COMMON CENTS LAB

2020 ANNUAL REPORT

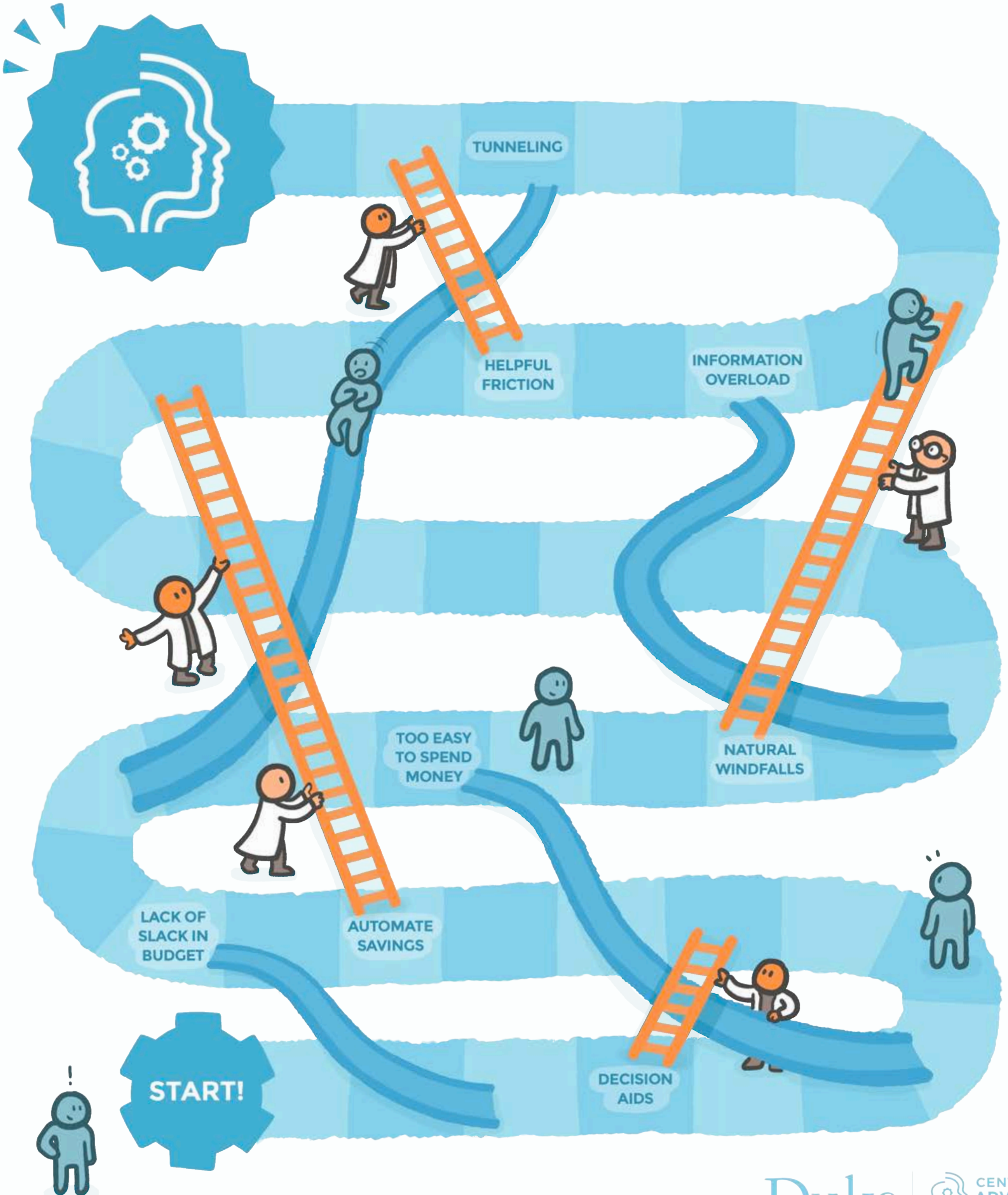

TABLE OF CONTENTS

ABOUT US

CENTER FOR ADVANCED HINDSIGHT
COMMON CENTS LAB

Common Cents Lab is a financial research lab at Duke University that creates and tests interventions to help low-to-moderate income households increase their financial wellbeing. Common Cents leverages research gleaned from behavioral economics to create interventions that lead to positive financial behaviors.The Common Cents Lab is part of the Center for Advanced Hindsight at Duke University. Common Cents is comprised of researchers and experts in product design, economics, psychology, public policy, advertising, business administration, and more.

