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Small changes, real impact:

Applying behavioral economics in asset-building programs

A brief from the BETA Project

Introduction

When was the last time you thought about how the details of your program affect your clients' behavior?

Behavioral economics is the study of how people make decisions in a complex and textured world where details matter. It draws from the fields of economics and psychology, but brings a unique perspective that departs from each of these fields in important ways.

Behavioral economics differs from standard economics because it uses a more realistic (and more complex) model for how we view people. It differs from psychology because it maintains a focus on institutions and the contexts in which decisions are made.

To apply lessons from behavioral economics research, the BETA Project adopts ideas42's Behavioral Diagnosis and Design methodology to help identify the barriers that impede desired behaviors and outcomes. Taking this approach in the asset-building field prompts program designers to:




- **Think about the context in which decisions are made.** Understanding the context of decision-making can change how we view the problem at hand and illuminate new pathways for solutions.
- **Target the end-user experience.** To understand how clients make decisions in reaction to their context, an organization must examine the process that clients experience, from when they enter a program to when the program achieves (or fails to achieve) the desired outcomes.
- **Look for small changes that can offer real results.** Behavioral solutions often impose only minimal direct costs compared to solutions like offering direct cash incentives or match dollars. However, before moving forward with solutions, it is important to also test them for effectiveness.

The BETA Project

Bringing together practitioners and experts to apply behavioral economics in the asset-building field

The Behavioral Economics Technical Assistance (BETA) Project is an initiative at CFED to build the capacity of asset-building programs to apply insights and lessons from behavioral economics to their own program designs. In collaboration with behavioral design firm ideas42, and with funding from the Citi Foundation, the Project seeks to increase the scale and impact of programs helping individuals build financial capability, savings and security by establishing an infrastructure that supports and connects high-capacity programs to innovative researchers and experts.

The BETA Project team set out to design and test behavioral solutions through real world products, processes and services. We asked organizations in the asset-building field to send us their most pressing behavioral problems. In 2013, the Project team applied a behavioral diagnosis and design methodology to create and test a set of solutions aimed at behavior change at three partner sites:

			
Service	Microlending	Affordable Housing	Financial Advising & Product Integration
Location	San Antonio, TX	Cleveland, OH	New York, NY
Problem Statement	Borrowers have difficulties making consistent, on-time repayments using the ACH electronic withdrawal system.	Despite multiple payment options, clients in the Lease Purchase Program fail to pay their rent on time.	Low-income individuals sign up for accounts with affiliated credit unions during a financial education course, but do not fully utilize them.
Designed Solutions	Redesigned statement with planning tools; email & text reminders	Monthly raffle with mailed reminders; late fee payment waiver	Plan-making activities with a removable pouch and simplified account materials

For more details on the content summarized in this brief and larger versions of the graphics, see our full report “Small changes, real impact: applying behavioral economics in asset-building programs” available at CFED’s Resource Directory.¹

¹<http://cfed.org/resources>.

The Process

The BETA Project applied ideas42's methodology which involves four iterative stages. The process is for the most part linear, but at each stage, we return to a previous stage and make sure our thinking continues to align with what we have learned.



DEFINE

Step 1. We DEFINE the problem by disentangling presumptions about behaviors and solutions.

Crafting a problem definition is critical because it sets the focus for the entire effort. The assumptions we make about people change how we approach behavioral problems. If we clear our problem statement of presumptions, such as an assumption about the intentions behind a client's actions, we will be able to take people as they are and design solutions that work.



DIAGNOSE

Step 2. We DIAGNOSE the behaviors at play by uncovering behavioral bottlenecks and contextual details.

In diagnosis, we generate hypotheses about why people are taking (or failing to take) certain actions. We try to understand how people made decisions related to the behavioral problem at hand. We look for places where small differences in contexts could have a real impact. Finally, we think about how behavioral economics can explain the behaviors we observe.

Check out [BETA Project Blog Post](#) and the [BETA Project Report](#) for more insights into the behavioral diagnosis & design process.



DESIGN

Step 3. We DESIGN potential solutions by creating, prototyping and refining our ideas.

