# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>01</th>
<th>02</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td><strong>LEARNING FROM CUSTOMERS</strong></td>
</tr>
<tr>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>CGAP’s Journey in Human-Centered Design</td>
<td>Insights</td>
</tr>
<tr>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>What is Human-Centered Design?</td>
<td>Design Principles</td>
</tr>
<tr>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Flow Chart: Is HCD Right for You?</td>
<td>Summary: Insights to Design Principles</td>
</tr>
<tr>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>From the Desk of a Skeptic</td>
<td></td>
</tr>
</tbody>
</table>

INTRODUCTION: CGAP’s Journey in Human-Centered Design

LEARNING FROM CUSTOMERS:
- Insights
- Design Principles
- Summary: Insights to Design Principles
HCD IN ACTION: CGAP PROJECTS

36 MTN
46 Bancomer Bank
56 Bradesco Bank
66 Tigo Cash
78 Habib Bank Limited
88 MicroEnsure
98 BTPN Bank

HCD TOOLS

108 Tools: Learning from Customers
110 Tools: Synthesis and Ideation
112 Tools: Prototyping
114 HCD Toolkits
116

WHAT IT ALL MEANS

118

120 Flow Chart: How Do You Get Started with HCD?
122 Our Recommendations
When CGAP’s work in human-centered design (HCD) first started, digital financial services operated in a kind of Wild West. New mobile money services were launching almost weekly, fueled largely by excitement over the success of M-PESA. Yet, many of these offerings stagnated from lack of use and inactivity rates quickly reached 80 or even 90 percent. As we talked with providers, we grew convinced that the problem wasn’t mobile money itself. It was the approach that so many providers took to their customers.

For the most part, providers weren’t launching products or services based on well-defined insights about clients in their market. A good number of providers were going to market with one-size-fits-all mobile money solutions that customers struggled to understand and to use. As we explored various methods for understanding customers and developing products, we kept coming back to human-centered design (HCD). Well established in other industries, but relatively new to financial inclusion, HCD is a process built on learning directly from customers in their own environments and then quickly developing and refining concepts with customers themselves. The process challenges providers to understand, create, evolve, and test possible solutions and repeat the cycle for as many times as it takes.

As we explored various methods for understanding customers and developing products, we kept coming back to human-centered design (HCD). Well established in other industries, but relatively new to financial inclusion, HCD is a process built on learning directly from customers in their own environments and then quickly developing and refining concepts with customers themselves. The process challenges providers to understand, create, evolve, and test possible solutions and repeat the cycle for as many times as it takes.

When Proctor & Gamble set out to create a better mop, design firm Continuum observed people mopping their own kitchen floors. They quickly saw how dirty and time-consuming the process was, and realized that people wanted clean floors without mopping at all. The result was Swiffer, a quick cleaning product with annual sales of $500 million. How might such a methodology apply to financial inclusion? Most of the time, traditional market research leads to incremental improvements, which may not be the right approach to gleaning deep customer insights and developing customer-centric digital financial services. As providers develop new channels for providing financial services to customers who have never walked into a bank branch before, we placed a bet on HCD, thinking that it might just hold the promise to develop breakthrough products and services that truly meet the needs of customers. Inspired in part by IDEO’s HCD work on the Keep the Change campaign it designed for Bank of America, we were ready to test what HCD could do for the unbanked around the world.

In the past three years, CGAP has experimented with HCD techniques across seven projects in eight countries. We brought leading design firms in to work with banks (ranging from mid-sized to among the largest in-country), telcos, and an insurance intermediary. We developed 175 concepts for financial products and/or services and 30 prototypes. Looking back, what we remember most are the people we met and how they enabled us to see life through their eyes. We remember inspecting the homemade alarm system devised by an ingenious man living in Kibera, the biggest slum in Nairobi, to protect his home. We remember rejoicing with an elderly Pakistani woman when she received almost a year’s worth of social transfer payments at once after giving up hope of ever getting her due. And we remember a young family in Brazil that had to break their ceramic piggy bank the day before to deal with a family emergency.
What did we learn? For a start, we heard all about the problems of mobile money—how difficult and inconvenient it is. And banks fared even worse as people eagerly shared their pent-up frustration with how confusing and misleading bank services were. Pretty quickly we had to abandon our assumptions about how much cheaper, and more convenient digital financial services are compared with the systems already in place.

We gradually began to get ideas of how we could combine the best of informal financial services with what we know to be the strengths of mobile money. We also thought hard about the emotional element of money. We tested concepts to help people organize their money electronically as easily as they separate it in paper envelopes. We tried to determine how to organize and manage savings and loans groups electronically. We developed insurance products that are offered together with educational tips and entertainment. We made the benefits of what is so often a distant, aspirational concept tangible and immediate.

Maybe the biggest lesson from these seven projects is that it’s going to be a challenge to integrate mobile money into the lives of the poor. Mobile money is not a magic bullet and neither is HCD. Even the most customer-centric, innovative concepts will fail without a whole ecosystem designed around the needs of the customers. The foundation of this ecosystem is composed of elements that are perhaps less exciting but require a tremendous amount of hard work: a well-trained, ubiquitous, and liquid agent network; a call center where people get their questions answered and complaints resolved; and a network of merchants; utility providers; and companies making and receiving payments digitally.

In many ways, the traditional financial sector fails poor families in the informal economy. Human-centered design is a step towards identifying opportunities to help them improve their lives.

—Tilman Ehrbeck, CEO of CGAP

The flipside of that learning is that we are immensely hopeful. In the following pages, we’ll share the insights we gained and the actions they spurred. We talked to hundreds of people in eight different countries and together, all of them showed us a way forward.
WHAT IS HUMAN-CENTERED DESIGN?

HCD is an innovative approach to problem solving that starts with people and ends with solutions uniquely tailored to meet their needs.

Though working with design firms like IDEO.org, Continuum, and frog, was immensely helpful, HCD is not an esoteric process only available to the design elite. Instead, it’s a repeatable set of steps, a highly generative take on gathering information, processing it, and quickly building and testing solutions.

One of the biggest shifts for us was how HCD collects information. We got out from behind our desks, into the communities we’re looking to serve, and talked to people. HCD relies on in-depth interactions with a small number of customers. We sat in their homes, we visited their businesses, we shopped with them in markets. By participating in interviews first-hand instead of reading focus-group and survey reports, we saw the power of directly and deeply interacting with a small sample size of users.

Synthesizing what we learned is a hallmark of the HCD process, and probably the hardest to do without someone guiding you. Post-its flew, a slew of ideas were devised, refined, discarded, and then, once we had great ones, put out in the world to test.

Next was prototyping: building a physical iteration of our ideas and then gathering feedback on that idea from customers. It’s an approach premised on learning from people at all stages. Talking to a person in her home is good, sharing a prototype of a product based on what she told you is better. We built lots of prototypes (some good, some bad, all rough), shared them with users, and then incorporated their feedback into the next iteration. Lather, rinse, repeat until you’ve got it just right.

Perhaps the biggest benefit of HCD is that the customer is never far from what you’re designing. Instead of making assumptions in the boardroom, you’re learning in the schoolroom, and the village market trumps a team of marketers. What better way to serve your customer than by designing with her at the core?
Click to play the video: “Designing a Financial Service in Africa”
IS HUMAN-CENTERED DESIGN RIGHT FOR YOU?

How well do you know your customers?

- We play poker every Tuesday night!
- Eh, I could be better at that.
- You mean those numbers on my spreadsheet?

Are you ready to innovate?

- Have fun on Facebook!
- I'd rather hang out at home.
- Yes! But it sounds hard.
- It can be, but we can help.
Do you have a well-defined challenge?

Got time?
- Me? No. What’s your challenge?
- Yes.

Yes. I can make time.

Got money?
- Only a little.
- I can make time.

Yes.

Do you have some resources and an eager, committed team?
- Yes.
- No.

Yes. HCD is perfect for you!

No. Wait until you can commit more resources to an HCD project.

HCD may not be right for you at this time.
Small sample sizes, hanging out in people’s houses, designing before you know much of anything, empathy? C’mon, is human-centered design anything more than some feel-good methodology peddled by West Coast dataphobes that has somehow become the latest fad in financial inclusion?

All good questions, my skeptical friend. Sprinkled throughout this document you will find the answers to some of the most common questions people ask about HCD. Read along! We’ll be real, and we think you won’t be skeptical for much longer...
Q: WHAT IS HCD BEST AT?

A: The biggest benefit of HCD is that it goes beyond the superficial to help you understand your customer’s hopes, fears, and needs more strongly and personally than before.

HCD helps you get inspiration from your customers and quickly turn these into lots of new ideas. It is very useful to go from blank slate to generating tons of ideas that you’ll transform into new concepts, products, or services.

HCD’s utility goes far beyond product design and can be applied to any part of the customer journey, from marketing messages to user interface to how customer complaints are received. Even if your project is focused on product design, you will also diagnose a lot of other operational and customer-facing issues that come up.

