

The DIF: Designing for lasting impact that goes to scale

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The DIF – Design Iteration Form – is a tool to help you design a model to create lasting change at a big scale and an organization that can take it there. The DIF process guides you through an initial (or remedial) iteration of design that can serve as the vehicle for a continuous process of refinement and evolution. These are the descriptions of each step in that process:

The Mission: understanding exactly *what* you're setting out to accomplish

Big Idea: a very concise statement of *how* you're going to accomplish it

Impact: the ultimate outcome that fulfills the mission

Behavior: *who* must do *what* differently to create impact

Interventions: what you're going to do to drive those behaviors in a lasting way

Doer & Payer: who is to implement and pay for your model at scale

Impact Model: putting it all together into something systematic that can go to scale.

Scaling Strategy: thinking through growth – doer/payer - at each level of magnitude

Organization: defining the best structure to deliver your model

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 at scale. The two parts are equally important and interdependent. 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 this.

Do the same with impact. It is important: This is what drives design. It's the whole point of the exercise – and of your venture.

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 Jack. Follow him as he staggers through the process.

PART ONE: Designing a model

Example DIF: Jack throws nets out of a plane

Imagine this: our flight delayed, we meet a guy named Jack 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." Jack 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.

Jack says he's started a project in a remote part of southwest Uganda. We brace ourselves. We think: *we've heard this one before*. "I'm throwing mosquito nets out of a plane!" We sigh. Jack 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 Jack 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.

Jack's mission

Jack knows that children are the ones most at-risk of dying from malaria, and that anything that benefits children will also benefit 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”

Jack’s Big Idea

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”

Jack’s impact

Decreased malaria rates in children under five

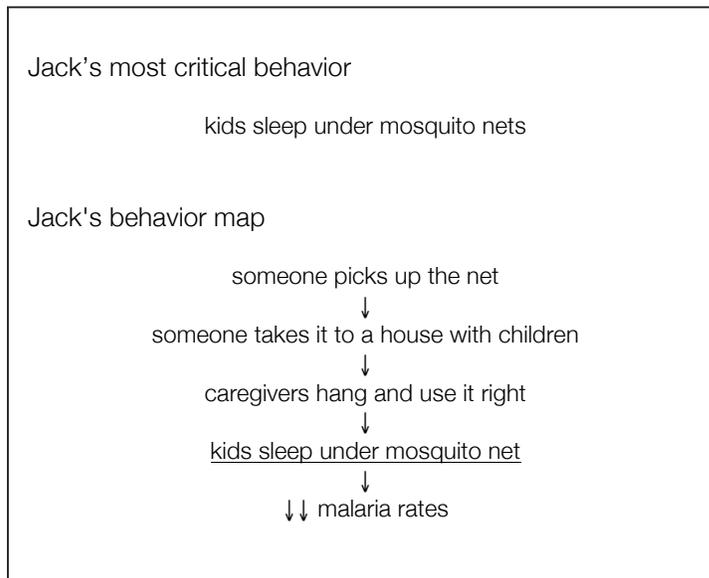
4. Behavior Mapping

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 it.

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.

Here’s something worth doing once you’ve listed your interventions: Look 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 interventions – formulated so that they can be delivered in a systematic and replicable way – make up what we call *the model*.

Jack’s interventions

Uh oh. Jack now realizes that he 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 until market is saturated

Caregivers hang and use it right:

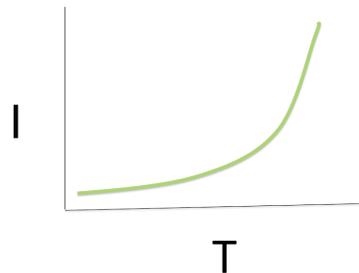
- Social marketing campaign, effective instructions in packaging

Kids sleep under it:

- Social marketing campaign

6. Doer & Payer: Who's going to take it to scale?

At Mulago, we obsess on the notion of impact that goes to scale. That being the case, people often come to talk about “going to scale” and “scaling our work up.” Most of the time they’d be better served by the word “growth.” Growth is a fine thing, but scale is what solves problems and so scale is what we look for. When we talk about “going to scale,” this is what we mean:



Call it exponential, geometric, what have you – the point is that the curve steepens and impact accelerates dramatically over time. We know it takes a while; we know that the hockey stick is bullshit, but in the end we need to see something that looks like that curve.