During the design phase, we generate creative ideas around potential solutions to our problem. We also iterate back to our diagnosis and tease out details about the specific behaviors and context that might lead to additional ideas. Design flows from diagnosis, but there is not a one-to-one correspondence between diagnoses and designs. Instead, we try to design solutions that can effectively ameliorate the diagnosed bottlenecks.



TEST

Step 4. We TEST solutions by measuring impact on our outcomes of interest.

Many new products—designed with the best of intentions and based on solid theory—fail to work. To mitigate this and inform strategic decisions on a designed solution, we conduct tests to make sure that our theory-driven designs have the desired effects in the real world. While randomized controlled trials (RCTs) are our preferred testing method, comparing outcomes before and after a solution is implemented and across assigned comparison groups are also acceptable methods.

Helping Borrowers to Make Payments On-Time

DEFINE

Original Problem Statement

For individuals with credit scores lower than 522, having separated personal and business checking accounts almost doubles the probability of repayment. Accion hopes to help the underbanked borrowers improve loan repayment rates so they can build or improve their credit and move up the asset-building chain.



Revised Problem Statement

Borrowers have difficulties making consistent, on-time repayments using the Automatic Clearing House (ACH) electronic withdrawal system.

Accion's original problem statement focused narrowly on repayment rates and underbanked individuals with low credit scores. Accion's default rates were actually on par with the industry average, but late payments were imposing a cost on borrowers (in the form of fees) and a cost on Accion (in the form of staff members contacting borrowers with late payments). We were also wary of narrowing our solution to only those clients with a certain credit score range. Finally, the problem statement already presumes that the solution must relate to separate personal and business checking accounts. We widened the scope of the problem statement to focus on timely repayment among all borrowers, without any assumptions about what the solution might be.

DIAGNOSE

Diagnosis Highlights

Borrowers may forget to ensure there are sufficient funds in their account before the due date.

Because Accion requires borrowers to use automatic withdrawals in a designated account for their loan payments, borrowers must remember to deposit sufficient funds into the account before the payment date and make sure the balance remains sufficient until the withdrawal occurs. However, Accion's loan contract and monthly statements do not prompt clients to think through those earlier steps to ensure there are sufficient funds or make alternative payment arrangements.

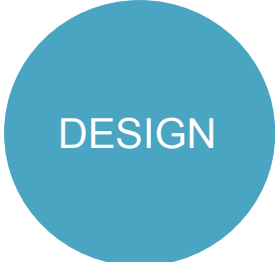
Borrowers tend to stick with the default payment date, even though it may not be ideal.

Changing the payment date is one of the most common loan adjustments that borrowers perform. However, many borrowers do not make the change until they encounter an issue with payment.

Borrowers may be deterred by barriers associated with making deposits.

Many steps need to be completed before a borrower successfully makes a deposit. For example, borrowers have to schedule time to go to the bank, find directions, determine how to get there, and remember required documents. These hassles may impede borrowers from achieving their goal.

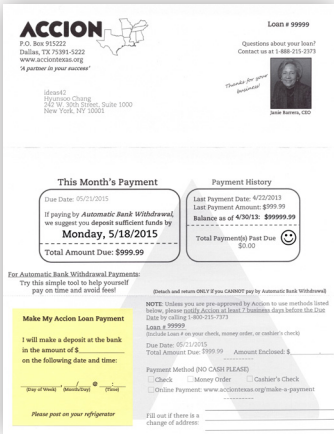
Accion Texas is one of the largest microlenders in the country, lending to low-income consumers who are often shut out of traditional credit channels.



Designed Solutions

Redesigned Statement with Planning Tool

We saw the monthly statement as an opportunity to make sure we were prompting borrowers to take the right action at the right time. Unlike the original statement, the redesigned statement included a highlighted recommended date to check for sufficient fund and a Post-it note to help plan the deposit of funds.



Email and Text Message Reminders

We created a system of reminders to prompt borrowers to check their account balance and/or make a deposit prior to their payment date. Email and text reminders were sent out 10 and 3 calendar days, respectively, before the payment date. These reminders highlighted the “right” desired action, were specific and were strategically timed.



Results

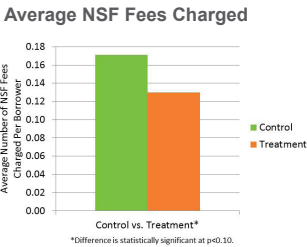
More borrowers with small payments paid on time.

