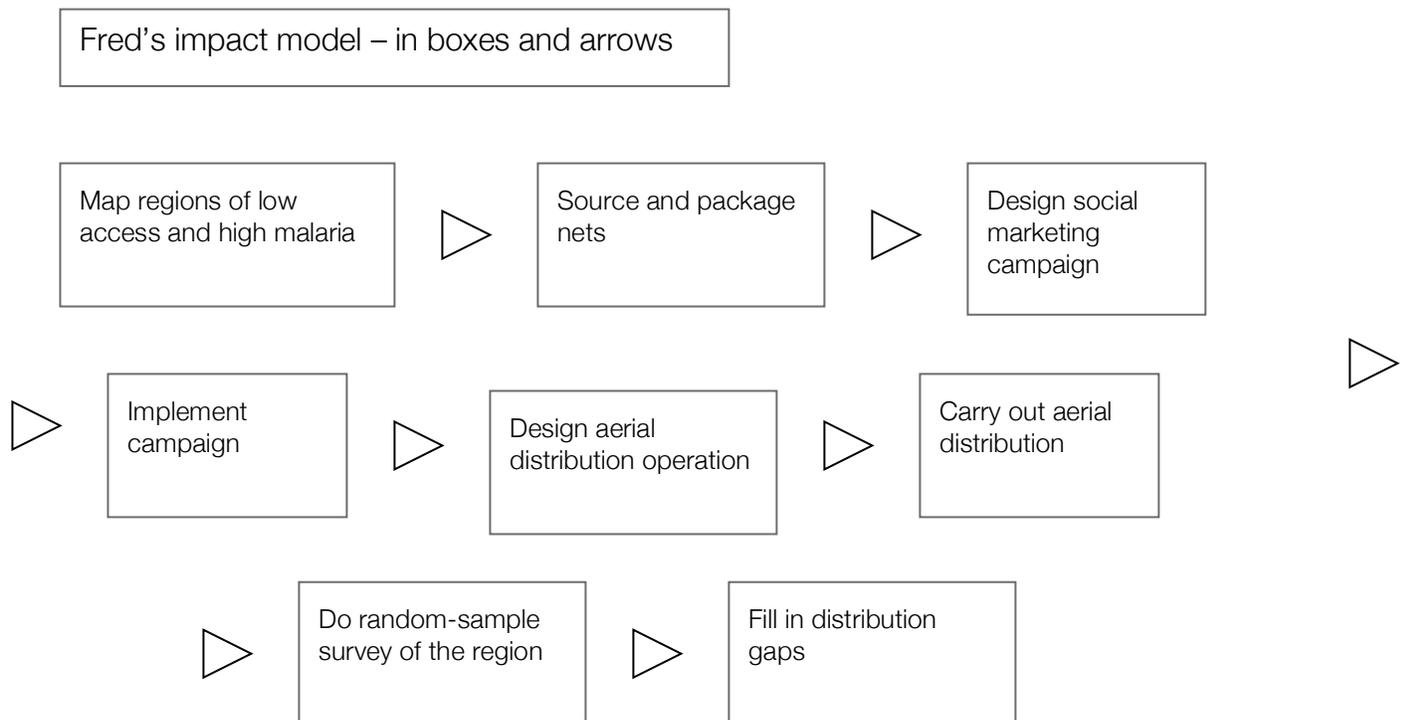
Fred’s way to scale: Via government:

By the way, here is Fred’s thinking: “We will build an organization big enough to conclusively prove the model’s impact and cover a substantial part of Uganda, then we’ll leverage the results into policy change and an effective government program. Once we’ve got effective take-up by government in Uganda, we’ll begin to lobby other governments to establish similar programs and provide the technical assistance they need.” (NB: you don’t need to write this out here – just which one of the five you’re going to use.)

7. Impact Model

Nothing is replicable unless it's systematic. This is a way to get you thinking systematically and a format that allows you to continually mess with your model. Don't panic about the form – just try it. You can use a boxes-and-arrow format, some other kind of flow diagram, or simply a list. *Use a pencil and blank paper – or post-it notes – if that works better than doing it on a computer.*

First, list all of your interventions. Then arrange and group them in some sort of logical, sequential order. The point is to organize and package your interventions as a systematic process. There is no proscribed “right” way to map out the boxes and arrows; just keep fiddling with it until you have something that makes sense to you. The result is a flow diagram of your impact model. Look back and forth between Fred's interventions above and his model below to get a sense of how it translates.