To fulfill its mission, Common Cents partners with organizations, including fin-tech companies, credit unions, banks and nonprofits, that believe their work could be improved through insights gained from behavioral economics. To learn more about Common Cents Lab visit advanced-hindsight.com/commoncents-lab.

MetLifeFoundation | **Founding Partner**

At **MetLife Foundation**, we believe financial health belongs to everyone. We bring together bold solutions, deep financial expertise and meaningful grants to build financial health for people and communities that are underserved and aspire for more. We partner with organizations around the world to create financial health solutions and build stronger communities, engaging with MetLife employees to help drive dimpact. To date, our financial health work has reached more than 6 million low-income individuals in 42 countries. To learn more about MetLife Foundation visit www.metlife.org.

BlackRock.

BlackRock helps investors build better financial futures. As a fiduciary to investors and a leading provider of financial technology, our clients turn to us for the solutions they need when planning for their most important goals. As of December 31, 2018, the firm managed approximately $5.98 trillion in assets on behalf of investors worldwide.
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A NOTE FROM METLIFE FOUNDATION

Dear Reader,

For most of those served by the financial health sector, 2020 appeared to have far more snakes (or chutes) than ladders. The year started somewhat hopeful, with renewed attention to the ladders needed to help close the wealth gap. Then came the extralong snakes of the pandemic – both a health crisis and an economic crisis, all rolled into one – followed by a racial reckoning. Ladders seemed to be fewer and shakier, and by the time the "she"cession emerged in December, the dice seemed loaded against progress for low- to moderate-income populations, particularly Black/African-American, Latinx, Asian American and Pacific Islanders, and many other underserved communities.

Through it all, the financial health sector continued to identify opportunities to serve – and even grow – their customers, with savings finally demonstrating the beauty of resilience. Of course, the pandemic was not a one-off event and even great savers found themselves in need of support. Fintechs, nonprofits, social enterprises, and for-profit financial health sector stepped up with financial coaching, providing assistance to those seeking to navigate stimulus payment requirements, PPP loans, and carefully considered credit.

The CCL team weathered the switch to virtual and, together with their partners here in the US, Mexico, Turkey and China, were able to keep (most) things moving. Maybe there were fewer long ladders of progress in most of the experiments, but there were also shorter snakes. In a few instances, the dice were taken off the table for a while, but our partners and their clients are coming back to the game table, ready to move up the sturdier ladders.

We encourage readers to dive into this volume, which showcases a few of the ways your peers and colleagues have worked with Common Cents Lab to serve the consumers we are passionate about serving.

While we certainly can't predict the future, the vaccine rollout and the re-opening of the economy is a hopeful sign that "luck" might be changing. To mix a metaphor, we're collectively putting our finger on the scale by using behavioral science to enable low-income folks the opportunity to climb few more ladders and roll right past the long snakes.

Evelyn Stark
MetLife Foundation

A NOTE FROM BLACKROCK

Dear Reader,

When we initially designed BlackRock's Emergency Savings Initiative in 2019 to help people living on low- to moderate-incomes build and access emergency savings, we had no way of knowing that a global pandemic would underline the issue of emergency savings in such drastic relief. We were grateful to be in a position to make substantive contributions to the national conversation as the world changed overnight because we and our expert partners were already thinking about and working on the problem.

