Chapter Three

Love the Problem, Not Your Solution

When Proximity Designs decided to work with smallholder farmers in Myanmar, the husband and wife cofounders, Jim Taylor and Debbie Aung Din, packed up their lives and moved there. They believed that poverty is so complicated that you need to be close to the problem – proximate – to understand its dynamics, have empathy for the people affected, and gain deep knowledge of the local realities.

In 2004, Jim and Debbie took aim at the problem of irrigation with a goal of improving crop production and relieving the backbreaking work of hauling water daily from distant sources. As existing alternatives were too expensive for their target customers, they set out to design a portable, lightweight, and affordable treadle pump – a foot-powered suction pump to draw groundwater to the surface. Being local meant they could involve their users in every stage of the design process. It also allowed them to solicit rapid feedback from farmers on each iteration of their prototypes, sometimes on a daily basis.

Proximity believes in treating people as customers, giving them choice and dignity. Distributing goods for free implies deciding who receives them – putting people in the position of being supplicants and potentially creating divisive dynamics in a village. Instead, they decided to sell their treadle pumps. A farmer's decision to buy or not sends a clear signal about their perceived value, reveals important consumer insight, and keeps Proximity accountable to their customers. Charging for the pumps also opened the path towards a financially sustainable venture, along with the potential for far greater reach and scale.

After Cyclone Nargis devastated the country in 2008, Proximity responded immediately. It worked to understand what communities most needed and as a result designed simple shelters, water storage tanks, and a package of supplies to get farms up and running again. International aid agencies and nonprofits arrived later, with preprogrammed packages that were often not relevant for the local conditions.

Nine years later, Proximity is the largest social enterprise in Myanmar and has reached 80% of the farming population, increasing their incomes by an average of $250 a year. It has made an economic impact estimated at over half a billion dollars in the past five years.

BEING PROXIMATE

Now that Chapter Two has helped us establish a clear, audacious goal, the obvious question is how to achieve it. To do so, we have to start by understanding the people involved and the problems they face.

Mission-driven work tends to serve disadvantaged populations whose needs, priorities, cultures, and experiences may be nothing like those who are seeking to help. Thus, our instincts and interpretation of priorities can be misleading. Geography, language, or even different neighborhoods or vernacular can create further barriers to understanding. On top of that, we often seek to intervene in the middle of complex systems, at points of market, government, and policy failure. Unintended consequences are a legitimate risk.

Let’s get real. Good solutions are unlikely to come from within the comforts of a fancy glass office, far removed from the problem at hand. Such efforts tend to produce inappropriate or impractical proposals, such as building an app for people who don’t even have smartphones.

Instead, the best social entrepreneurs start by deeply understanding their customers. How do they live their lives? What are their challenges, needs, and desires? Are their experiences relatively uniform or do they vary across different demographics? Beyond the direct beneficiary, what are the motivations of others who may be affected by your work, such as community members, government, donors, existing providers, and other stakeholders? The less like you your intended customers are, the more you’ll need to invest in building trust and understanding. This means being proximate, a dose of humility, and lots of listening.

Today, before creating a new product or service, Proximity Designs spends six weeks doing a deep dive. Teams get as close as possible to the people they hope to serve by setting up a pop-up studio in or near a typical community. The space is tailored to the problem at hand and left open 24/7 to create a casual social environment that welcomes serendipity. By being immersed in a community, the team can live and breathe their experiences and get to know people more intimately. The studio also serves as an inspiring workspace where creative juices can flow and ideas start to emerge.

Being proximate matters even when working with populations near your home turf. When Dr. Sarah Schulman, a founder of social design firm InWithForward, was asked by the British Colombian government in Canada to address the social isolation of adults living with cognitive disability, she and her team moved into a public housing complex in Burnaby to live alongside their customers. From there, they undertook 50 ethnographic studies and discovered people felt bored, stuck, and isolated by the same old "special education" programs.