Another option is to fill it out in list form:

- Map regions of low access and high malaria →
- Source and package nets →
- Design social marketing campaign →
- Implement campaign →
- Design aerial distribution operation →
- Carry out aerial distribution →
- Do random-sample survey of the region →
- Fill in distribution gaps

However you do it, make it describe a systematic process of sequential steps.

8. Detail

The devil is, of course, in the details. Once you've sketched your impact model to capture a replicable process, provide the details that bring each step to life. Write a brief narrative that captures what is distinctive and necessary for each step. Imagine that you're trying to describe what you do to someone interested in doing it for herself. Don't put too much effort into this; just capture the detail that makes it actionable.

Some of Fred's detail

Design social marketing campaign

Start by addressing local media – what is in place already? Attempt to get an ethnographic understanding of grassroots information channels, as well as mapping social networks. Integrate all available channels into a cost-effective campaign.

9. Scalability Checklist

If you did all the stuff above, you now have a reasonably fleshed-out model. The scalability audit is a systematic reassessment of that model per the five Mulago scalability elements, and it's one of the most important elements of the design process. Here is the checklist:

1. Real Impact
 - ✓ Behavior chain: does your model ensure that the dots are connected all the way to impact?
 - ✓ How will you measure impact¹ – can you sketch out a good-enough approach that includes the right indicator, quality numbers, and attribution?
2. Cost effective
 - ✓ Can you see a way to measure/calculate the cost per impact?
 - ✓ Do you have the numbers to make any kind of intelligent projection?
 - ✓ Looking at the most expensive parts of your model, is there anything you can strip away?
3. Replicable
 - ✓ Is the model systematic and simple enough that someone else could do it?
 - ✓ Could it be adapted to a wide array of settings and still reach your target population?

¹ See the two pager on Mulago's [approach to impact](#) on the Rainer Fellows website if you need further elucidation.

4. Lasting behavior
 - ✓ Look at the conditions and incentives in play for the key behaviors you address in your model – will they really want to do it and are you making it as easy as possible for them?
 - ✓ Can you make the case that the conditions and incentives will last?
5. The right design for the right actors at scale
 - ✓ Does your model doable by the actors who must eventually deliver it at scale – or more to the point, is it specifically designed for them?

Use each of these questions as tools to go back and poke at your model. The most useful way to do this is to write out your answer to each on the blank worksheet – imagine that you're trying to persuade a skeptic that you've got each covered, then be that skeptic. Fiddle with the parts as you need to; let the process reverberate all the way back up to your big idea. Remember, the scalable model is the nucleus of all your worth. *It's worth as many trips back to the drawing board as it takes.*

PART TWO: Delivering the model

11. The stage of the work

The stage describes where you are on your path to scale, and it has important implications for your overall scaling strategy, the kind of organization you need to deliver your model at this stage, the kind of financing you need now and in the future. Here are the usual stages that models need to go through – pick the one you think you're in:

- Idea: Constructing a starting-point model; looking at failures and best practices to date; not much on the ground yet
- R&D pilot: Work on the ground at a scale that allows you to sort out just what your model is and how it really works
- Proof-of-concept pilot: You've got a replicable model; now see if it creates the behavior and impact you thought it would
- Limited expansion: You expand operations to a size that allows you to work out the kinks prior to scaling up – and be certain that it's really replicable
- Scale-up: Dramatic expansion of impact, via your chosen path to regional, national, and international scale

Fred's stage:

Fred has done several experimental drops and has a plane and some people on the ground – he's in *R&D* now

12. Scaling strategy

Your scaling strategy is about how you're going to get to a million beneficiaries and beyond. Go back and glance through section 6 "Who's going to deliver your model at scale?" Your choices are these:

1. Do it yourself via a big organization – NGO or company
2. Do it yourself via open-source materials
3. Get others to do it: the market
4. Get others to do it: governments
5. Get others to do it: NGOs

A scaling strategy might make use of only one, more than one in sequence, more than one in parallel, or a combination of choices in series and parallel. A useful way to think through a potential strategy is to imagine who is going to deliver your model at succeeding scale: 1,000 beneficiaries? 10,000? 100,000? 1,000,000? 10,000,000?