Common Cents Lab was among our partners already focused on tackling the emergency savings crisis. CCL's expertise in applying behavioral science to financial products and services – identifying the barriers that stand in the way of setting money aside as a financial cushion and designing the tools and features that make saving as frictionless as possible – was a crucial component in our undertaking to increase financial wellbeing through collaborative solutions. CCL's dedication to experimental design and rigorous measurement gave the initiative confidence in the insights we've been learning through our work together. As the U.S. government responded to the pandemic with unprecedented economic stimulus and the regulatory and policy landscapes shifted to address emerging challenges, behavioral science kept reminding us that there were already important ways to intervene all around us.

The case studies represented here paint an interesting picture of pursuing financial wellbeing in the midst of a pandemic. There are disrupted timelines and some unexpected outcomes, but woven throughout is also the story of community financial institutions, nonprofits, financial tech companies and others whose commitment to improving the personal financial lives of their users, members, customers, and employees remained resilient amid a world in turmoil.

Now is the time to harness this momentum to reach a tipping point where critical systems – from the workplace to the financial services industry to public policy – fully embrace emergency savings as a core priority.

Sincerely,

Claire Chamberlain
BlackRock

HOW TO READ THIS ANNUAL REPORT

Hi there! Our Annual Report is where you can find summaries of the most recent year's projects detailed in our case studies: you'll see the problems we tackled, hypotheses we formed, interventions we launched, and questions we addressed. Each case study was designed and tested by the Common Cents Lab and was aimed at increasing financial health around the US or abroad.

This Annual Report, similar to our previous ones, is divided into five sections, each focusing on a different aspect of financial health:

» Increasing income
» Decreasing expenses
» Decreasing bad debt
» Increasing short-term savings
» Increasing long-term savings

While we would love for you to pore over every detail in each of the five sections, we know a thing or two about time and attention scarcity, and realize that some of you may choose to browse this report.

If you do browse, we have 3 recommendations for getting the most from this Annual Report:

1. **Read the section summaries.** These are the big-ticket headlines and takeaways from the studies in each section.
2. **Pick one or two studies that stand out to you and dig in.** Think about how they relate to your big questions at work or at home; think about what you would have done differently as the designer of the study, or how you would have reacted as the user!
3. **Consider how these different sections and case studies relate to each other.** Financial health is dynamic—paying down a loan may mean you have less to put into savings, and vice versa. Think about not only all that goes into creating this Report, but also all of the ups and downs of financial health someone on the other end of the intervention has to navigate in their everyday life.

We hope the work we've detailed here provides motivation, some new ideas to implement, and a hearty enthusiasm for behavioral science in the financial health domain. Please enjoy the following Annual Report!

Any questions? Feel free to reach out to us at info@CommonCentsLab.org!
Want to get involved? Sign up for our newsletter and announcements at commoncentslab.org!

2020
ANNUAL
REPORT

INTRODUCTION

Have you ever walked into a room and suddenly wondered what prompted you to go there in the first place? Maybe you've experienced the digital version of this at some point: finding yourself on a random Wikipedia page with no memory of what led you there.

It was just such an experience—reading the history of the game "Snakes and Ladders"—that led to the cover design of our 2020 Annual Report (which you can print and play, if you're so inclined). Over the centuries it has existed, the game has reinforced a variety of moral lessons on the various virtues and vices that can lead someone to be successful or to fail. Beyond that, the dominant force in the game is luck.

In our work, we're keenly aware that "luck" is not evenly distributed, and that some people start the game on the 99th square. This year we saw low-wage industries lose jobs at nearly four times the rate of high-wage industries. And we find that Americans of color were 2 to 3 times more likely than white Americans to experience food insecurity or inability to pay rent.

We also know that in real life the snakes and ladders are typically not virtues and vices, but systems that—whether poorly-designed or well-designed to benefit some and exclude others —make it easier or more difficult for people to improve their financial wellbeing. Our version of the game reflects that, and highlights that thoughtful design can help people reach their goals and bounce back more quickly from the financial misfortunes they may encounter.