The design principles that arise from the engagement are solidly rooted in customer insights and yet are simple and easy to grasp and apply. They are a great way to codify “what we kind of already knew” and get it out to staff in other geographies or in a larger company to ensure consistency in designing for customers.
LEARNING FROM CUSTOMERS

KEY FINANCIAL INCLUSION LESSONS FROM OUR HCD PROJECTS
Part of the power of HCD is that it uncovers people-level insights that have systems-level impact. By having intense conversations with hundreds of low-income people across emerging markets, CGAP developed an understanding of their financial aspirations, fears, and mindsets, which we used to create offerings that met their needs. For the most part, we were surprised by how consistent our insights were and how similarly low-income people manage their money whether they’re farmers in Indonesia or shopkeepers in Accra.

A huge benefit of HCD is how it captures critical customer insights and synthesizes them down to design principles—clear, instructive guardrails for what you’ll actually design—that then inform the products and services created.

Here are some key representative patterns and insights from across our projects.

After seven globe-spanning projects, we have come to the conclusion that human-centered design is a fantastic way to engage, understand, and find consistently innovative ways to bring the unbanked into the world of formal finance.
Poor people save, but saving is highly nuanced and takes a surprising variety of forms.

The act of “saving” can take many forms. In most countries, customers linked saving to a specific goal or activity. In Mexico, people physically divided their cash by categories like school fees and food. In Brazil, responsible spending is a type of saving. Getting a good deal or stretching your week’s wages is much the same as tucking away a few coins or bills. Meanwhile, in Ghana, people pay hefty fees for the convenience of having a susu collector come to their homes or offices to collect savings on a daily basis.
“My mom keeps my money organized into different bags for things like rent and food. I give her the money separately and she keeps it. I give it to her because if I had the money with me, I would spend it on anything!”

—Maria, Mexico
Customers’ goals are short-term. The future is a distant concept and hard to imagine because present needs are so prominent.

The near-term controls people’s lives. The poor live fast-paced lives dictated by what is happening today, not years from now. People dream within what they feel is possible, which makes substantial change very hard to achieve. The poor are masterful at managing daily cash flow, yet they find long-term planning and goal setting difficult. Most would like to be nudged to set goals and to imagine a path to accomplishing their distant dreams. Knowing something is attainable gives them the power to imagine more.
Cash works. It’s all about control.

Cash is one thing that people understand and trust. It provides limits, and seeing what is left over after spending leads people to make better financial decisions. Cash works seamlessly for daily transactions whereas mobile money requires extra effort and cost. For mobile money to compete, it will need to offer a value proposition that is significantly superior to cash.

“With cash you can’t spend what you don’t have.”
—Sueli, Brazil
People trust people more than they trust organizations.

Stories about unfair treatment of customers travel fast, and just one bad experience with a formal financial institution can have a long-lasting negative impact on a person’s financial inclusion. Fear of scams is widespread, and many countries lack a strong recourse system for customers to have their complaints heard. It is easy for an organization to get a bad reputation in a community, and once that happens it can be difficult to reverse negative momentum. Although people are acutely aware of the shortcomings of informal services, like savings groups, they are more tolerant of them. One reason is that they know who to confront if something goes wrong. They don’t feel nearly as comfortable doing that with formal organizations.

“He [the loan shark] is nice if I can’t pay on time. Sometimes I take out a second loan to pay for the first.”
—Darojah, Indonesia
Distrust of banks is prevalent.

For the unbanked, there are huge mental blocks to trusting financial institutions with their money. Across all projects we saw the same recurring perceptions: banks have high fees, are difficult to access, confusing, and ultimately not worth the effort. Even in Pakistan, where many interviewees expressed the belief that banks are secure and honest, they ultimately maintained that banks were “not for me,” and “only for rich people.”

“Banks are only for rich people.”

—Murium, Pakistan
“You’ll never get poor by giving to others.”

—Aswing, Indonesia
Communities pool resources for financial and emotional support.

Low-income people feel more comfortable investing in their communities and their neighbors, because they know they will have a built-in support system in their own time of need. Most communities already have informal financial services groups, groups that integrate easily into people’s lives and offer functional, financial, emotional, and community support.
“My mother has poor vision, so I manage the phone for her. My aunts don’t learn how to use mobile money because I am always there to do it for them. Plus, I get to keep the leftover change for myself.”

—Paul, Ghana

Social networks drive financial and technological awareness.

People learn new information by word of mouth. Community role models, not formal education or business ownership, are most likely to pass along financial literacy. The intergenerational nature of communities also means that wisdom is shared down and technological and cultural information is shared up. All this is communicated in language that is easy for all generations to understand. For the unbanked and the poor, older generations rely on their younger relatives to carry out financial or mobile transactions.

DESIGN PRINCIPLE

Talk Like People Talk
Build Consistent Support Into the System
Poor people are at best uncomfortable, and at worst, fearful, of new technology.

Mobile financial services require customers to use their phones in ways that they might not understand or that makes them feel uncomfortable. Similarly, ATMs can be a source of anxiety for many customers. In Pakistan, illiterate beneficiaries of the country’s cash transfer program struggled even to input a set of numbers into a phone, since in Urdu, numbers and letters are read from right to left, not left to right.

“I’ve heard of mobile money on TV, but no one I know uses it. And I don’t have enough money for charges.”
—Faustina, Ghana

DESIGN PRINCIPLE
Build Consistent Support Into the System
The need for safety in financial services is context specific.

Contrary to our assumptions, tight security wasn’t a primary concern of unbanked people in Indonesia or Ghana when it came to using mobile money. In other countries, such as Brazil, Mexico, Kenya, and Pakistan, security with financial services was a huge concern and fear of hackers and scams are very real. In Ghana, susu collectors and microfinance institution loan officers walk through poor communities with hundreds of dollars in cash. Mobile money providers there who advertised the safety of their services have struggled to get traction.
“The poor don’t steal from the poor.”

—Bus driver, Indonesia
“I don’t play games with my money.”

—Cesar, Brazil
Fees don’t hurt when the service works.

We found that people don’t mind paying for financial services as long as the service doesn’t let them down. However, many customers have had bad experiences with providers and felt like they had no recourse when something went wrong. Unsatisfied customers are likely to leave rather than to work through their problems. This is especially true when they perceive that they’re getting nothing in return for their fees. In Mexico, the team changed the language of their target segment from “unbanked” to “debanked” since so many people we spoke with had voluntarily left their banks.
DESIGN PRINCIPLES

Customer insights are only as good as the actions they spur. These overarching design principles were born directly from what we heard in the field and they directly informed what we designed.

DESIGN FOR TRUST

One of the reasons the unbanked stick to cash is because it’s tangible and it’s certain. In order to succeed as a viable alternative to informal finance, banks and mobile money services need to feel the same way. When designing new financial services for low-income people, put consumer trust and security at the center and try to recreate and build on the benefits of cash.

Make sure that the transition away from informal banking you’re offering has trust, convenience, and comfort at its core. Be transparent and don’t hide any element of your service. Be consistent in your messaging and offer. Show your pricing structure up front. Remember that your agents are community representatives and users will trust them because they know them.

OFFER BENEFITS NOW

Give people small benefits more often so that they see that something is working and is relevant for their lives today. Consider small increments of the service at a greatly reduced price. Work with people’s current cash flows and timing. Move from the aspirational to the functional. Consider what small benefits you can offer to customers immediately – discounts, a small “thank you gift” for signing up, educational tips or rewards for signing up friends. This will build up customers’ short-term trust and retain them as loyal users.

Example: We experimented with several different ways to offer customers benefits now when purchasing a longer-term insurance product. Some ideas we explored were immediate pharmacy discounts when purchasing health insurance, allowing people to access their payments as loans, and providing smaller, more specific short-term insurance at a low cost.
HELP PEOPLE MAXIMIZE THEIR MONEY

Low-income people already struggle to stretch their money. Make sure that what you’re designing is a tool to help them stretch it better. Be creative in offering products in a way poor people can afford. Think beyond the dollar. Concepts like rewards, bonuses, incentives, and loyalty programs can be easy and fun ways to help people “earn” more of a product with fewer out-of-pocket costs.

People think of saving not only as putting money aside, but also cutting expenses and seeking deals. Keep this in mind when you’re designing a product or service; also design flexibility and affordability into any new offering. Many low-income customers want you to remove the temptation to spend.

Example: In Brazil, the design team suggested custom- ers unlock mini-rewards, such as a free movie ticket, after just a few months of use. Knowing that small fun rewards await them, customers are incentivized to use their phones instead of cash. And the rewards allow them to enjoy simple pleasures without any guilt.

TALK LIKE PEOPLE TALK

Financial services need to be explained in a way that all individuals can easily understand. Drop the jargon and meet customers on their turf. Use their terms, not yours. Give simple and clear instructions. Literal language, specific examples from real life, and strong, clear visuals like illustrations and photographs trump icons, abstraction, and aspirational language—especially in communities where illiteracy is a tremendous barrier.

Example: In Mexico, the word “to save” (ahorrar), was understood by many banks to mean “excess money,” something many low-income users didn’t think they had. Instead, people use terms like “to put aside” (apartar) to describe how they keep their money.
DESIGN PRINCIPLES

BUILD CONSISTENT SUPPORT INTO THE SYSTEM
Support your customers throughout the entire user journey. Connect with customers on both a practical and emotional level and give them a hand when they struggle. If banks are viewed as consistently leaving people in a tough spot, then design a solution that delivers on its promise, rewards good behaviors, always has an accessible support system, and ensures that customers are consistently supported at all stages of the journey. Don’t forget to support agents, call centers, and all other touchpoints as well.