The conversations in group homes and day programs gave rise to Kudoz, a diverse catalog of experiences offered by volunteer individuals and businesses. Think Uber for social services, but free. Options have included How's a City Built? Learn About Vancouver's Architecture, Get Outside and Play Pokemon Go, and Practical First Aid. Kudoz became a new platform for learning and exchange. Participants were empowered to explore new interests, and hosts could give back while sharing their own passions.

Parachuting into a new environment for a few days or weeks may yield valuable insights but is often insufficient. Understanding your users shouldn't be a one-time investment. Of course, this is easiest if you are based in or near your customers and integrate community members among your staff. With ongoing channels for rapid formal and informal feedback, users can participate in the design process and continue to provide unexpected insights.

Making the effort to listen doesn't necessarily mean people will always be willing to share. After taking several online Acumen courses, including Human-centered Design, Professor Kevin Schneider at Oral Roberts University integrated multidisciplinary approaches into his curriculum as a way to better understand poverty. On one project, his students sought to improve the quality of life in Carrilho, a remote village on the east coast of Brazil. Yet, when they arrived to conduct an initial needs assessment, no one was willing to speak with these strange foreigners. They quickly realized they had to start by building relationships and trust. After taking a step back to spend time playing soccer with the local kids, the locals became more comfortable and slowly warmed up to the students.[1]

When we are working with people and communities whose experiences are different from our own, *literally* getting proximate to the problem is an essential precursor to a good solution. If you're interested in exploring the topic further, a number of books on the topic of participatory research and ethnographic studies are available.

CONSIDERING THE SYSTEM

Problems rarely exist in isolation. Most are influenced by a broad range of policies, market dynamics, and stakeholders. While the idea of addressing structural barriers to change has been around for some time, the importance of systems thinking – a holistic analysis of the complex interrelationships among elements of a problem – has become more widespread in recent years. Lasting change is not possible without considering all the layers of interactions that reinforce the existing state of affairs. One helpful tool is a system map – a visual representation of the interplay between the various actors, organizations, and policies, and how each connects, affects, and relates to the others. Figure 3.1 shows a simple example.

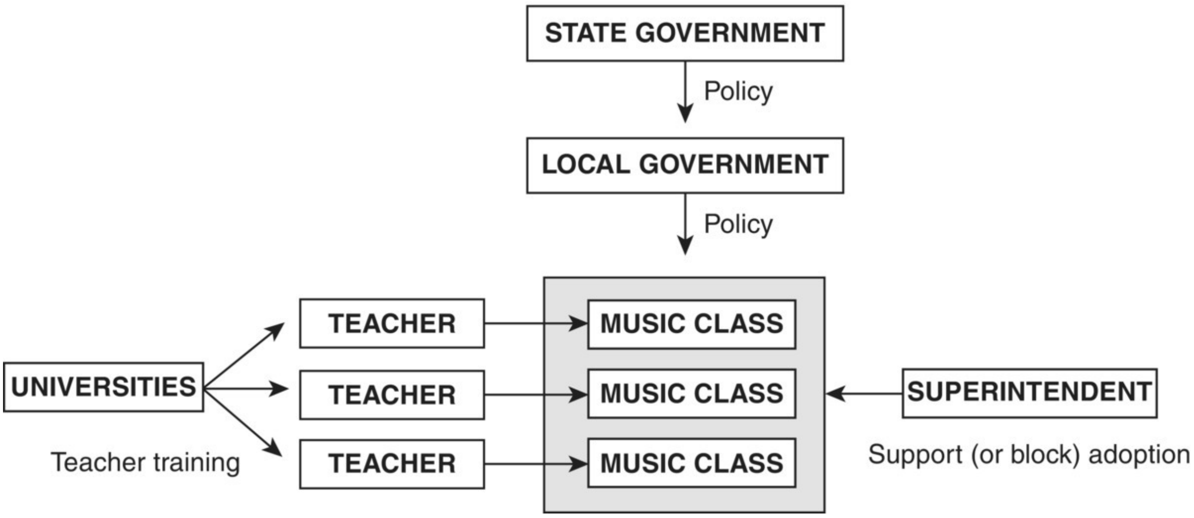

Figure 3.1 System map for Little Kids Rock (illustrative only).