On our list of common misfortunes to plan for, here's one we likely wouldn't have thought of before 2020: global pandemic. Yet it has upended the lives of millions of people—sending them back to square one in any number of arenas, while certainly including financial wellbeing. And it has impacted our work in interesting—and sometimes unexpected—ways.

At a macro level, the unemployment rate in the US—which had been at a near record low of 3.5% in the beginning of 2020—spiked to 14.8% and ended the year at 6.7%, double where it had been a year earlier. The long-term unemployed (27 weeks or more) accounted for almost 40% of the total unemployed workers in the US by the end of 2020, double the proportion of long-term unemployed at the beginning of 2020. Long-term unemployed workers are at a significant risk of financial insecurity as erosion of skills can make finding work even more difficult. While there were some positive trends during the pandemic, like the increase in the savings rate for many Americans, low income households were less likely to experience them in an ongoing way. For example, while higher income households increased their savings by decreasing spending by 17%, lower income households, with already tight budgets, could decrease spending by only 4%.

This has provided us and our partners with new constraints and opportunities to build systems for success in our key focus areas:

- **Increasing Income**
- **Decreasing Expenses**
- **Decreasing Bad Debt**
- **Increasing Short-Term Savings**
- **Increasing Long-Term Savings**

We focus on these crucial outcomes and use behavioral science as a counter-balancing force to the elements of psychology and design that at times lead us away from what's in our best interest. To bring those ideas into reality, we partner with mission-aligned organizations to use behavioral science to help design and test products and processes to help financially vulnerable households achieve financial resiliency, and, ultimately, thrive.

These Common Cents Lab partnerships with financial institutions, non-profits, governments, and technology companies use behavioral science to redesign the board, giving millions of households fairer odds to achieve financial stability and reach their financial goals. In 2020, we worked on 65 projects to improve financial wellbeing across 48 different organizations in the United States, Turkey, Mexico, and China, expanding our cumulative direct reach to over 1.5 million people, estimated to conservatively represent a potential reach of over 6 million people if our interventions were rolled-out at full scale.

COMMON CENTS LAB 2020 HIGHLIGHTS

65 PROJECTS

48 PARTNER ORGANIZATIONS

1.5 MILLION REACHED

In real life the snakes and ladders are typically not virtues and vices, but systems that—whether poorly-designed or well-designed to benefit some and exclude others—make it easier or more difficult for people to improve their financial wellbeing.

LESSONS FROM 2020

LMI households continue to be challenged by scarcity, and the pandemic has not made things any easier. When time and money are scarce, households may focus solely on the immediate problems in front of them, an idea known as tunneling, to the exclusion of other important matters. Scarcity creates an additional tax on cognitive bandwidth—the amount of focus we can give to a given issue—and makes solving financial problems more complex and the lack of slack leaves less room for error. The compounding demands on an individual's brainpower has ripple effects, leaving fewer cognitive resources to manage their households.

Helping LMI households overcome the heightened effects of scarcity was a key focus of our work in 2020, and we approached this problem with three primary strategies to build more and better ladders:

Draw attention to important but less urgent priorities to overcome tunneling

We have so many competing priorities for our time and attention, that it can be difficult to stay on top of everything we need to do to become financially well. Organizations can use well-timed messaging to make sure users don't let these things fall by the wayside.

One of the most critical elements to achieving financial wellbeing is to have some savings available for emergency expenses. We drew users' attention to this critical priority across several different organizations. For example, in an experiment with Qapital, we found that a prompt about emergency savings during user onboarding more than doubled the number of users that created an emergency savings goal. Similarly, at a credit union, we prompted members to set up a Rainy Day Savings Account, with about a quarter of the members taking up the offer. In the area of retirement savings, we highlighted the importance of maintaining retirement savings accounts with a message on the Ascensus user home screen to encourage users to use their retirement savings projection tool.