GIVE THE CUSTOMER CONTROL
Empower the customer at every stage of a product or service. Offer clear choices, be transparent and timely with all information, and give users a real-time window into their spending and savings. Too often banks and mobile money can feel complicated, intimidating, and overwhelming. Put the power in your customers’ hands and give them the confidence to take control of their finances. Make your product or service as tangible as possible.

COMMUNITY COUNTS
To change behavior on a massive scale, entire communities need to be convinced. There are all kinds of existing networks in communities, so be sure to leverage what already exists. Friends and family, word of mouth, and social networks are all key to building brands and increasing adoption. Understanding influence, knowledge points and nodes in a community can be crucial in communicating a new offer.

Informal financial offerings often reveal important dynamics, behaviors, and trends in a society, so when you introduce people to a new service, make sure you’re building on what already exists and that your new take is user-friendly and encourages participation. Make sure the community lies at the core of all decisions and marketing strategies by creating public displays of identity and support.
DESIGN FOR CONCRETE GOALS AND DREAMS

People dream based on what they know. And what they know tends not to be pie-in-the-sky abstractions, but tangible, real-life examples. Inspire them to achieve realistic goals like saving for school fees or paying a hospital bill. Design a product, service, or experience that allows them to think of a path to accomplishing short-term goals that lead to longer-term ones and can also build a path to accomplishing bigger dreams.

OFFER LIMITS NOT TEMPTATIONS

Design systems and services that discourage spending. We learned that not spending is often considered a type of saving, so make sure that products and services take advantage of this mindset. Often people want to be helped to save money in a way that makes sense for them. We often heard people saying something like “Save me from myself.” Designing limits into new offers is key.
Poor people save, but saving is highly nuanced and takes a surprising variety of forms.

Customers’ goals are short-term. The future is a distant concept and hard to imagine because present needs are so prominent.

Cash works. It’s all about control.

People trust people more than they trust organizations.

Distrust of banks is prevalent.

Communities pool resources for financial and emotional support.

Social networks drive financial and technological awareness.

Poor people are at best uncomfortable, and at worst, fearful, of new technology.

The need for safety in financial services is context specific.

Fees don’t hurt when the service works.
HCD IN ACTION: CGAP PROJECTS

7 HCD PROJECTS, 8 COUNTRIES
Financial service provider

Design firm

01  UGANDA

MTN  GRAMEEN FOUNDATION

Financial service provider
Design firm

02  MEXICO

BANCOMER  IDEO.ORG

03  BRAZIL

BRADESCO  IDEO

04  GHANA

TIGO CASH  IDEO.ORG

Financial service provider
Design firm

05  PAKISTAN

HABIB BANK LIMITED  CONTINUUM

06  KENYA & MALAWI

MICROENSURE  CONTINUUM

07  INDONESIA

BTPN BANK  FROG AND DALBERG
INCUBATING INNOVATIVE PRODUCTS

Location
KAMPALA, UGANDA

Teams
7 GRAMEEN APPLAB MONEY TEAM MEMBERS
2 PEOPLE FROM CGAP
REGULAR MTN INPUT

Partners
GRAMEEN FOUNDATION APPLAB MONEY
MTN UGANDA

Synopsis
100 INTERVIEWS
16 FOCUS GROUPS
2,000+ SURVEYS
9 CONCEPTS
3 PROTOTYPES
THE PROJECT

CGAP’s first HCD project took place in Uganda where we helped to set up a product incubation lab with Grameen Foundation (GF), housed at MTN Uganda (MTN). GF’s AppLab Money team used a variety of methods to uncover customer insights and develop commercial products for MTN.

This unique agreement allowed AppLab’s team to sit in MTN’s office, test on its network, analyze the company’s data, and trade ideas with its staff. The plan was to develop commercially viable product concepts that MTN could launch and bring to scale. Creating an incubator that sat with the provider and yet had an independent source of funding brought the luxuries of time, money, and talent, in the form of a team focused exclusively on creating and scaling powerful mobile money products ripe for adoption by poor customers.

The independent product incubation lab generated thousands of data points and hundreds of ideas. Unfortunately, about nine months into the process, MTN Uganda experienced substantial fraud on its mobile money system, so it prioritized addressing this problem over innovating. Despite this setback, the AppLab Money team continued to test and refine products.

CGAP learned a significant amount during this project. It has helped us to refine and sharpen our subsequent HCD projects and to structure projects that are shorter and more focused on the research techniques we know will yield breakthrough customer insights. It has also helped us learn about the challenges of creating change in an organization from the outside in and restructure future projects to ensure more buy-in from providers.

TOOLBOX

SIMULATED INCOME AND EXPENSE  JOURNEY MAPPING  ANNUAL EXPENSE TRACKER
“When I need cash urgently I have to sell my stock at lower prices because I cannot always get a loan from my family.”

—Dembe, Uganda
Harvest cycles affect all villagers: During harvest, farmers are flush with cash and boost the local economy. The rest of the year, cash reserves are lower and expenses like school fees limit purchasing power for farmers. These harvest cycles affect entire village ecosystems, and even shopkeepers, butchers, and restaurant owners struggle financially during non-harvest seasons when farmers have cash deficits.

Farmers try to “beat” harvest cycles. To meet expenses such as school fees during non-harvest periods, farmers sell animals or solicit cash from friends and family. Some plan to mitigate the risk of cash shortages and diversify their farms to grow cash crops.

Because local capital is scarce, farmers are keenly aware of local income-generating activities and could make a profit if they had access to capital. However, local credit sources (investment groups, friends, and family) are limited, especially during non-harvest periods. This significantly limits farmers’ ability to sustain a regular income, build their asset base, and move out of poverty.

Local data exist that can be used to assess credit worthiness of farmers. Financial service providers will not easily lend to farmers without a credit history or substantial collateral to put against a loan. They view the risk of default as too high. Yet pools of data exist outside of the providers that can help to assess credit worthiness, and are held by mobile network operators and agricultural input suppliers.

**KEY INSIGHTS**

Q: YOU ONLY INTERVIEWED 15 INDIVIDUALS FOR ONE OF THE PROJECTS AND 20 IN ANOTHER. HOW IS THAT A RELEVANT SAMPLE SIZE?

A: The goal of HCD is to find inspiration by talking in depth to target customers. The goal is not to have a statistically representative sample, but to have deep conversations with target customers and for those conversations to serve as an inspiration in the design of products and services. HCD is great at uncovering patterns and themes among users, and it often finds opportunities for design that traditional methods overlook.
AppLab program manager Olga Morawczynski noted that the project led to several key lessons, which helped her team improve their chances of getting a product to market. First, the team learned how to design products that reflect MTN’s organizational needs rather than the desires of a handful of senior managers. When a significant fraud occurred in the middle of the project, many of these senior managers left MTN and their replacements had very different visions of which products would be most suitable to MTN’s growth. The AppLab Money team had to start its process from scratch and scrap ideas that it spent ample time developing.

Morawczynski also said that the team should have followed the principle of keeping it simple. A product like Step Up! was just too complex and demanded MTN and its partner bank to undergo substantial changes to their systems and interfaces. These changes required money and significant management support. MTN, which was still stabilizing after the fraud, was just not ready for such complexity or investment. Future AppLab Money projects keep the principle of simplicity at the core to increase the chances of getting products and services into the hands of clients.

**PROTOTYPES**

**ME2ME**  
Status: Not live  
ME2ME is a goal-based mobile savings product that builds on familiarity and use of mobile payments to shift the perception of savings to a “payment to yourself.”

**ZIMBA**  
Status: Not live  
Zimba is a platform for enabling more flexible lending and borrowing within social networks that also expands access to broader capital pools.

**STEP UP!**  
Status: Not live  
Step-Up! is a savings-and-loan product that allows customers to improve their credit rating by saving and borrowing. The product makes credit scoring visible to customers to encourage higher savings and lower default rates. Both MTN and GF are developing products based on this concept.

**READ MORE** AppLab Money Incubator: Case Study Part 1
“We brought our partners a new way of really understanding the needs and desires of clients. We have since created a design process based on our experiences in Uganda and are now using it in 3 other countries, with close to 10 scaling partners.”

—Olga Morawczynski, Project Manager, Grameen Foundation AppLab
Una manera de guardar dinero para tus metas mientras ganas dinero.

Juana quiere comprar un carro.

Ella abrió una cuenta con Mis Proyectos y escogió ahorrar para un carro.

<table>
<thead>
<tr>
<th>Por cada</th>
<th>Gana al mes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000</td>
<td>2</td>
</tr>
<tr>
<td>10,000</td>
<td>25</td>
</tr>
</tbody>
</table>

Mientras Juana ahorraba también ganaba dinero.

Un día Juana compró su carro y recibió el dinero que ganó.

Nuestro rendimiento mensual:

<table>
<thead>
<tr>
<th>POR CADA</th>
<th>GANA</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>1</td>
</tr>
<tr>
<td>5,000</td>
<td>12</td>
</tr>
<tr>
<td>10,000</td>
<td>25</td>
</tr>
</tbody>
</table>

Algunos de nuestros beneficios:

- **30%** en 7 tiendas
- **20%**
DESIGNING FOR SAVINGS

Location
MEXICO CITY, MEXICO

Teams
3 PEOPLE FROM BANCOMER
3 DESIGNERS FROM IDEO.ORG
3 PEOPLE FROM CGAP

Synopsis
20 INTERVIEWS
12 CONCEPTS
2 PROTOTYPES
With over 11 million clients, Bancomer is the largest commercial bank in Mexico. It wanted to develop a new product to appeal to low-income Mexicans. Bancomer had already launched a product (Cuenta Express) for this segment, but, although registrations were high, usage was low. During the first stint of fieldwork, the team targeted a small sample of consumers with in-depth two-hour interviews to gain a better understanding of lower-income Mexicans’ financial behavior.