The journey of Little Kids Rock, a nonprofit based in suburban New Jersey, shows how engaging at a systems level can lead to massive impact. Founder David Wish has a sparkle in his eye and an infectious enthusiasm that makes you feel he's going to playfully push you out of your comfort zone at any moment. He calls himself an expert at first grade, as he took it twice himself, then taught it for 10 years. Growing up, he had a terrible experience in music classes, including being criticized for his rendition of "Hot Cross Buns" and having a violin thrust upon him when his preferred guitar wasn't available. It was only when a good friend taught him how to play cool tunes on a guitar in high school that he developed a passion for music.

The traditional way of teaching through music theory, scales, reading notation, and classical music leaves many kids bored and alienated. On a lark, as a first-grade teacher in Redwood City, David decided to give his class the opportunity to simply play songs they liked. It was a hit. Soon he had kids, parents, and teachers beating down his door to participate.

As an individual teacher, he realized he couldn't come close to meeting the interest his class had generated. So, he started teaching other teachers his technique. But demand continued to outstrip his ability to deliver. He soon recognized that he needed a different approach. As he considered the broader landscape, he recognized that university programs train massive numbers of teachers, state and local governments establish the curriculum through policy, and superintendents can support (or block) adoption of new teaching techniques. To leverage these existing systems, he created a new category of music education and called it modern band. Rather than focusing on individual educators, he worked with universities to train teachers and with government to include modern band in the curriculum. Today Little Kids Rock offers one of the largest music programs in US public schools, with over 2,400 schools in 45 states including modern band programs for their students.

A system map can reveal important insights into the stakeholders and their constraints, vested interests, and influences. From there, we can begin to identify potential points of intervention, who needs to be involved, what problems we could address, and what opportunities we could create.

WHO IS YOUR CUSTOMER?

Once you've collected insights through research, ethnographic studies, and system mapping, your target audience can be distilled into one or more customer segments. Each segment embodies the shared experiences, desires, and challenges that may be held by a set of beneficiaries or stakeholders. Avoid over-generalizing by selecting an entire organization or community, as individual reactions within a broad group may vary widely depending on their context. By evaluating a potential solution against the needs of people in similar roles or circumstances, we can gain an understanding of the potential value we could deliver.

Selecting a primary customer segment can bring focus to the early stages of design. Consider this the sweet spot – the people who stand to benefit most. If you can truly delight them, they will become your early adopters, share detailed feedback, and become evangelists. If you try to take too many diverse interests into account in the beginning, you may never fully satisfy anyone. It is far easier to expand your customer base from a dedicated following. Consider how Facebook built its audience by starting with an exclusive website for Harvard students and then expanding to Boston universities, to other Ivy League schools, to other universities, to US high schools, then to anyone with an email address. This allowed Facebook to focus on catering to the unique needs of each customer segment in turn. If Mark Zuckerberg had opened up his new social network to the general public from the start, Facebook might never have had the dedicated following to build momentum for its expansion.

One popular tool among Lean Startup practitioners is the Value Proposition Canvas introduced by Alexander Osterwalder in his book *Value Proposition Design* (see Figure 3.2).[2] The right half of the canvas represents a customer segment, and identifies jobs, responsibilities, and activities for that customer along with his or her existing pains (obstacles and challenges) and potential gains (desires and aspirations). These are then matched with a value proposition on the left side that describes how a proposed solution might relieve pains and create gains.