We're also continuing to capitalize on the success of prompts in the designs of new interventions. For example, we have designed a pop-up for Inclusiv member credit unions to prompt members to set up automatic transfers into an emergency savings account. And we've incorporated a prompt for users to set up emergency savings as a key step toward financial wellness within the financial technology company MX's FinStrong app, a feature which is expected to launch in 2021. In Mexico, working with fintech Albo, we also co-designed a digital pocket, "Espacios", to encourage their customers to save for emergencies.

> **In an experiment with Qapital, we found that a prompt about emergency savings during user onboarding more than doubled the number of users that created an emergency savings goal.**

Additionally, we are providing reasons for households to take action on these important but not urgent tasks today. In Mexico, working with the credit repair company Cura Deuda, we designed an intervention where users who made their debt payments on time could enter a contest to get a chance to have their debt repaid in full. In Turkey, where credit card usage is rapidly growing, we are working with Findeks to find ways to help users pay their debts on time so they can improve their credit scores.

Automate tasks to restore cognitive bandwidth

Keeping track of everything in a complex environment is hard. It's even more challenging for LMI households who faced some of the greatest hardships caused by the pandemic, like reduced income paired with higher expenses. On top of all of that, scarcity adds its own tax on cognitive bandwidth. Automating financial behaviors can help lighten the load. We've helped make saving money for the short-term easier with automation; the prompts mentioned above for Qapital, a credit union and Inclusiv all connected users to one-time set-ups for on-going transfers into savings. We are also looking at how to improve take up of the Split and Save product at a credit union, which will allow users to automatically save a portion of large electronic deposits into their account; our intervention will look at immediate versus delayed action and the use of a default recommended savings percentage. Automation is also valuable in the loan repayment space, to help users maintain good credit. At Beneficial State Bank, we found that texting people a form to align their automatic loan payments with their pay cycle doubled the uptake of the payday-payment alignment. We're also working with fintech Colendi to encourage borrowers in Turkey to make their utility bill payments through their app.

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When automation of some financial behaviors is not feasible, then reminders can be an effective alternative. For example, with the nonprofit financial planning firm Justine PETERSEN, we are currently testing text reminders to encourage timely loan repayment by small business owners. At a credit union, we are trying a variety of communication methods – from emails to refrigerator magnets – to increase borrowers' on-time loan payments. In a separate experiment with a credit union, we are pairing payment reminders with offers of financial counseling. In China, we are designing interventions to increase earnings and decrease medical expenses among low-income patients by prompting them to enroll in a medical expense reimbursement program.

Provide scaffolding to simplify complex decisions

People often benefit from tools to help them make sense of the complexity in their finances. In a financial health assessment with Washington State Employees Credit Union (WSECU), we help members prioritize what part of their financial health they should focus on first; we are comparing how numerical or descriptive scores help users understand their financial wellbeing and encourage members to take action for improvement. At credit counseling provider MMI, we are testing a new way for counselors to interact with clients, focusing on empathy, expertise and social norms, to encourage clients to complete debt counseling. At Schools First Credit Union, we are testing how best to use rules of thumb in communications to members to get them to pay down debt more quickly. We are also helping people understand when they need to make corrections to spending with asymmetric feedback with Branch.

Some complex decisions carry additional weight because they are hard to correct if we make the wrong choice. At Alight, we are testing a timely prompt to help people understand the long-term financial trade-offs of making hardship withdrawals from workplace retirement accounts. This prompt is meant to provide a moment of deliberate thinking around a crucial decision that may lead people to decrease withdrawals from their future self. At Patelco Credit Union, we created a calculator for their credit builder loan to help members understand the true cost of their loan payments without stretching their budgets too thin.

> People often benefit from tools to help them make sense of the complexity in their finances.

We also recognize that finding money in tight budgets for savings can be challenging, so we recommended that people use unexpected windfalls to jumpstart savings. At both WSECU and Digital Federal Credit Union, we guided members to put reductions in loan payments from loan modifications or consolidations towards savings. At Virginia Credit Union, we similarly redesigned the redemption portal to encourage members to put their credit card rewards towards savings.