Based on insights from the first round of interviews and the resulting design concepts, the design team created a number of prototypes with accompanying branding materials and advertising brochures. These prototypes consisted of, for example, ATM mock-ups done with an iPad that offered a new product. The prototype was very useful for the design team in determining whether people could use the envisioned product and where consumers struggled. Unfortunately, the Bancomer ATMs did not look as sophisticated as the mocks-up by the design firm. Although these mock-ups were inexpensive for the design firm to create, the bank could not easily implement them.

Products faced several other roadblocks during implementation including regulatory and marketing hurdles. The resulting product concepts were two savings products: One was a goal-based savings wallet, and the other aimed to improve the efficiency and formalization of existing Mexican informal savings groups. These products were never launched and are being reconsidered for a different customer segment.
“My mother keeps our money in bags—different bags for different things, like rent and food.”

—Juana, Mexico
IDEO.org’s designers came up with this sketch as a way to investigate how people wanted to save. The drawings represent various degrees of accessibility of money (in the brick, hard to get; in the envelope, easy). By putting that drawing into the hands of unbanked Mexicans, the team quickly came to see what aspect of savings was important to them. In the end people favored the box—it suggested the right balance of safety and accessibility.
saving for saving’s sake doesn’t exist. Interviewees intuitively categorized money for projects, expenses, and emergencies. People felt that by distributing their money to different projects they knew exactly where it was going. Another insight was that people feel in control with cash in hand and thus felt skeptical about banking services. These two insights show how people compartmentalize their money not only mentally, but also physically.

Often, banks get caught up in small-print talk, where they present financial services in very complicated ways and present terminology to their customers in “finance speak.” The majority of the people we spoke to kept away from any of the bank’s products they had a hard time understanding.

Making a killer product a reality entails far more than just coming up with the right concept. When we first started implementing HCD we really wanted to see a new product that would drive uptake almost on its own. This project resulted in two very exciting ideas that were exactly the kind of thing that we wanted to see. Implementation, however, was hampered by regulations related to the pricing of ATM transactions as well as lack of buy-in from other departments (like IT and marketing, who were not involved in the process) within Bancomer. CGAP changed many aspects of the HCD projects following this one to minimize these challenges. We learned then, that launching a product is a lot more than just the product itself. It drew us to understand the importance of the whole customer experience, the regulatory environment, marketing channel strategy and more.
HCD SPOTLIGHT: INSTITUTIONALIZATION

Despite the lack of a product in the market, this project impacted the way Bancomer seeks to understand customers and develop products. Bancomer is currently developing two new products for the segment and is using HCD techniques to ensure the process is customer-centric. Recently, Bancomer did a project on how cash moves through supply chains and hired a design firm to help brainstorm how this could be digitized. Before this project, they would have just hired a traditional consulting firm who would have focused on the numbers, not the human factor. Institutionalization was not an explicit focus of this project, one of our first, but happened nonetheless as managers saw the power of feedback loops and customer input.

PROTOTYPES

MIS PROYECTOS
Status: A web-based version of Mis Proyectos is being considered for development

Mis Proyectos is a savings account that helps people categorize and track their savings based on goals (buy a motorbike, pay school fees etc.). This ATM-based product offers savings categories and a way for follow-up and planning for clients. This service was easy to access, customers could see their balances at ATMs, and they could even qualify for loans based on their projects and savings.

TANDAZO
Status: Not live

Tandazo offered an opportunity for the bank to create a relationship with current and future tanda organizers. The product offers linked accounts in order to administer group saving. There are support tools for the organizers of the tandas that include a mobile application to administer the tanda and to send reminders, debit card for the members of the tanda, and a Tandazo ID card. The product also provides a status system through which organizers can gain access to sell banking products. All transactions can be done through ATMs and branches.

READ MORE Why Don’t Low-Income Mexicans Use Formal Savings Products?
“We now use the human-centered design process consistently in our unit. If we have a good idea, we first go out and talk to customers about it. It has really changed the way we do things and validate new ideas.”

— Manuel Niembro, Global Financial Inclusion Manager
BRADESCO

DESIGNING A NEW MOBILE WALLET

Location
RECIFE, BRAZIL

Teams
2 PEOPLE FROM BRADESCO
4 DESIGNERS FROM IDEO
2 PEOPLE FROM CGAP

Synopsis
20 INTERVIEWS
14 CONCEPTS
10 PROTOTYPES
JANUARY 2014: PRODUCT LAUNCH NATION-WIDE
MEU DINHEIRO CLARO
THE PROJECT

Bradesco Bank is Brazil’s second largest commercial bank with over 50 million clients. The mobile money sector in Brazil is still nascent, yet agent banking is among the most mature in the world. In fact, agent banking was born in Brazil more than a decade ago. With one part of the infrastructure firmly in place, and a desire to introduce the first truly innovative mobile wallet in the country to the base-of-the-pyramid, Bradesco, IDEO, and CGAP set out to talk to customers in August 2012. The aim was to improve the design of a mobile wallet the bank had been developing in partnership with the MNO Claro.

The design team went to Recife—the largest city in Northeastern Brazil and one of the poorest in the country—twice. First we conducted in-depth customer interviews to understand lower-income Brazilians’ financial behavior, and second we tested paper prototypes to gauge people’s interest in the concepts created.

On the first trip to Recife, IDEO shared 14 ideas and solicited customer feedback on each one. This was a different technique than other projects, where we started with basic customer interviews and only later tested concepts. In this case, we used customer reactions to refine existing concepts and to create new designs for specific themes echoed throughout the interviews.

IDEO tested these new concepts and paper prototypes on the second trip and, unlike other engagements, instead of just recommending a product or service, IDEO suggested a complete engagement strategy for the Brazilian market—a carefully thought out strategy to guide customer behavior, drive awareness, increase behavior, and build loyalty.
"We break [our piggy bank] for emergencies, like last week."

—Patricia, Brazil
We initially assumed that because of the steep growth of credit in Brazil in previous years, credit would be a popular product that Bradesco should incorporate in the market. However, we found the opposite: People wanted help curbing spending to save more. Credit felt dangerous to a lot of people, and many people had switched back to cash since it felt safer after having difficulties with credit cards. In addition, the design team found that people in Brazil were very savvy with their cash and were always looking for great deals and ways to spend smarter. As a result, they recommended that Bradesco should help people stretch their money, making every cent count.

Product development and process changes take a very long time in large commercial banks. It took two years for Bradesco to launch its mobile wallet, with some of the suggested features by IDEO. Check out Meu Dinheiro Claro (click to open in web browser).

Q: WHAT’S THE RETURN ON INVESTMENT?

A: When you are designing a product or service that has been tested with customers from the beginning via rapid feedback loops, you can have confidence that the end product will really be relevant for your target customer. Implementing ideas from HCD projects should lead to enhanced customer loyalty and product usage and, eventually, an increased bottom line. But don’t invest in HCD for a quick win. Some of the bigger banks launching HCD projects have had to wait several years to see product and service launches.
We learned a key lesson from this project: For a product to be successful, the entire customer experience must be high-quality and carefully based on design principles arising from customer insights. Getting the ecosystem right around a particular product is as important as the product itself.

PROTOTYPES

Instead of coming up with distinct products, the design team put together a full engagement strategy for Bradesco. Each new feature belonged to a different part of the strategy, which had an important macro goal in sight.

Status: *Meu Dinheiro Claro* was launched nation-wide in January 2014. The first pilot (soft-launch) was in October 2013.

---

**GOAL 1**

The first step for Bradesco is to build awareness around the product and give people a reason to use it. IDEO recommended strategies to do this based on its understanding of the target segment. Some of the techniques included notable signs on the street, building pop culture presence, neighborhood presence, and a simple referral process.

**GOAL 2**

The second step takes folks from an awareness of the product to building behavior. In this phase, Bradesco was encouraged to focus on helping people experience value firsthand. This included a set of discrete recommendations on what people’s first “test drive” of the product would look like. It also included numerous interface design recommendations and encouraged setting up small gifts to drive and reward regular use.

**GOAL 3**

The last stage is building loyalty and keeping customers engaged. The two product features suggested here were a digital piggy bank where people could save seamlessly every time they transacted and a yearly lottery where people were eligible for big sweepstakes.

---

**READ MORE** Applied Research Methodologies for Financial Inclusion
<table>
<thead>
<tr>
<th>Descrição</th>
<th>Mês 03</th>
<th>Mês 04</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPVA</td>
<td>722,00</td>
<td></td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>180,00</td>
<td></td>
</tr>
<tr>
<td>água</td>
<td>40,00</td>
<td></td>
</tr>
<tr>
<td>Taxa vado 1/4</td>
<td>40,00</td>
<td></td>
</tr>
<tr>
<td>Supera</td>
<td>40,00</td>
<td></td>
</tr>
<tr>
<td>ona tira</td>
<td>30,00</td>
<td></td>
</tr>
<tr>
<td>Giovani</td>
<td>30,00</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,092,00</td>
<td></td>
</tr>
<tr>
<td><strong>Wesley</strong></td>
<td></td>
<td>170,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,262,00</td>
<td></td>
</tr>
</tbody>
</table>
“In my opinion, human centered design is more than a method, it’s a way of thinking. And there’s no turning back after you start.”