We observed a small increase of on-time payments, but it was not statistically significant. Digging a bit deeper, we found that if we only looked at of borrowers with the smallest payments (below \$227.49/month), that group appeared to have a positive response to treatment. Our solution increased on-time payment in this group by 4. 3%.

This is important, because this group was the most likely to pay late in the first place. This quartile also included almost half of borrowers with the two lowest tiers of auto-review scores (an indicator of credit-worthiness) and one-third of borrowers in the lower half of Adjusted Gross Income—suggesting that this group may be “riskier” than the other quartiles of borrowers.

The number of NSF fees charged decreased.

Non-Sufficient Funds, or NSF, fees (\$30 per transaction) may be charged to borrowers. Average NSF fees decreased by almost 25% in the treatment group, including borrowers with all sizes of monthly payments.



Encouraging On-Time Rent Payments

DEFINE

Original Problem Statement

Barriers such as poor marketing inhibit residents in the Lease Purchase Program from paying rent online.



Revised Problem Statement

Despite multiple payment options, clients in the Lease Purchase Program fail to pay their rent on time.

Cleveland Housing Network's (CHN) problem statement made two presumptions. First, it presumed that poor marketing of the program was preventing online payment. Second, it presumed that if more people signed up to pay rent online, they would be more likely to pay their rent on time. This second presumption is hidden—meaning it is implied rather than directly stated. CHN management indicated that on-time rent payment was the goal, and that online payment was merely a means to reach that ultimate goal.

Further, we checked the second assumption against one month of data and found that many people paid their rent late even if they had signed up for the online payment system.

We removed these presumptions to generate a simpler problem statement.

DIAGNOSE

Diagnosis Highlights

Residents are anchored on the 10th of the month for payment.

While rent is due on the 1st of the month, many residents choose to pay it on the 10th, the day before a late fee is applied. While there aren't any immediate consequences to doing this, many residents develop a flawed understanding of the rent payment process. Rather than thinking of the rent as due on the 1st, with a 10-day grace period, they think of it as simply due on the 10th. This anchor was so pervasive that both clients and CHN staff reflected the same incorrect perception.

Residents prioritize other bills.

While CHN staff generally believes that rent should be the highest-priority bill for residents, residents often disagree. Residents may focus on one bill at a time, or the most urgent bill, or paying off the greatest number of bills, rather than the most "important" bill or managing strategies for their budget as a whole.

Residents do not respond to the \$25 late fee.

Some residents think of the late fee as a minor cost. They accept that they have paid the fine on multiple occasions, but do not consider it a significant cost in comparison to the rent amount due. For someone paying the median rent (\$500), the additional fee does not seem like much. The difference between paying \$500 and \$525 seems trivial—even though it adds up over the course of the year.

The Cleveland Housing Network (CHN) builds vibrant neighborhoods and strong families through healthy affordable housing and offers extensive programs and services to help low- and moderate-income families build assets, reduce housing expenses and improve their personal financial situations.

DESIGN

Designed Solutions

On-time Raffle



Residents who paid on time were entered into a raffle for two \$100 prizes each month, along with a “grand prize” of one month’s

free rent in August. The raffle was not intended as a monetary incentive, but a way to “buy” attention and re-orient residents to the 1st of the month as their rent due date.

Reminders

Monthly postcards kept residents’ attention on the raffle and gave them time to prepare their finances to pay by the 1st. Residents also got a magnet that could function as a constant physical reminder of the raffle program.

Late Payment Fee Waiver

Finally, we created a physical manifestation of an existing policy that allowed residents a one-time waiver for a late fee. While the existing policy was largely ad hoc, the award of a redeemable physical document put the choice to manage consequences of late payment in the residents’ hands.

TEST

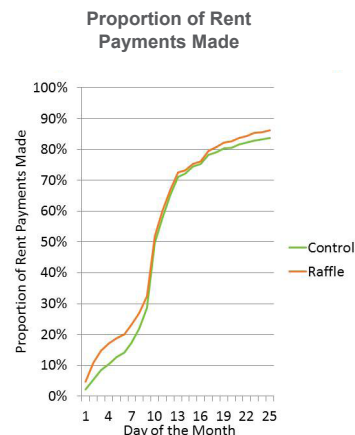
Results

The raffle increased on-time rent payment, especially for residents with fixed incomes.