Since we need to talk about scale – and design for it – with lots of organizations doing lots of different things, we wanted to find a simpler, more usable way to talk and think about it. Over time, we realized if you want to get to real scale, there are two questions that really matter: 1) who's the doer and 2) who's the payer?

You've got a proven model at big scale – the thing you do. Who's going to replicate – do – it and who is going to fund that replication?

Thinking about the doer is simplified by the fact that there are only four choices:

You: running an NGO or business that gets to scale through growth or leverage

Lots of NGOs: replicating your model

Lots of businesses: replicating your model

Governments: delivering your model through programs and policies

That's all you get. Pick the doer that will dominate at a scale of a million and beyond. They've all got pluses and minuses, like this:

You: Having full control over replication means that you can deliver a complex model at high quality. Building and growing a really big organization is a pain in the ass, especially in a dysfunctional funding market.

Lots of NGOs: Plenty of bandwidth there, and it shifts fundraising off your back, but NGOs are notoriously bad at implementing other NGOs ideas: either they don't want to because they perceive a need to seem unique in the aforementioned dysfunctional market, or they try to implement on the cheap and fail to get the same impact.

Lots of businesses: we're not interested in one-off businesses – it's industries that solve problems. Obviously, to make use of this doer, a solution needs to come with a profitable business – the more profitable, the more imitators – and that precludes a lot of solutions. Capital remains a problem: mainstream investors won't touch most of this stuff and impact investing continues to be the most dysfunctional part of a dysfunctional funding market.

Government: They have big bandwidth, lots of resources, and a mandate to serve – and they're probably the only way a lot of basic service solutions will scale. They are usually inefficient, maddeningly inconstant, and often corrupt. Have fun.

That's it. Pick one, and pick it early: A model will only scale if it is designed with the doer in mind. Governments don't do complicated (nor, in most cases do other NGOs). For-profits too often leave out the very poor. NGOs that grow really big usually can't maintain disciplined replication of one solution because they have to meet a burgeoning payroll (see dysfunctional funding market).

Got one? OK, now pick a payer at scale. Conveniently, there are only four them as well:

Customers: revenue from product sales

Taxes: revenue raised by governments

Big Aid: multi- or bilateral revenue from rich governments to poor governments; sometimes delivered straight to the doer

Private philanthropy: anyone from Gates to the individual small donor

Investment gets a business growing, but eventually you need to sell a lot of stuff to a lot of people. Most poor governments don't collect much in the way of taxes. Big Aid is big, but it's a pain in the ass. Private philanthropy is a mess, but once you get some momentum, it gets easier – up to a point.

Once you've picked your doer and payer, you've got the context you need to think usefully about scalability. Three questions about your model:

- 1) Is it cheap enough? This is about cost-effectiveness – the cost per unit impact – but it's also about the price that the payer is willing to pay. If you want to scale up your innovative community health worker model, what's the Health Ministry's price point for per capita coverage? If you have a product to sell, will customers pay enough to give you (and your imitators) a decent margin?
- 2) Is it simple enough? If your model is complex and requires ninja-level execution, then you're going to be doing it yourself. Governments are pretty hopeless at it, and NGOs are often not much better. Even businesses won't be able to replicate a model that is very complicated.
- 3) Is it adaptable enough? Cookie cutter solutions don't work very often. The best models use a systematic process to generate locally appropriate solutions. If your model is rigid, or if it depends on limited set of circumstances or a rare kind of talent, then it's probably going to hit a ceiling pretty quickly.

Everything must be iterative; your doer and payer may change over time and your model will certainly evolve in response to the reality bath that is the real world. It won't be easy, but it can be a lot of fun, and this simple framework can help you make sense of the changes and maybe even get ahead of the curve.