—Gabriel Villa, Head of Shopfacil Business Unit, Bradesco
Ghana

TIGO CASH

RETHINKING MOBILE MONEY

Location
ACCRA AND KUMASI, GHANA

Teams
5 PEOPLE FROM TIGO CASH
3 DESIGNERS FROM IDEO.ORG
1 DESIGNER FROM IDEO
3 PEOPLE FROM CGAP

Partners
IDEO.ORG
TIGO CASH

Synopsis
46 INTERVIEWS
8 CONCEPTS
4 PROTOTYPES
3 LIVE PILOTS IN 27 COMMUNITIES BY MAY 2014
THE PROJECT

Tigo Cash launched its mobile money service in Ghana in 2010. By 2012, the service had just over 1 million registered subscribers, yet only a fraction of these were actively transacting. Tigo Cash—along with its competitors in Ghana—was struggling to gain momentum. In 2013, CGAP, Tigo Cash, and IDEO.org set out to better understand how to improve the customer value proposition and to improve customer engagement with mobile money among low-income Ghanaians.

The aim of the project was different from the other projects as we did not set out to change the product itself. Instead, we wanted to understand key customer touch points and how to activate registered customers who were not actively using the service. We visited Accra and Kumasi to understand the behavior of current Tigo Cash customers and how Tigo Cash could be more appealing. Over the span of four months, we talked to more than 40 people and learned what matters most when it comes to making and receiving payments. We synthesized what we learned and then quickly built and tested four prototype services to test our learnings. This customer-centric approach allowed Tigo Cash to understand how to position mobile money and to tailor its service to fit the needs and desires of unbanked Ghanaians.

TOOLBOX

INTERCEPT INTERVIEWS    PHOTO NARRATIVE    BUSINESS MODEL CANVAS
“Every day I give my susu collector money. I have been saving money with him for several years now. Whenever I need the money I call and he delivers it.”

—Anita, Kumasi
Understanding Customers for Financial Innovation in Ghana
KEY INSIGHTS

Through over 40 interviews, the Tigo Cash, IDEO.org, and CGAP teams gained knowledge of customers’ desires and fears before we set about designing solutions. Many insights were familiar to Tigo Cash management, and some were surprising. In its marketing campaigns, Tigo Cash had framed its value proposition as “Speed, Access and Convenience,” yet the team heard from customers that they already considered cash easy and convenient. They considered sending cash “fast enough” (including cash transfers through a bus that arrived within a day). Cash was fine. Mobile money, on the other hand, was confusing and a hassle. People were not looking for the things Tigo Cash was offering; in fact, these seemed like irrelevant offerings to them.

As a result of this, the design team proposed three experience principles aimed to help Tigo Cash focus on key elements to help build the trust and value of Tigo Cash. The principles are (1) creating a visible Tigo Cash community (wherever I am, it’s there!); (2) offering expanded potential (creating value beyond convenience, having Tigo Cash offer growth opportunities); (3) and provide continuous support and make customers feel valued.

FROM THE DESK OF A SKEPTIC

Q: WHAT ARE HCD’S TOP THREE DRAWBACKS?

A: It’s expensive, especially to do the process start to finish with a professional design team. We spent $150,000 to $350,000 per project, and that was just for the conceptual and design phase.

Second, there aren’t many HCD firms with experience in developing countries and financial inclusion. Some of the teams we worked with had steep learning curves as they went into slums in Africa and navigated terrorism threats in Pakistan for the first time in their lives.

Finally, the measure you give is the measure you get. You can’t bring in a design team, wave a magic wand, and simply get a great response. The providers who gained the most from these projects had to spend a lot of their own staff time and resources, as well as commit to becoming more customer-centric, to make the projects a success.
This project was a big win in terms of institutionalization. Never had the extended team (Tigo Cash and CGAP) felt as cohesively integrated into the design process as with this engagement with IDEO.org. This is in large part due to Tigo Cash who contributed several staff full-time for the duration of the project. Tigo Cash learned how the HCD process works and built capacity to do it for itself in the future.

HCD SPOTLIGHT: PROTOTYPES

### NO WAHALA KIOSK
**Status:** Live in 27 communities

Mobile money agents are common, but they do cash-in and cash-out transactions and are rarely able to provide broader customer support. That makes mobile money, about which customers have so many questions, a tough sell. We prototyped the value of regularly scheduled and dedicated customer service with the No Wahala Kiosk.

### TOOLBANK
**Status:** Live

For this prototype, we sought to give Tigo Cash promoters better tools to educate and register customers and thus increase the potential that those customers will actively use the service. One of the tools we used were use case videos that allowed people to see the tool and see how they could use it in their own lives. Check out the video on page 74.

### TIGO SAVE
**Status:** Live in 27 communities

Because susus are already such a big part of Ghanaian savings, we decided to model a Tigo Cash service on them. The key to this prototype was making an informal savings system feel more official. By putting agents in Tigo Cash outfits and explaining the benefits of Tigo Save over informal susus, we were able to confer more gravity on the product and leverage a popular informal savings practice.

READ MORE Storify Slideshow
New Mobile Money Solutions in Low-Income Communities
Click to play video: Prototype Tigo Cash-User Story: “Seth”
READ MORE
Project Tumblr blog (password: icevest)
“Since the project, I have thought about a lot of consumer insights methods very differently. To me, HCD really got beyond the superficialities of consumer research to actually get to the bottom of the real motivations and feelings of customers. Extremely powerful and something I wish I can introduce in a systemic way at Tigo.”

—Selorm Adadevoh, Head of Mobile Financial Services, Tigo Ghana
Pakistan

HABIB BANK LIMITED

DESIGNING GOVERNMENT-TO-PERSON PAYMENTS

Location
REGIONS SURROUNDING LAHORE AND MULTAN, PAKISTAN

Teams
2 DESIGNERS FROM CONTINUUM INNOVATION
2 PEOPLE FROM HBL
2 LOCAL DESIGNERS
2 PEOPLE FROM CGAP

Synopsis
31 INTERVIEWS
6 CONCEPTS
3 PROTOTYPES

Partners
HABIB BANK LIMITED
CONTINUUM INNOVATION
THE PROJECT

CGAP and HBL worked with design firm Continuum Innovation to better understand government-to-person payment (G2P) customers in Pakistan. The beneficiaries of the Benazir Income Support Program (BISP)—nearly all of whom are women and are among the poorest in the nation—face a number of challenges.

BISP transfers money to 5.5 million households regularly and HBL distributes over 1 million of these. However, the program faces many challenges—financial, social and educational. The original objective of our work was to help HBL develop a sustainable financial product that it could offer to its G2P customers. Through the customer research and product design process, CGAP and HBL came to understand both the opportunities and constraints to sustainably bank this extremely poor population segment of Pakistan.

The research findings emphasized the need for a communications strategy tailored to the unique circumstances of this demographic, which faces the acute challenge of widespread illiteracy. The bank had previously made assumptions about the financial capability of these beneficiaries that were not grounded in reality. Most beneficiaries struggled to interact with ATMs or agents and felt embarrassed and confused by the process of visiting a bank. How might we better understand, and then serve this extremely needy population get the money that it’s owed?
“As the money comes, it goes. Nothing is saved, all is spent.”

—Nadia, Pakistan
READ MORE

Literacy a Hidden Hurdle to Financial Inclusion
KEY INSIGHTS

Beneficiaries were provided PINs that they need to key into an ATM to receive their social payment. These four-digit PINs were designed by the bank to be entered from left to right. However, beneficiaries input PINs from right to left because that is how local Pakistani languages are written and read.

Existing instructions for BISP beneficiaries came with diagrams and icons, so beneficiaries could understand procedures even if they could not read text. However, research showed that these beneficiaries didn’t understand most of the diagrams and icons. For example an icon used to connote five “500 rupee” notes actually looked like a poorly drawn hand to beneficiaries. Therefore, a very literal communication form was recommended, such as photographs showing exactly what the person has to do on exactly the same device they will use.

Existing receipts for payment confirmation could not be understood. The text was small and there were distracting characters and symbols surrounding it. Receipts should be redesigned, with large visible numbers for the most vital information (ex. amount disbursed) and elimination of less vital surrounding text. The design team created a Design Guide to help HBL and other institutions make their offerings easy to use by G2P customers.

FROM THE DESK OF A SKEPTIC

Q: WHY WOULD YOU BUILD A PROTOTYPE SO SOON INTO THE PROCESS?

A: The sooner you build a prototype and test it, the better. That way you haven’t committed yourself to a concept that might not fly with customers. The idea of rapid prototyping is to get something out to customers as soon as possible and to let them validate or invalidate the idea quickly. As you build confidence in the value of your idea, you can invest more resources in building more refined prototypes to answer more sophisticated questions, including running a live prototype to measure market demand, and try quantitative methods to validate it even further.
This was the first CGAP HCD project that embarked on the acute challenge of determining whether the poorest and most illiterate population segment—social payment beneficiaries all of whom are women—could ever sustainably be banked through some type of financial product. We learned that given the uniqueness of this particular population segment, the bank has to completely deconstruct its assumptions. We learned that an appropriate communications strategy tailored to the needs and capabilities of these clients is the vital lever to creating any kind of product that this segment could actually access and use.