Residents who received communications about the raffle were twice as likely to pay their rent on time as the control group (who were not informed about the raffle).

These effects persisted after the raffle eligibility period ended. Raffle residents were still 2% more likely to have paid their rent at the end of the month.

We even observed a small, but not statistically significant, decrease in evictions.



The waiver was not effective.

We did not test the waiver separately from the raffle – everyone who received the waiver also received the raffle treatment. We did not see any improvements in the group who received both the waiver and raffle over those who received the raffle alone.

Encouraging On-Time Rent Payments

DEFINE

Original Problem Statement

Barriers such as inconvenient locations of credit unions and banks keep “unbanked but bankable” clients from using asset-enhancing bank accounts and reliant on expensive fringe financial services.



Revised Problem Statement

Low-income individuals sign up for accounts with affiliated credit unions during Neighborhood Trust’s financial education course, but do not fully utilize them.

Neighborhood Trust’s problem statement equated the use of fringe financial services with the use of bank or credit union accounts. It presumed that bank or credit union account use is a perfect substitute for fringe financial services, while these services can actually address very different financial needs (e. g., using a checking account to pay bills vs. taking out a payday loan).

We narrowed the problem statement to focus on credit union accounts, without assuming that account use would impact use of fringe financial services.

DIAGNOSE

Diagnosis Highlights

Clients take action during the course to open an account, but not to start using the account.

For clients in the Getting Ahead personal finance course, Neighborhood Trust created a remote account opening process that was smooth and simple. However, they did not create similar opportunities to facilitate account use. Notably, some clients reported never visiting the credit union or using their account even once after opening.

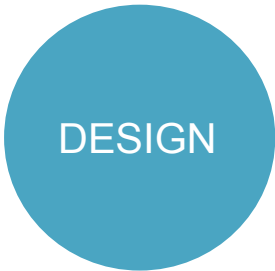
Clients may be deterred by hassles associated with accessing the account on a regular basis.

Small hassles can prevent people from acting on their intentions. Several small barriers may have impeded clients from using their accounts once they opened them, including the geographic distance from a branch and limited deposit capabilities to add funds to accounts.

After the course ends, clients’ attention shifts away from the account.

Credit union accounts are “top of mind” while clients are taking the course, but become less salient when they graduate. The only direct reminder clients receive about their accounts is the credit union statement that arrives on a quarterly basis.

Neighborhood Trust empowers low-income individuals to achieve their financial goals by connecting them to affordable and transparent financial products and helping them adhere to a long-term financial plan.



Designed Solutions

Simple Plan-Making Activities

Neighborhood Trust clients set goals to perform multiple complex tasks between classes. We broke these actions down into smaller, more actionable steps and provided clients with plan-making prompts to strategize how to achieve these goals.



Removable Pouch

For each detailed plan, we provided a physical pouch to carry home the plan and act as a tangible reminder to complete the plan before the next workshop class.

Account Information Cards

To successfully use an account, a client must have key information (such as the account number) and know how to access it. A simple card and map made sure clients could keep this information handy in their wallets and eliminate the hassle of retrieving it.



Results

Clients found the plan-making activities useful.

A supplementary survey given to clients in the treatment group produced positive qualitative responses. Ninety-two percent completed an Action Plan during the course. When asked to rate the usefulness of the Action Plans on a 5-point scale, 99% of respondents ranked them as a “3” or higher, 76% ranked them as “4” or higher, and 49% ranked them as a “5”.

Clients who experienced the solution had higher rates of account opening and usage.

When we compared outcomes for clients with treatment advisors to those with comparison advisors, we saw evidence of positive effects. Clients who experienced the solution had higher rates of account opening and account usage. For instance, 52% of treatment group clients offered an account at NTCU had multiple (2 or more) transactions, compared to 15% of comparison group clients. Clients in the treatment group averaged about 11 transactions per month, compared to about 1.4 transactions per month in the comparison group.

However, because of a small sample size, we were unable to run a randomized controlled trial with Neighborhood Trust. Because assignment was non-random, we are unable to determine if the differences we observe are due to treatment or other, pre-existing differences between client populations. The differences in outcomes could reflect differences in the client populations or differences between the advisors.