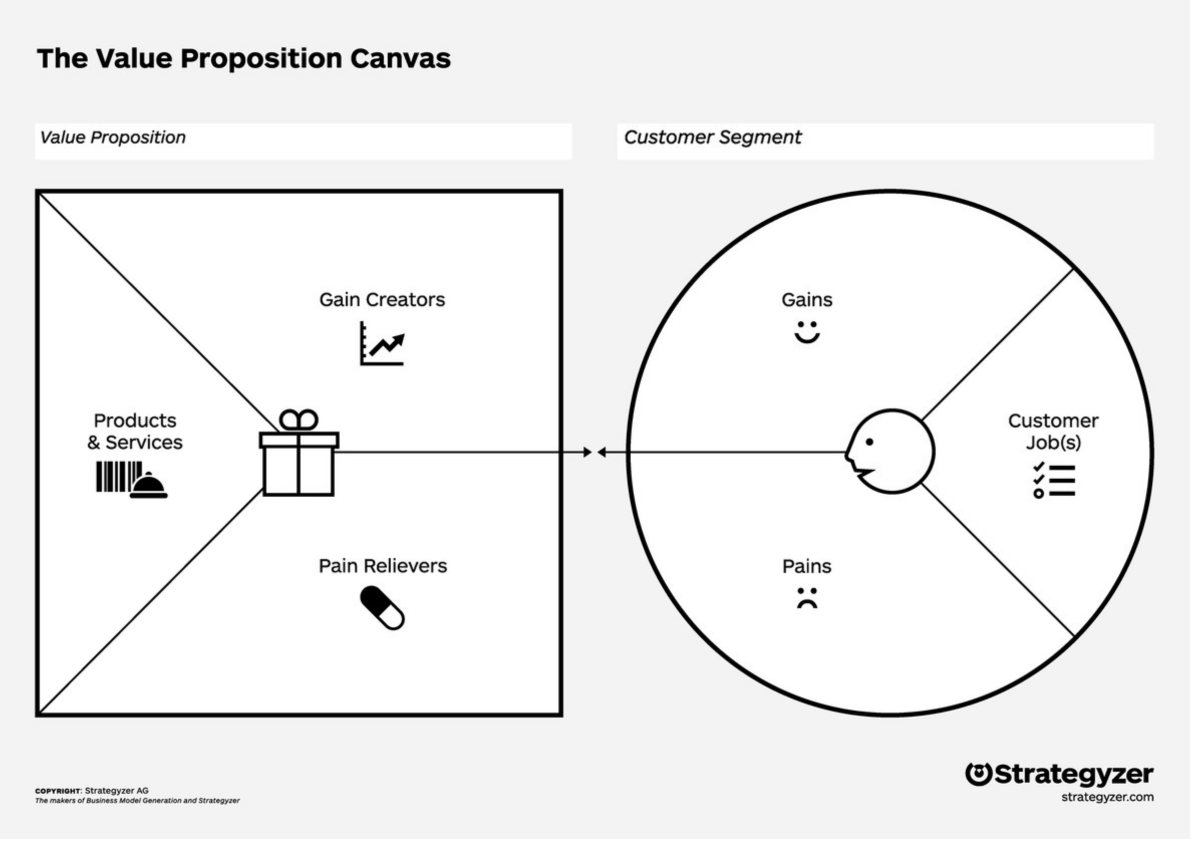

Figure 3.2 The Value Proposition Canvas.

Source: Strategyzer AG.

We used the Value Proposition Canvas in Hacking for Impact, a class I co-taught at the University of California at Berkeley in the fall of 2017. The class was modeled after Lean LaunchPad®, an experiential methodology for teaching entrepreneurship pioneered by entrepreneur-turned-educator Steve Blank. In his course student groups test the business proposition for a potential startup, validate their hypotheses by talking to at least ten customers a week, and present their findings back to the class for feedback and guidance. The more recent

Hacking for Defense and Hacking for Diplomacy classes brought the same pedagogy to military and foreign policy challenges, respectively.