CONCLUSION

Going forward, we anticipate that more organizations will integrate concepts from behavioral science into their current product and marketing work. We see evidence that organizations are building behavioral science functions that will perform actual applied research. The distinction is that while the influence of behavioral science will continue to grow, the impact may be more localized to those organizations that prioritize measurement, learning, and adaptation.

The fruit of those investments will be inextricably linked to the roots of the organization. Some organizations will use behavioral science to improve the design of products and services that help people meet their goals. Those organizations will be thoughtful about how they align their incentives with their end users. They will pair behavioral scientists with data scientists, product managers, marketers and other key functions to make prompts more salient, decision aids more useful, and products more engaging.

There will also be organizations that use behavioral science to increase short-term gains at the expense of users' wellbeing and the organization's long-term prospects. These organizations will use behavioral science by adding friction where a goal might be beneficial for a user but not the organization, by creating choice architecture that leads to higher spending but lower satisfaction, and by relying almost exclusively on interventions that occur outside of a user's conscious knowledge and willing participation.

In essence, we foresee some organizations using behavioral science to build sturdier ladder and others to build sneakier snakes. As organizations, from non-profits to big business, or regulators to journalists, understand the potential and real outcomes that can come from behavioral science, it makes it more important than ever that we select partners who share our beliefs -- that low- to moderate-income households deserve sturdier ladders.

> Some organizations will use behavioral science to improve the design of products and services that help people meet their goals. Those organizations will be thoughtful about how they align their incentives with their end users.

As we move into 2021, life will not return to normal at the same pace for everyone. And in many places the same structures and challenges—the snakes in our game—exist and threaten the financial resiliency and livelihoods of low- to moderate-income households. We expect that many people will be operating in this heightened state of scarcity for some time and will continue to benefit from behavioral interventions that introduce slack and give people some mental bandwidth back.

The challenges of 2020 caused everyone to reflect on what elements of work and life are crucial and what can be evolved. As we begin a period of rebuilding, it's worth reevaluating the approaches we've taken in the past—the layout of the board—and see if we can't build a better, more fulfilling experience for people. In some instances, that is going to be building sturdier ladders and removing snakes from the board. But we are also looking for ways of changing the game more dramatically. Those transformational innovations will be designed to make the game more equitable and more enjoyable for everyone.

1

INCREASING INCOME

In any given year, increasing income is an essential strategy for millions of households to achieve financial stability. While many states and cities have increased minimum wages, wage growth has been slow and uneven. The gaps between the highest earners and middle- and low-wage workers and between White earners and Black earners have widened. Even before the pandemic, households were taking on additional work to supplement their income or meet other financial goals. In 2018, more than 41 million Americans reported doing some gig or contract work on a regular basis. It's estimated that by 2023, over half of the workforce will either be gig workers or have worked as an Independent contractor during their career.

The COVID-19 pandemic has further exacerbated these wage gaps, with many households being laid off or furloughed, having their hours cut, or choosing to leave the workforce because of increased caregiving responsibilities. During the pandemic, unemployment peaked at 14.7% in April and fell to 6.9% in October. These rates are the highest since the Great Depression and worse than those during the Great Recession. It is estimated that since March of 2020, close to half of all households experienced some loss in employment income. And lower income households were hit hardest; they are more than twice as likely to have lost a job and nine times more likely to struggle to pay bills than higher income households. This has led many people to the gig economy to make ends meet. This year, we continued our work on increasing income, through both long-run and short-run projects.

We worked on five projects that span the lifecycle of increasing earnings: from increasing educational attainment, to connecting to job opportunities, to job retention, and even increasing income through gig work.

» With Foundation Communities and the Social Policy Institute at Washington University in St. Louis, we are encouraging low- and middle-income students to complete the FAFSA through a benefits-framed text message campaign. Prior research has shown that completing the FAFSA increases one's likelihood of attending college, which can dramatically increase their lifetime earnings. This project is launched and currently collecting data. Read more on page 19.