Implications

Small Changes, Real Impact



What we found at the three BETA Project partner sites is encouraging. Small changes to program design, inspired by behavioral economics, can have a real impact on program effectiveness:

- **At Accion, we saw that simple reminders reduced NSF fees and increased on-time payments—especially among the most vulnerable borrowers.** The impact on “risky” borrowers is particularly significant in light of Accion’s mission to reach this underserved population, but it has larger implications as well. Access to credit is important; it can help vulnerable borrowers grow a business, stabilize the amount of money available each month and deal with emergencies. Improving repayment behaviors among this borrower segment could reduce costs and help justify expanding services to this population.
- **At Cleveland Housing Network, we saw effects of the raffle on rent payment throughout the month, even after late fees were applied, suggesting a more profound effect on behavior than mere financial motivation.** The fact that these effects persisted throughout the month, even after late fees were applied, suggests a more profound effect on behavior than mere financial motivation. Countless programs and products have payment (or repayment) problems in the asset-building field. If we find that this effect scales, it has the potential for massive impact.
- **At Neighborhood Trust, we saw that simple plan-making facilitates action, and observed a promising increase in people’s utilization of accounts.** While our results at Neighborhood Trust were indicative, and not conclusive due to small sample size, similar efforts to prompt action at Grameen Bank resulted in similar-sized effects on savings account usage but at a statistically significant level.² Sites providing financial education should marry their education efforts with concrete steps to assist people in taking actions (such as through simple plan-making) that move them towards a stronger financial position.

These effects are not just statistics. There are real people who benefitted from the BETA project. Moreover, the solutions were relatively inexpensive, with direct costs of less than \$5,000 at each organization. The primary cost was the investment in staff time to work with the BETA Project team to diagnose the problem and design solutions. All three sites have decided to continue to use some form of the tested solutions in the future. These findings speak volumes about ways other asset-building programs can make small adjustments to deal with these common problems and have a real impact.

² Research conducted by ideas42 – report forthcoming; For research on behavioral techniques to increase sign-up for savings accounts see Bertrand, M., Mullainathan, S., & Shafir, E. (2006). “Behavioral economics and marketing in aid of decision making among the poor”. *Journal of Public Policy & Marketing*, 8-23.

Lessons


- 1 Be preemptive.** Asset-building organizations often start engaging with clients only after a problem, such as a missed payment, arises. While in-person interactions with clients can be expensive, there are many early opportunities for engagement through other communication channels with clients.
- 2 Incentives “buy” attention.** Incentives can be a powerful tool for behavior change, but not always because of their financial benefit. Sometimes incentives are helpful because they capture people’s attention. They signal that doing the incentivized activity is important and perhaps encourage someone to prioritize that activity.
- 3 Facilitate action along with information.** Information alone rarely leads to behavior change. Simple plan-making activities help to guide clients into action (e.g., active utilization of accounts). Organizations that seek behavior change should provide assistance through action-oriented activities like simple plan-making and direct access to relevant products and services to help clients follow through on their goals



10 Tips from the BETA Project

Beyond learning from our direct results at the three partner sites, our work through the BETA Project yielded helpful tips on how asset-building organizations can design new program solutions with their client behaviors in mind and enhance their organization's capacity to integrate behavioral economics into their programs.

- 1 Put the problem before the solution.** New solutions are exciting and capture the imagination, but before digging into solutions, it is important to first clearly identify the problem you are trying to solve and develop a deep understanding of the context. This means taking some time before implementing a new solution to clearly define the problem you are trying to address and carefully examine the context around the problem.
- 2 Distinguish between the person and the situation.** It is easy to attribute “bad behavior” to “bad people.” However, human behavior is inextricably linked to the situation surrounding the person—we make decisions and act in response to our surrounding context. Organizations should concentrate on situational, not dispositional, explanations of behavior.
- 3 Don't assume that actions reveal intentions.** Behavioral economics teaches us that our actions do not always align with our desires or intentions in an optimal manner—we often behave out of line with our intentions. It is important to remember that a person's actions may not always be indicative of their intentions (or lack of intentions). To tease out the connection between actions and intentions, look for features of the environment that might be preventing someone from turning their intentions into action.
- 4 Understand the distinction between decision and action.** One of the most common mistakes people make is not determining whether a problem is related to decisions or actions. A person can decide to take an action, but then fail to follow through. Alternatively, a person might have trouble at the decision stage, far before it's time to take action. Understanding the difference between the two is vital. Design solutions that are focused on decision problems will often not work on action problems, and the same is true in the opposite direction. When your client is not taking a certain action, take some time to carefully inspect why—it might not be for the reasons you think.
- 5 Look through fresh eyes.** We often become narrowly focused on our own role within an organization. More often than not, employees lose touch with organization-wide policies and practices, especially as those may evolve subtly over time. Clear your perceptions of how your program operates and start asking people around the organization how they manage client interactions related to the problem you are trying to address. Do not assume that you know how your program's policies and practices work—talk to the staff members who are executing them on daily basis. Start asking “Why?” for every detail of your services and products.