Although the bank had initially hoped that the design team would create new products with which to fully bank these clients, the design team found so many problems and such a lack of trust with the basic service that they recommended refocusing on making the existing service work for the beneficiaries before attempting to develop any new products for them.

**PROTOTYPES**

We did not create any product prototypes. Instead, we tested various ways that the bank could communicate more effectively with this segment and make it easier for them to access banking services. The result was a Design Guide with very specific recommendations on making banking services accessible for illiterate people.
Working with The Poorest Women in Pakistan
“Testing new product and strategy concept designs with customers has become a norm within our team at HBL. This practice has proven to be particularly valuable in designing products and communication strategies for a low income, underserved, and illiterate target market.”

—Daniyal Khalid, Assistant Manager Business Intelligence, HBL
Protect your health and get free yearly check ups.

Check out In Good Health from Airtel. *123#
Kenya and Malawi

MICROENSURE

GAMIFYING INSURANCE

Location

NAIROBI, KENYA
LILONGWE, MALAWI

Teams

2 PEOPLE FROM MICROENSURE
3 DESIGNERS FROM CONTINUUM INNOVATION
2 PEOPLE FROM CGAP

Partners

MICROENSURE
CONTINUUM INNOVATION

Synopsis

23 INTERVIEWS
4 CONCEPTS
4 PROTOTYPES
MicroEnsure, Continuum, and CGAP set out to understand how MicroEnsure could increase uptake and engagement of insurance services among mass-market consumers in Africa. MicroEnsure had recently announced a partnership with Airtel to deliver insurance products for its customers across all 17 countries where Airtel has a presence. This presented an exciting opportunity to design new products that could scale across Africa.

To better understand who we were designing for, the team visited low- and middle-income people living in urban and peri-urban areas of Nairobi, Kenya, and Lilongwe, Malawi. We chose these two countries as extremes in Africa in terms of income and technology adoption. Using foundational research and our design criteria to guide us, we designed solutions for the mass market. We took the solutions back into the field as cardboard prototypes and tested four text-based game concepts; benefits in the form of promotional text messages; and a way to buy insurance in the form of airtime. Feedback from potential customers and MicroEnsure confirmed that a product platform offering people small pleasures in the form of games, and education in the form of advice would increase engagement with the product and build an avenue for people to learn more about and sign up for insurance products.

MicroEnsure is now working with a Kenyan game developer to build a more refined prototype of one of our concepts and will take it back into the field for broader testing.
“I like to play the game Block’d on my phone. I have my phone on me at all times.”

—Ethel, Malawi
For low-income people in Africa, insurance is a distant concept. People do not see it as something that fits their lives, so we need to convey the value of insurance. The product offering has to help people understand the value of insurance to help them meet their goals. People aspire to making enough money to cover their basic needs, own a home, and perhaps a car. But inconsistent income and constant setbacks, ranging from needing to pay school fees to the death of a loved one, make achieving “the good life” very hard.

In order for insurance to be appealing, it needs to offer some immediate benefits as well as long-term protection. In this project, we experimented with providing entertainment and educational tips to make the product more immediately relevant to people’s lives.

**Q: WHEN DOES QUANTITATIVE RESEARCH COME IN? ARE YOU REJECTING THIS FLAT OUT?**

**A:** Absolutely not. Quantitative tools and methodologies are still highly effective for purposes such as market sizing and segmentation. This can be useful, for example, in analyzing a potential market and deciding which segments to prioritize. HCD could then help drill deep into the needs and wants of customers within those segments.
This project taught us quite a lot about prototyping, particularly around the gamification of insurance. We knew that different types of games would serve as a fun, small pleasure for people, but could they do more? After lots of research and many quick-and-dirty prototypes, we learned that games are also a way to connect people to educational, or advice-like, content. We tested a few quiz-based games and one that unfolds as a choose-your-own-ending love story. We found that people were captivated by the love story. It was clearly a situation they could connect with and learn from. Learning and advice serve as a type of currency for people, and they are hungry to receive and share it.

### PROTOTYPES

**AIRTIME SCRATCH CARD**
We created a mockup of an airtime scratch card with part of the cost going toward insurance coverage. This was a tangible way to ask about how people buy airtime and what their expectations are around paying more for an insurance product. People liked the tangible nature of the airtime card and the visible recognition that they are protecting their family.

**BENEFIT MESSAGING**
We tested a few promotional text messages touting different benefits. They explored both the “what” and the “how” of benefits. The what, as in what type of content is most resonant (health, business, love) and the how, as in how the reward is delivered (free check-up, business advice through your phone, referring a friend to receive the next chapter of the love story). We found that people craved advice that they could use to get them further toward the good life. Business advice and referring a friend to get greater coverage were the most popular.

**SNAKES AND LADDERS POSTER**
We wanted to expand “games” beyond the phone interface and see if people would connect the two different forms. Better yet, could one form (analog) complement the other (digital)? We built a poster game board that would be used as a promotional piece that to complement a digital game. We found that the playful nature of the game board turned more people off than on. People saw value in the poster for children and did not make the connection that it would connect with a game on their phones.

[READ MORE] Increasing the Immediate Value of Microinsurance for the Poor
Using Phones to Engage Customers with Insurance Products
“I think what we’ve done with CGAP will become the future of our business, if not our industry. By helping us to understand risk from the client’s perspective, we’ve identified new products and revenue streams that are unimaginable to most of the companies in our industry today.”

—Peter Gross, Regional Director, MicroEnsure Africa
btpn kios
wow!

hubungi btpncall (021) 500 300 untuk informasi lengkap
Indonesia

BTPN BANK

REDESIGNING THE DREAM WALLET

Location

JAKARTA, BOGOR, DEPOK, TANGERANG, BEKASI, TEGAL, AND BALI, INDONESIA

Teams

5 PEOPLE FROM BTPN
3 DESIGNERS FROM FROG
4 CONSULTANTS FROM DALBERG
2 PEOPLE FROM CGAP

Partners

BANK BTPN
FROG DESIGN
DALBERG GLOBAL DEVELOPMENT ADVISORS

Synopsis

72 INTERVIEWS
118 IDEAS
4 CONCEPTS
4 PROTOTYPES
THE PROJECT

Founded in 1958, BTPN is a mid-size Indonesian commercial bank serving 1.4 million mass-market customers. The bank launched a mobile wallet product called BTPN Wow! in 2012. The product is geared to low-income Indonesians and is designed for usage on basic phones. However, the bank felt it needed additional support to tailor this offering to truly meet the needs of its customers. So project Bertumbuh (meaning “to grow”) was born in an effort to help Bank BTPN improve its BTPN WOW! product and assist it in understanding its target customers. CGAP teamed up with the strategy consulting firm Dalberg and the design firm frog to see how HCD could improve the customer value proposition of BTPN WOW!

After an initial three weeks of research in the field, the team synthesized its learnings and embarked on a two-day frogThink ideation session to generate new ideas across the entire BTPN WOW! customer experience. They aimed not only to cover the mobile user experience, but the agent ecosystem and other touch-points—from acquisition to retention—along the customer journey. The frogThink session resulted in 118 new concepts. BTPN selected the seven most promising ideas and then the frog and Dalberg teams spent three weeks working to develop the shortlisted concepts.

The BTPN WOW! team is working on additional prototyping to further refine concept ideas.
“My husband sends money from Jakarta. The extra I put into an arisan. Without getting an early draw on the arisan I wouldn’t have been able to start my business.”

—Siti, Tegal
Indonesia: Anatomy of a Successful Human-Centered Design Project
One interesting insight from this project was that constrained means in Indonesia result in limited dreams. Canned dreams, unspecific goals, and lack of planning for the future are endemic. People dream within what they feel is possible; but also only make possible what they dream, making it difficult to create much positive change.

People who are unbanked also have mental blocks against being banked. Past experiences with banks—hidden fees, losing access, accounts being closed due to low balance—discourage people from trying again. In addition, individuals with no money to save don’t think banks are for them.

One of the most useful tools in this project was intercept interviews. Intercept interviews are short conversations on the ground in the middle of market places or busy areas when vendors or people are willing to just have a chat with designers or researchers. During these 15-30 min conversations, people share things about their lives. They are useful in giving more color to a particular context, and are helpful to test quick hypotheses. The team was able to do these in several markets in Jakarta, in communities, and even during train travel between cities!
The Dream Package is both a service that helps a customer define a dream, and a product that will help to achieve it. Through this process the customer builds a financial reputation with the bank, and over time, the customer’s growing credit history empowers the customer to pursue more dream packages of higher value. This product allows the customer (with the help of the agent) to identify a specific dream for the customer, which comes with a payment plan.