» With researchers from Peking University in China, we are exploring the challenges that women face in participating in the labor market and designing an intervention to increase their participation in rural communities. Read more on page 21.

» With researchers from Fudan University in China, we are working to increase the average weekly or monthly earnings of migrant workers through expectation setting to help reduce "job hopping." Read more on page 19.

» In partnership with Steady, an App that connects people to gig opportunities, and in collaboration with researchers at Irrational Labs, we ran two studies directly focused on increasing gig earnings. We found that using social proof, either in the form of the number of people or the aggregate dollar amount earned, had no impact on increasing uptake of Income Boosters. However, in a second study, we found that displaying a clear earnings goal helped users earn an additional $7-$20 per week. Read more on pages 24 and 27.

In 2021, we anticipate continuing to dive into concrete strategies that can help put more cash into people's pockets today, as well as unlock their potential for higher future earnings.

Partner Type:
Credit Union

Partner Cohort:
2020

Project Type:
Field Study

Project Status:
In Design

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DaGong

Improving Financial Earnings Among New Generation Migrant Workers

BACKGROUND

Internal migration has experienced incredible growth in China, and the rapid growth of the manufacturing sector in the country has created huge demand in the labor market. Under the Hukou system in China (Hukou is the citizenship issued by a given province/city in China), most migrant workers, who are not granted a Hukou in the city they migrate to, cannot enjoy the benefits given by a city, such as employment, health insurance, housing, and schooling for their children. This increases the friction for migrant workers attempting to settle down in the city they move to.

Migrant workers are more likely to lack stable employment and income, and are more likely to have unplanned expenses.

To better understand the financial instability of migrant workers, we partnered with a research team at Fudan University and WDW, an online job agency with over 700,000 registered members. WDW provides free job vacancy information for workers, arranges job interviews, and provides on-the-job service for workers. The research team at Fudan has conducted a series of field observations and interviews among young workers, and found that migrant workers are more likely to lack stable employment and income, and are more likely to have unplanned expenses. They are exploring ways to improve workers' financial wellbeing by improving their financial management knowledge (e.g., spending and saving) and increasing their earnings through two mechanisms: (1) working for a longer period of time with a given employer or (2) shortening the period of idling/wandering between work.

HYPOTHESES AND KEY INSIGHTS

- **Migrant workers have unstable employment:** The data recorded by WDW shows that tenure for each job is only about 46 days on average, with a median 34 days. The interviews conducted with migrant workers showed the majority (60.7%) of the respondents have never worked continuously for more than one year.
- **High turnover rate in the first seven days resulted in reduced income in migrant workers:** WDW data showed the turnover rate is 41% in seven days and 52% in 14 days. Due to the paying mechanism, migrant workers don't get paid if they don't work for a whole week, and don't get paid in full if they don't work for a whole month. The high turnover rate in the first two weeks resulted in many migrant workers receiving less income than they actually earned.
- **Mismatch of expectations:** The main stated reason for migrants to quit their job is "low income", but the field observation revealed that even when switching to other positions they don't earn a higher hourly rate.

EXPERIMENT

We are finalizing the behavioral diagnosis and will begin designing an experiment for launch at the end of Q1 2021.

RESULT

The experiment is expected to be launched at the end of Q1 2021, and we anticipate sharing out the results in the 2021 Annual Report.

This project is in collaboration with Fudan University.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Local Government	**2020**	**Field Study**	**In Design**

Promoting Labor Supply for "Left-Behind" Women in Rural China

BACKGROUND

Due to the regional imbalance of socio-economic development, the phenomenon of rural relative poverty remains prominent in China, resulting in a total of 43.4 million people still living in poverty at the end of 2016. For many households, this leaves them unable to sufficiently plan for the future, protect themselves against financial shocks, or acquire assets for wealth building. One common cause of low income levels for some of the rural households in northern China is insufficient labor supply. With improved techniques and technologies, farming has become less demanding of farmers' own time and effort. Higher degrees of automation and outsourcing also provide chances for people in rural areas to seek other employment. The common demand for day laborers in many rural communities could provide additional income for "Left-Behind" women in rural area -whose husbands work in cities- the population with working capacity but low employment rate.