Remember Fred? Here's his strategy:

Fred's way to scale: Via government policy and delivery agents.

"We'll start by demonstrating the viability and economics of the delivery method, then will build a nonprofit organization big enough to give away a lot of nets, covering a substantial part of Uganda, and conclusively prove the model's impact. Then we'll leverage the results into policy change and an effective government delivery program. Once we've got take-up by government in Uganda, we'll begin to lobby other governments to establish similar programs and provide the technical assistance they need."

As you brainstorm various strategies, some become clearly more desirable and viable than others. You also see where the scaling strategy may require sequential stages. In Fred's case, this may mean proving that free nets eliminate the most malaria (by paying for and directly distributing, then studying the health impacts) and *then* advocating for government policy and implementation. Opportunities for parallel tracks emerge as well – Fred might consider recruiting some other NGOs to adopt his approach.

Based on the scaling strategy, an organization model also begins to emerge. Some key questions that shape both the scaling strategy and an organizational model are:

- What do we have to do really well now and in the future? Directly deploy a big sales force? Inspire and teach other organizations? Lobby government?
- How big do we need to grow? Huge, to support a big, direct distribution effort? Or small, because we can leverage media and technology to create behavior change?

- Where will the money come from? Is government going to pay for our intervention at scale? Will consumers/customers pay the full cost of our intervention? Do I have to build a huge donated capital/fundraising machine?

The important thing is to have the ultimate doers at scale firmly in mind as you devise your strategy and think back on how it reflects on your impact model.

13. Financial model

This is about the money – how you’re going to finance the organization and its work. The financial model’s design is driven by these four fundamental questions:

- I. What will maximize impact **for the target population** over time?
- II. Does your impact model include a revenue stream?
- III. What is your intended path to scale?
- IV. Given the first three questions, what is the best source of capital (or, conversely, given the sources of capital, what structure makes the most sense for you)?

Here are your choices:

- Nonprofit: three kinds
 - No internal revenue stream, fully subsidized by philanthropy
 - Some revenue stream, but still subsidized by philanthropy
 - Revenue stream that can support all the organization’s expenses
- For-profit: two kinds
 - Market rates of return, using conventional, mainstream capital
 - Sub-market rates of return, using “social capital,” “patient capital,” or some other source of financing (debt or equity that for whatever reason does not seek to maximize financial return)

(Note that within the “for-profit” world there are several legal forms of entities, including LLCs, publicly held companies, social benefit companies, etc. If you go down this route you need to sort out the right legal structure with a good attorney.)
- Hybrid: two kinds
 - “Affiliated” nonprofit and for-profit entities that work side-by-side, but from a governance perspective are independent of each other
 - “Nested” nonprofit and for-profit entities (e.g. a nonprofit umbrella organization owns the majority shares of a for-profit operating entity)

Sometimes it makes sense to move from one structure to another. For example, if you have a market-based solution serving the needs of the very poor, but need a lot of subsidized research to make it market ready, then launch as a nonprofit, retaining the option to convert to a for-profit or hybrid when you have a viable business model.

When the aim is to create a for-profit business, it is critical to remember that in this arena, margins are low, the R&D burden is often high, and distribution channels inefficient. Typically, for a new, high-impact idea, you'll need considerable subsidy money to get to a viable business model.

Another way to help sort out the for-profit vs. nonprofit question is to look at the various kinds of financing out there and imagine which will give you access to the right kind of capital. There are essentially four big buckets of money:

- Philanthropy and grants
- Earned revenue
- Loans (above and below market rate)
- Equity (high and low expectation)

Nonprofits can use any of the first three; for-profits can generally use the last three. Occasionally, for-profits can access grant capital if their business meets some charitable purpose of a grant making organization. It's worth keeping in mind that most high-social impact businesses that target the poor are relatively low margin and unlikely to attract serious private investment. In any case, what should guide your choice of financing and structure is this:

"What kind of capital will lead to maximum impact for my target population in the most timely fashion?"

There, you're done! If you've looped back around and fiddled with the pieces to the point where what you've got feels right, you're ready to take it for a test drive in the real work. The DIF is structured so that tweaks are easy and iterations painless. Come back, revisit, and reiterate in a few months.

OK, have at it – the world is waiting!