Our pilot class brought it to a fourth domain, social impact, working in partnership with nonprofit and government sponsors. Among the student groups was FirstGen, which aimed to increase the diversity of students studying STEM (science, technology, engineering, and math) subjects through an annual robot competition. The team started with a customer segment of disadvantaged students and discovered that they found existing STEM extracurricular activities boring and that after-school programs caused them to miss the only bus home. Next, the customer segment for teachers showed that they were overworked and didn’t have the time or funding to serve as sponsors.

Given the transport issues and lack of teacher bandwidth, the FirstGen team struggled to identify a compelling value proposition. Although I was equally stumped as to the answer, I encouraged them to cast a broader net rather than stay wedded to their original approach. As the team explored further, they uncovered the potential of community centers, which were more conveniently located near the students’ homes and always seeking new programs to offer. So, they pivoted. The customer segment of community center branch managers turned out to be far better positioned to serve as hosts.

In the world of human-centered design (HCD), interviews and observations may be synthesized into archetypes or common behavioral patterns that represent the range of customer segments. These insights can be used to inspire and crosscheck ideas throughout the design process.

IDEO.org took such an approach in its partnership with the Bezos Family Foundation to increase parental engagement and spur early childhood development. It started by conducting extensive interviews with low-income families, child development experts, and pediatricians around the country. These led to five insights that reflected the unique challenges the parents faced. Many had suffered abuse and neglect as children themselves and so had no positive role models for parenting and weren’t aware of the type of stimulating interactions kids need. Others felt isolated from peer support networks, as they lived in dangerous neighborhoods. Teen parents faced particular challenges, such as finishing school and finding a job, without the maturity or resources to navigate them. All clearly cared deeply about their children’s growth.

From these insights, the IDEO.org team found new opportunities to engage parents. For example, as some families were uncomfortable with the common prescription of reading aloud, they encouraged natural dialog between adults and children during routine, shared moments, such as sitting in the Laundromat or going shopping. Back-and-forth conversations promote brain development and strengthen the relationship between parent and child. The Bezos Family Foundation incorporated these recommendations into the design and launch of Vroom, a nationwide initiative that takes early brain science out of the lab and puts it into the hands of parents.

There is no one right tool for gaining insight into the customers or beneficiaries you hope to reach. What's important is to recognize the limitations of our own instincts and to understand the motivations that will affect customer adoption of any intervention. This usually involves a mix of quantitative data to capture what is happening and qualitative techniques to explain why.

DON'T FORGET YOUR OTHER CUSTOMER

When Caitlin Baron was tapped to be the first CEO of the Luminos Fund, a social enterprise to help out-of-school children get back to school, she wanted to establish an innovative culture up front. She eagerly bought and read *The Lean Startup* from cover to cover. Then, she felt stuck. The principles made sense, but she found that most donors expected her to have the "entire path to impact mapped out before you even begin." Many were interested in bringing Luminos's program to new countries, but required "committing to proposals with very locked-down operating models" – even small refinements to adapt to local conditions, such as offering midday meals or textbooks, were painful to make. Finding support to experiment with new, related interventions was even more difficult. Luminos is fortunate to have received long-term, unrestricted funding from the Legatum Foundation, which is giving it the flexibility needed for its entrepreneurial journey.

Caitlin's story is all too common. One of the biggest factors that makes innovation harder in the social sector is the need to satisfy two completely different types of customers – your user (or beneficiary) and your funder. In business, the same customer usually both benefits from and pays for the product or service, so interests are naturally aligned. Investors and lenders place a bet on a company based on its business plan, team, and track record, and rarely get involved in the day-to-day details of how money is spent or how products and services are designed.

On the other hand, grants from foundations or governments, a common source of funding in the social sector, typically require meticulous plans for activities, deliverables, staffing, and budgets to be specified in a grant proposal. If selected, you are expected to execute on that plan. Due to this enforced waterfall model, any changes to the original design can require painful renegotiation. I've heard too many stories of organizations that determine that what they're doing is not working but find that the path of least resistance is to continue anyway. Of course, this also gets in the way of applying lean techniques to build the best solution.