6 Details matter. Behavioral economics teaches us that small details have a much larger influence on behavior than we think. We often underestimate the importance of these details when we design programs. Take a look at the details of your program on an excruciatingly low level, and think carefully about how they affect your clients. When considering a program change or initiative, be meticulous about planning for implementation.

7 Take a client perspective. Often, products and services are designed to meet legal or funder requirements with little consideration for how clients may perceive or interact with them. A helpful exercise is to take yourself through the customer experience in your program. Role-playing as the customer and taking a close look at your products and services from a client's viewpoint can yield helpful discoveries about how contextual features influence client behavior.

8 Listen carefully, and verify what you hear. Constantly seeking information about the decision-making context and feedback on potential solutions is an important part of the behavioral diagnosis and design process. However, remember that people often have trouble explaining or understanding their own behavior. Check client statements on what they say they do against observations from data collected about their situation and behavior, rather than taking all statements at face value. Also, apply the same approach to yourself and your staff—validate what you think you know from many perspectives.

9 Focus on outcomes by paying attention to data. Learning about client behavior requires being aware of the change you are seeking to make. Simply monitoring existing data can yield insights without running complicated statistical analyses. Start by articulating the outcomes you wish your clients to achieve and pinpointing the specific behaviors that are required to achieve those outcomes. Make sure that these outcomes are being measured through your data system. Allocating resources to data management and analysis to determine what works is vital to your organization's efficiency.

10 Seek advice from trusted sources. New research and practices based on behavioral economics are quickly emerging. Seek information on new insights from behavioral research and strategies to apply the insights from behavioral economics experts such as [ideas42](#), [Innovations for Poverty Action](#) and the [Center for Advanced Hindsight](#). Additionally, learn about what other asset-building organizations are doing, check for resources and technical assistance at [CFED](#), join the [Assets & Opportunity Network](#) to share your behaviorally-informed design experiences and contact BETA Project staff at BETAProject@cfed.org.

About the BETA Project Team



CFED empowers low- and moderate-income households to build and preserve assets by advancing policies and programs that help them achieve the American Dream. This includes buying a home, pursuing higher education, starting a business and saving for the future. We are a leader in providing data about household financial security and policy solutions, promoting programs on the ground, and investing in social enterprises that create pathways to financial security and opportunity for millions of people.

Project Staff: Pamela Chan, Anita Drever, Ethan Geiling, Ida Rademacher



ideas42 is a unique behavioral ideas lab and consulting firm bringing together highly creative practitioners and industry and policy experts with world-renowned economists and psychologists from top-tier universities. Our mission is to apply our expertise in behavioral economics to invent fresh solutions to the world's toughest social problems with the goal of improving tens of millions of lives.

Project Staff: Hyunsoo Chang, Bill Congdon, Dan Connolly, Katy Davis, Matthew Darling, Josh Wright

Citi Foundation



The Citi Foundation is committed to the economic empowerment and financial inclusion of individuals and families, particularly those in need, in the communities where we work so that they can improve their standard of living. Globally, the Citi Foundation targets its strategic giving to priority focus areas: Microfinance, Enterprise Development, Youth Education and Livelihoods, and Financial Capability and Asset Building. The Citi Foundation works with its partners in Microfinance and Enterprise Development to support environmental programs and innovations. Additional information can be found at www.citifoundation.com.

Project Staff: Daria Sheehan

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