This concept is a series of games—both physical and on mobile phones—for agents to play with customers, other agents, and by themselves. The games help BTPN recruit, train, and monitor agents as well as help the agents acquire, educate, and serve customers. Responding to an insight that technology is a barrier, especially for older adults, this concept was designed to help agents and customers feel more comfortable using their phones for more than calling and texting.
Price in Rice is a way to bring tangibility to customers who are used to counting their stores of value in goods like rice. The price equivalent in a tangible good would be displayed next to the customer’s account balance information. A customer could choose the most meaningful tangible item in which they would like to see their balance displayed. In this prototype the balances are shown in rupiah, kilograms of rice, and kilograms of pork. The price equivalents would adjust to the market values of tangible goods.

These cards serve as a tangible manifestation of a BTPN WOW! customer loyalty program. Staged over time to match a customer’s needs and financial progression, the cards would change as the relationship between BTPN and the customer evolves. This should help get over some of the mental blocks that unbanked people have regarding being banked.
“I considered this project to be extremely valuable as it had brought not only a new perspective on product design, but it had also exposed the team and me to the HCD concept in general. I have no doubt in my mind that these insights and framework would serve the organization and me well in our efforts to create relevant services aimed at the unbanked in Indonesia.”

—Donny Prasetya, former Head of Sales, BTPN WOW!, BTPN Indonesia
HCD is a process, one that we’ve worked through seven times now. And although each project had its own unique contours and constraints, we found that there are certain basic elements of the approach that were especially effective. Over the next pages, we’ll share some of our favorite tools.

More and more design firms are starting to produce their own toolkits and how-tos with regards to practicing HCD. We’re not aiming to recreate that here (though do check out our cribsheet to the best HCD toolkits on pg. 116). Instead, we want to highlight the prototyping, synthesis, and research methods that helped us most.

With the help of some top-tier design firms showing us the ropes, we quickly came to understand some of the ways that HCD can best work for financial inclusion.
LEARNING FROM CUSTOMERS

There are a variety of ways you can connect with your customers. Here are some approaches that we found particularly effective.

<table>
<thead>
<tr>
<th>SIMULATED INCOME AND EXPENSE ACTIVITY</th>
<th>SACRIFICIAL CONCEPTS</th>
<th>USE CASES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What</strong></td>
<td><strong>What</strong></td>
<td><strong>What</strong></td>
</tr>
<tr>
<td>Participants are presented with images representing common expenses (school supplies, food, rent, etc.), and are then given a hypothetical amount in play money. They are then asked to allocate it as they would in real life. We also gave them crisis situations to see how they would respond.</td>
<td>Participants are presented with concepts or potential product ideas that can be easily sacrificed or discarded if they don’t like or understand them. Participants were asked their impressions and opinions and then had the freedom to reject concepts altogether. This feedback is key in developing later prototypes.</td>
<td>Participants are presented with cards that contained examples of different instances when a financial transaction was needed (emergencies, bills, school fees). They were then asked how they would (or how they have) physically delivered money to the intended recipient in those cases.</td>
</tr>
<tr>
<td><strong>Why</strong></td>
<td><strong>Why</strong></td>
<td><strong>Why</strong></td>
</tr>
<tr>
<td>This exercise helps us understand people’s logic behind where they allocate their money, what they are willing to sacrifice, and how they would cope with emergencies. Though the activity didn’t have a savings image, participants kept setting money aside, under the board, or even in their bras.</td>
<td>This tool offers participants concepts that don’t have to be feasible, or even possible, since its only purpose is to spark a reaction and start the conversation. In Mexico, one sacrificial concepts exercise helped tease out how accessible participants wanted their savings to be.</td>
<td>This exercise gets interviewees to think through specific scenarios. The cards instigate rich conversations on different payment channels and why a person chooses one channel over another. Thanks to this exercise we learned that the value of what one delivers (cash, goods, etc.) appreciates or depreciates according to who delivers it and by what method.</td>
</tr>
</tbody>
</table>
## Extremes and Mainstreams

**What**
Design firms often encourage their teams to talk with both extreme and mainstream users of a product or service. Understanding the needs of fringe users will help design something that will appeal to everyone.

**Why**
If you can design for an extreme user, say someone who is very old, or very young, or not at all familiar with a product or service, then you’re bound to make something that will appeal and make sense to the broad mainstream of possible users.

## Intercept Interviews

**What**
Intercept interviews are just that, chances to stop people on the street or in a market to ask them questions. This is a great tool to quickly test smaller hypotheses, to understand and immerse in context, and to add color to the interview experiences.

**Why**
We found that stopping people in markets, on the street, or in community settings was a great way to get their opinions about products and services. These interviews allowed us to pivot quickly when doing our research and gave us a chance to test ideas right on the spot.

## Phone Show and Tell

**What**
We frequently asked people to show us how they use their phones. Instead of just asking questions, we’d ask people to pull out their phones and walk us through how they send messages, use apps, Facebook, and games.

**Why**
All projects had a technology focus as we were trying to design digital financial services. Asking people to show us how they use their phones gave us many insights—what kind of phones they had, what language they used when transacting, and how comfortable they felt using the phones.
SYNTHESIS AND IDEATION

A big part of HCD is boiling down large quantities of personal stories into actionable information. Here are some approaches you can use to synthesize what you learn from customers.

PERSONAS

**What**
Although personas are synthesized from data collected from interviews with users, in most cases they are fictional characters created to represent different user types for a product or service. Personas are useful in considering the goals, desires, and limitations of users to help guide decisions about what to design for them.

**Why**
Personas allow designers to better understand the end user and they make the design outcome more tangible. In understanding people’s behavior we learned that personal drive, or lack thereof, was an extremely powerful and important consideration in financial service design for Indonesians.

BRAINSTORMING SESSIONS

**What**
Brainstorming is a creative exercise to generate a large number of ideas in a short period of time. In brainstorming sessions designers have a clear set of rules: go for quantity, not quality; defer judgment; encourage wild ideas; build on others’ ideas; think and express themselves visually (if helpful); stick to one conversation; and stay focused on the topic.

**Why**
Brainstorm sessions run according to the rules above allow for the creation of new, crazy ideas very quickly. In some cases the ideas will not be used further, in other cases these are the seeds for new concepts and ideas. These are fast-paced creative sessions that allow for rapid ideation.

JOURNEY MAPPING

**What**
A journey map shows the path of how a person experiences a product, including how different features are used in different situations. It’s a visual representation of how a customer moves through an experience. It can start as early as the first time a customer hears about the product or service.

**Why**
A journey map forced our team in Uganda to think about the final product as a complete experience not as an isolated concept. This exercise forces you to think of things from the user’s perspective and to map out all the touch points with customers along the way.
BUSINESS MODEL CANVAS

What

This is a great tool to understand how all the elements of a business line up. A business model canvas is essentially a worksheet that forces you to visualize each component of your business plan or strategy. By displaying different parts of a strategy visually, it becomes easier to see where components clash, are not working, and which parts can be easily moved or replaced.

Why

Visualizing your business this way makes it easier to diagnose where bottlenecks exist and to stamp out inefficiencies in your business model. We used this tool to analyze the promoter business model that Tigo Cash uses and we were able to spot inefficiencies with the promoter model and their incentives.
A key element of HCD is rapid prototyping. By quickly building in just enough resolution to make an idea real, you can get it in front of customers and solicit their feedback.

**PROTOTYPE AN EXPERIENCE: STORYBOARD**

**What**

Storyboards are quick-and-easy prototypes. Like the storyboard of a movie, you draw all the components of your product or service and organize the illustrations in sequence for the purpose of visualizing how everything will work.

**Why**

Storyboards force you to map out what the product, experience, or service you’re prototyping actually looks like. A storyboard not only helps make an experience more linear, but it will reveal elements of the product or service you may have overlooked.

---

**LIVE PROTOTYPE**

**What**

We tested the No Wahala Center, a live kiosk, in our Tigo Cash project. Live prototyping is no easy feat but we ran the prototype in several busy markets, one a bustling commercial area of Odorkor in Accra. We set up a Tigo Cash tent where customers could ask questions, learn more and be referred to nearby agents. On a busy Friday morning, 10 people visited in the first hour with troubleshooting issues and several new registrations.

**Why**

A live prototype is a truly high-fidelity way of understanding the successes and failures of your product, experience, or service. One of the keys to running a live prototype is to document what you hear from customers—both positive and negative—so that you can integrate it into the next iteration.

---

**PROTOTYPE AN INTERACTION: MOCKUP**

**What**

We mocked-up an ATM interface on a poster board in Pakistan to test what kind of communication was most useful to illiterate women.

**Why**

We ran this particular prototype using pictures because we’d had limited success with words and icons and needed to understand how concrete or how abstract our ATM instructions should be. Turns out they need to be very explicit, and ideally the pictures should show the exact device that customers use.
**PROTOTYPE A SERVICE: MOCKUP**

*What*

The team in Mexico mocked up an ATM to test the entire interaction between users and the service. This prototype consisted of an iPad containing images of ATM screens placed inside a plastic box. To mimic an actual ATM, users could put their card into a slot and receive cash and receipts, which were actually delivered by the person behind the machine.

*Why*

We ran this prototype to learn about what kind of interface, language, and experience customers would respond to. The prototype helped test the flow and information architecture of the concept, as well as its content and phrasing.

**PROTOTYPE AN EXPERIENCE: ROLE PLAYING**

*What*

Role playing is another easy form of prototype and is ideal for understanding an interaction. Best of all, you can do it on the cheap, or by mocking-up simple costumes, props, or uniforms.