Funders come with their own agendas, which can be in conflict with what's best for the customer or your enterprise. For example, they frequently restrict support to a particular geography, demographic, technology, or sector. The need to raise money to keep the doors open can lead nonprofits to swallow such compromises. But, to satisfy all the crisscrossing priorities of multiple donors, organizations can end up tying themselves into a pretzel.

Chapter Eleven will explore ways to navigate these and other funding challenges in depth, while Chapter Twelve will delve into recommendations for how funders can better support innovation and ultimately greater impact at scale. In the meantime, suffice it to say that the need to satisfy two different customers, the beneficiary and the funder, can pull you between conflicting priorities. Still, both must be considered.

PROBLEM DISCOVERY

Kinari Webb loved orangutans and became passionate about protecting the rain forests in Indonesian Borneo where they live. But rather than jumping into a typical conservation project, she decided to start by engaging in something she calls "radical listening" – trusting community members to identify their own challenges and needs, asking for their ideas, and implementing their solutions. She wondered, Why were people cutting down the rain forest? And, How could it be stopped?

She discovered that much of the deforestation was happening when a health crisis would force a family to raise large sums quickly to send their loved one to a far away, expensive hospital. By understanding the dynamics in the community, Kinari was able to home in on the underlying causes of habitat destruction as a basis to determine the best solution. The result? She started Health In Harmony to build a local health clinic and develop alternative livelihoods. Today, the number of households that participate in logging has dropped by over 89% through this nontraditional approach to conservation.

Too often, we leap to a solution before fully appreciating the multidimensional nature of the problem at hand. Without a deeper understanding, making positive impact is a crapshoot, and interventions may even lead to negative, unintended consequences.

One technique for understanding a problem is called the 5 Whys. Through an iterative inquiry that asks why repeatedly, we can move from symptoms to the root-cause problem. Originally conceived by Sakichi Toyoda as a critical element of the Toyota Production System, it takes a scientific approach to determine the underlying nature of a problem.

For Kinari, the path forward was revealed along these lines:

> *Why* is the number of orangutans declining? Their habitat is being reduced.
>
> *Why* is their habitat being reduced? People are cutting down the rain forest.
>
> *Why* are people cutting down the forest? They have to raise money quickly to send a family member to the hospital.
>
> *Why* do they have to go to an expensive hospital? There is no local health clinic.
>
> *Why* is there no local health clinic? The area is poor, remote, and ignored by both government and the private sector.

Having a deep, immersive engagement with your target customers, as Kinari did, is ideal. Absent that, even a simple interview can add depth and nuance to your understanding of their pain points and desires. In our Berkeley class, we required each team to conduct at least ten interviews a week, to learn from real customers and stakeholders.

In interviews to validate a problem, the most important criteria is to not mention your solution – no matter how excited you may be. Once the discussion turns to a solution, the conversation will inevitably revolve around its plusses, minuses, and practicalities. The real problem may not surface. If Kinari had approached the community with a conservation project, she might never have heard about the connection to health crises. Instead, ask about customers' challenges, pains, and frustrations. How do they currently handle them? Have they tried other alternatives? Have they encountered anything that has helped?

Falling in love with your problem means getting to the root cause, wherever it may lead. When we don't stop to understand the underlying drivers, we can waste time perfecting a solution that merely addresses a symptom and doesn't lead to sustained impact. Problem validation should not be a one-time endeavor. Throughout the evolution of an intervention, it's important to stay curious and vigilant for indications that the original assessment was incomplete or that the nature of the problem has evolved.

Notes

1 Winnie Sun, "A Professor and His Students' Journey to Transform a Village," + Acumen blog, January 6, 2015, http://www.plusacumen.org/journal/professor-and-his-students-journey-transform-village.

2 Alexander Osterwalder, Yves Pigneur, Greg Bernarda, Alan Smith, and Patricia Papadakos, *Value Proposition Design* (Hoboken, NJ: Wiley, 2014).