Jack's doer: government Jack's payer: taxes/Big Aid

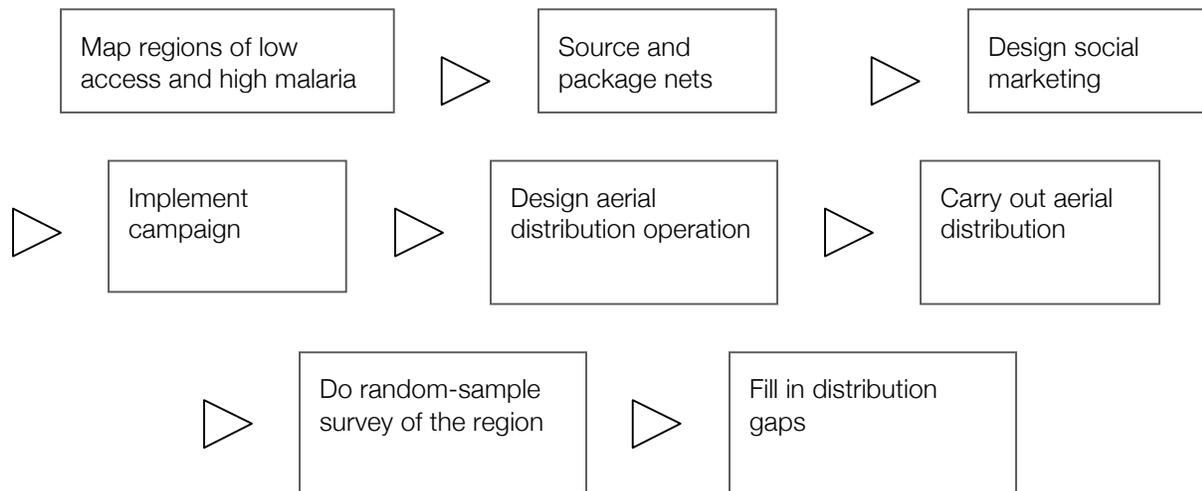
By the way, here is Jack's thinking: "We will build an organization big enough to conclusively prove the model's impact and cover a substantial part of Uganda, then we'll leverage the results into policy change and an effective government program. Once we've got effective take-up by government in Uganda, 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 Jack's interventions above and his model below to get a sense of how it translates.

Jack's impact model – in boxes and arrows



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 Jack'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.

PART TWO: Delivering the model

9. 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, and 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. This stage lasts longer than you think.
- **Proof-of-impact pilot:** You've got a replicable model; now see if it creates the behavior and impact you thought it would
- **Replication:** 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

Jack's stage:

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

10. Scaling Strategy

Remember your doer and payer at a million? So now try this: pick the next order of magnitude from where you are now and lay out your doer(s) and payer(s). If you've laid it out for a million, go to 10 million – hell, go to 100 million. What emerges from that is the outline of a strategy to get to scale – and the chance to assess whether you've got a solution that can make the trip.

Your doer choices at each level of scale are the same as before:

You: running an NGO or business that gets to scale through growth or leverage.

Lots of NGOs: replicating your model

Lots of businesses: replicating your model

Governments: delivering your model through programs and policies

Your payer choices at each level of scale are, again, the same:

Customers: revenue from product sales

Taxes: revenue raised by governments

Big Aid: multi- or bilateral revenue from rich governments to poor governments; sometimes delivered straight to the doer

Private philanthropy: anyone from Gates to the individual small donor

Now, starting with the next order of magnitude from where you are now (100 to 1000, 1000 to 10,000 and so on), write down your doer/payer at each level all the way to a million (and beyond, if you're up for it). That is the outline for a scale strategy.

Remember Jack? Here's his strategy:

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

"We'll start by demonstrating the viability and economics of the delivery method, then we'll 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. We'll simultaneously lobby The Global Fund and other multi/bi-laterals at the same time to pay for it. 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 Jack'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 – Jack might consider recruiting some other NGOs to adopt his approach.

Based on the scaling strategy, an organizational 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 most 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.

11. Revenue Model

This is about the money – how you're going to finance the organization and its work in the near/medium term. 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 of the organization's expenses

- For-profit (three kinds)
 - Bootstrapped, meaning that internal profits are used to finance the business and there is no need for external capital investment
 - Conventional investor backed, using mainstream capital (debt and equity) to finance startup and/or growth activities
 - Impact investor backed, using "social capital," "patient capital," or some other source of financing that – for whatever reason – does not seek to maximize financial return. Usually these funds are used for start-up activities with the expectation that conventional investors will supply the growth capital.

(Note: 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 perhaps you should launch as a nonprofit, retaining the option to convert to a for-profit when you have a viable business model. If you are thinking of doing this, you should set up both legal entities at the same time and make sure that assets with market value are housed in the for-profit. It can be an expensive and time-consuming process to transfer assets from a nonprofit to a for-profit.

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 are 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:

- 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 (it's a little mysterious to us, too). 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 world. The DIF is structured so that tweaks are easy and iterations painless. Come back, revisit, and iterate in a few months.

OK, have at it – the world is waiting!