*Why*

We ran a role play to test out a virtual savings group in Uganda. The team had customers create their own groups and assign one person to be a borrower. The borrower made a request to the entire group who then decided if they wanted to fill the request, and how much to contribute.
HCD TOOLKITS

If you’d like to learn more about HCD or are ready to get started yourself, check out these resources from our partners and beyond.

01
IDEO.ORG DESIGN KIT

IDEO.org’s roll-up-your-sleeves guide to HCD, Design Kit currently has 54,000 users from across the globe learning the methods and mindsets of serial innovators.

designkit.org

02
DIY TOOLKIT

Nesta and the Rockefeller Foundation teamed up to create the DIY Toolkit, a great primer on design thinking with a decidedly business slant.
diytoolkit.org
03
THE DESIGN GYM
New York City’s Design Gym teaches a load of design thinking work¬shops, and lucky for us they put many of their materials online as free downloads.

thedesigngym.com/downloads

04
STANFORD UNIVERSITY’S D.SCHOOL
Major proponents of HCD, the d.school at Stanford offers crash courses in its methodology.

dschool.stanford.edu/dgift

05
FROG DESIGN
One of our partners in our HCD work, frog design teaches its take on social innovation through its Collective Action Toolkit.

frogdesign.com/work/
frog-collective-action-toolkit.html
WHAT IT ALL MEANS

HOW AND WHY TO DO HCD IN YOUR OWN WORK
As we sum up the last three years of HCD, we’re very happy to offer the inside scoop on what HCD is good for (organization-wide innovation) and where we see red flags (it can be awfully expensive). Map your course through a flow chart that will help you determine if HCD is right for your next project, dig into the four things we think HCD is best for, and let us make the case one last time that when it comes to better understanding your customer, there’s no more effective approach.

Lots of prototypes, a bunch of insights, some surprising tools—by now we hope you’re starting to see the incredible promise of HCD. But how do you really know if it’s worth the time and effort?
HOW DO YOU GET STARTED WITH HCD?

- **What can I get for...?**
  - Under $100,000: You could do a smaller, shorter project with a design firm.
  - $250,000 and up: You can hire an HCD firm to run the project.
  - Limited resources: If it’s your first time with HCD, we advise you to hire an independent design expert for support. Or, if you’re feeling brave, give it a shot using the Tools on page 108.
  - Some experience: You could do a smaller, shorter project with a design firm.
  - Not much experience: You can hire an HCD firm to run the project.
A rookie may be able to listen openly to customers, but even basic preconceptions can negatively impact the work.

Design teams that are familiar with emerging markets AND financial inclusion generally perform better.

Is there a local person on the design team?

Yes. Great! But be aware of any biases that even local staff can have toward low-income people, female customers, etc.

No. A team of all foreigners is not a dealbreaker, but make sure to get fixers and translators who are skilled cultural guides.

Congratulations, You’re ready to start designing!

One final check list...

- Make sure that your organization is open to innovation, creative problem solving, and new ideas.
- Find an organizational champion: Identify a C-level executive whom you trust to oversee the project, promote your team’s work, and support the success of your ideas.
- Invite staff from different departments to experience HCD, e.g., go to the field, talk with customers, and brainstorm ideas. Human-centered approaches can provide value across your organization.
- Be sure to identify a question to answer and ideally a target segment or customer.
OUR RECOMMENDATIONS

HCD is the equivalent to having a really strong cup of coffee in the morning: It gives us a minute to pause and to open our sleepy eyes to the reality outside of ourselves. After seven projects, we’ve learned to see beyond what’s immediate and to start thinking beyond the product. HCD highlights again and again that the entire customer experience—even the boring stuff, like making sure mobile-money agents have liquidity—is as important, maybe more important, as the product itself.

We think HCD can have high impact for four key reasons:

01  
HCD is a process that brings the customer’s voice into the boardroom.

There is something powerful about sitting down in people’s homes and listening to them, hearing about their day, their work, their money woes, and their family. Even more powerful are the observations—seeing their kids come in and out and their friends and neighbors swing by. We once saw a loan shark come and collect his installment, even though the person had previously said he had no active loans. These are the kinds of things we wouldn’t have learned if we weren’t in people’s natural environments. By drawing insights from in-context learnings instead of conference rooms, HCD can establish a new balance within institutions.

Most banks are accustomed to finding inspiration internally and making decisions based on the bottom line. HCD forces managers to respond to the institution’s requirements at the same time that they respond to their customers’ needs. HCD took our partners beyond the scope of what they had been doing for years and gave equal weight to customers’ desires and the firm’s financial interests.

02  
The combination of a collection of customer insights and actionable design principles is very powerful.

In our experience, even where there was no single “aha!” insight that was completely new for the provider, the collection of insights together was presented in a way that was new and extremely useful. HCD helped us go beyond the surface level of these insights by suggesting ways to make them real.

Among the the most useful outputs from HCD projects were design principles to help organizations formalize all their knowledge about customers and then apply it consistently across branches and departments. Although less exciting than a brand new product concept, these principles can transform how banks operate. For example, an HCD principle can directly lead a large bank to build trust with its customers by making its pricing more transparent, or make its messaging more human by shifting the way in which the company communicates.
HCD can be applied to any aspect of the customer experience.

HCD goes far beyond product development to touch on every aspect of the customer experience. The entire HCD process or even just a part of it—prototyping, for example—can be applied to any part of the customer experience. In Ghana, one of our prototypes included a “No Wahala” (No Worries) kiosk in markets to provide customers with consistent support long after the initial registration. After just one day of testing out a couple of kiosks, we had valuable information on the kinds of questions customers had and the support they needed.

In Pakistan, we wanted to test a concept of having talking ATMs to guide illiterate customers through the process of making a withdrawal. We tested whether customers preferred instructions read aloud or printed in clear, simple instructional posters, and the posters won hands down. In this example, HCD techniques were used to test very specific aspects of the customer experience, not necessarily new product development, and quickly and cheaply yielded important learnings.

HCD is transformative.

As we progressed in our projects and better understood the three-dimensional value of HCD for our provider organizations, we shifted away from pure new product innovation and toward building provider capacity in HCD. We started requesting intense, high-level involvement from organizations, and we pushed design firms to build workshops and learning opportunities into their projects.

As managers left the comfort of their offices, we took them into the field where they learned HCD first hand. We got enormous buy-in from bosses as we taught them a new way of talking to their customers. The process itself inspired managers so much that some of them wound up taking design courses and ultimately teaching them. In other cases, the firms are planning on creating internal HCD units, and in others, managers are planning on making this the next step in their careers.
When we embarked on our work in HCD, we did so in a spirit of experimentation. We were hopeful and skeptical; we had the same questions that many of you may have: How can you draw meaningful conclusions from such small sample sizes? How do you know whether this product is really worth pursuing? Is it really worth the money? Over the course of seven projects in the past several years, we’ve learned a lot. We can now say with confidence that HCD is a powerful tool in the hands of the right organization with the commitment and leadership support to maximize its impact.

Of course, HCD isn’t a panacea and it won’t always lead to a radical new product or way of doing business. Some of our HCD teams’ insights confirmed what we already knew, and no provider has implemented an industry-disrupting idea that has ushered millions of the unbanked into financial institutions. Yet we remain hopeful. And we are driven to answer questions like: What other approaches are good complements to HCD? How can we increase the confidence of top management that insights from small sample sizes are representative? How can we better support organizations to implement great ideas that HCD helped generate? What’s missing from the approach, and how might we incorporate more statistical rigor into our HCD work?

But we still see enormous value and potential in HCD. We believe that it’s important in achieving greater customer-centricity, particularly in unpacking customer experience. We’ve also seen first-hand that embedding a human-centered focus in the organizations we’ve worked with has been key, even transformative.

At bottom, HCD’s value is clear: Better knowing your customer makes utterly obvious sense and is the smart thing to do. Sure, there are lots of ways to do it, and many providers in our field have been doing this for a long time. But we found that HCD is a fantastic process to help managers do this creatively, iteratively, and effectively. HCD puts you in your customers’ shoes and forces you to put them on and walk in them. It immerses you in a person’s life and shows you the way her mind works. And HCD gives managers the opportunity to do it over and over again, to see new realities and needs, and then design the right solutions. A true embrace of HCD poises financial institutions to achieve the ultimate balancing act—a chance to hit internal business targets while designing the products, services, and experiences that truly fit their customers’ lives.
IDEO.ORG IS THRILLED TO PARTNER WITH CGAP TO HELP TELL THE STORY OF HUMAN-CENTERED DESIGN AND FINANCIAL INCLUSION. A KEY PILLAR OF OUR MISSION IS TO SPREAD HCD, A METHODOLOGY THAT WE BELIEVE LEADS TO ROUTINE INNOVATION AND SOLUTIONS THAT ARE ADOPTED AND EMBRACED BY LOW-INCOME COMMUNITIES AROUND THE WORLD. HEARING AND UNDERSTANDING CGAP’S WORK WILL DIRECTLY AFFECT OUR OWN, AND SEEING HOW HCD LIVES OUT IN THE WORLD IS PERPETUALLY INSPIRING.

FOR MORE INFORMATION, VISIT WWW.IDEO.ORG
CREDITS

CGAP
Yanina Seltzer
Claudia McKay

IDEO.org
Aaron Britt
Patrice Martin
John Won

Design/Illustration
Ginny Wang
Daniel Castro