With the rising labor costs and the "end poverty" movement, there are opportunities for rural women to achieve through improved employment conditions. More frequent and regular labor supply could bring in more stable income, raise the household income level, improve household living standards and protect against risks for the long run.

More frequent and regular labor supply could bring in more stable income, raise the household income level, improve household living standards and protect against risks for the long run.

We partnered with a research team from Peking University and a local village administration to better understand the barriers these women face in picking up additional work to add to their household income and to design an intervention to increase their earnings by increasing the number of days that they pick up work hours.

HYPOTHESES AND KEY INSIGHTS

Through interviews and surveys conducted by the researchers at Peking University, we've identified the following barriers to getting more women in these rural villages to pick up work outside of the home:

- **Mismatch of expectations:** Many of these women lack the skills necessary for jobs that they perceive as being "easy" (less labor-intensive and relatively higher-paid) and therefore most desired.
- **Present bias:** Many of the women prioritize their immediate comfort and desires over any potential long-term benefits. And many of the jobs for which they are qualified are more labor-intensive and relatively lower-paid, making it harder for them to choose to work that day rather than socialize or relax around the home.
- **Low self-efficacy:** Many women lack confidence in learning any new skills, which keep themselves from any position that requires training or learning.
- **Low financial literacy level:** These women do not understand basic financial concepts.

Based on these barriers, we hypothesize that we may be able to increase the likelihood of women picking up extra workdays by increasing their financial literacy, setting concrete, nonbinding goals and framing their long-term benefits as losses if they don't work toward them.

EXPERIMENT

Lead by the Peking researchers, we will test our hypotheses by randomizing 500 women aged 35-55 into 3 conditions:

1. **Control:** These women will simply receive typical financial literacy education through a series of videos on WeChat or TikTok that focus on the benefits of financial planning and action-oriented tips and rules of thumb to increase income.
2. **Treatment 1:** These women will receive goal-oriented financial literacy education videos that adds numeric examples with long-term goals decomposed into short-term goals.
3. **Treatment 2:** These women will receive personalized goal-oriented financial literacy education. These women will first set a tangible goal for what they would like to purchase (i.e., a car or an apartment), setting the money and time span in an app, and then receive a series of videos that focus on action-oriented tips and rules of thumb to increase income.

The design includes 3 phases: pre-treat survey, treatment and post-treat surveys. We plan to launch this experiment after the Lunar New Year in China to align with when many households will be going back to work.

RESULTS

The experiment will last for 3 months and we anticipate sharing out the results in our 2021 Annual Report.

This project is in collaboration with Peking University.

Partner Type: **Technology** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **Complete**

Steady

Using Social Norms to Encourage Uptake of Income Boosters

BACKGROUND

Close to half of gig workers (44%) depend on gig work as their primary source of income. The Steady app helps these workers maximize their income by matching them with opportunities to make extra money and provides an income tracker to monitor earnings.

One way people can earn extra money through the app is with bonuses ("Income Boosters"), which Steady gives out when users sign up for new jobs or services. For example, a Steady user could earn $20 when they sign up to be a Postmates delivery driver. However, not all Steady users take advantage of the Income Boosters program.

Steady partnered with Common Cents Lab to explore ways we might encourage greater adoption of these bonus programs.

KEY INSIGHTS

To better understand what might be keeping Steady users from pursuing Income Boosters, we conducted a detailed diagnosis of the Steady Income Boosters flow. An insight from qualitative research suggested that Steady users were not confident that they would be paid if they signed up for Income Boosters. We hypothesized that by using social norms variants to illustrate that others had been paid, we would increase the likelihood of someone pursuing an Income Booster.

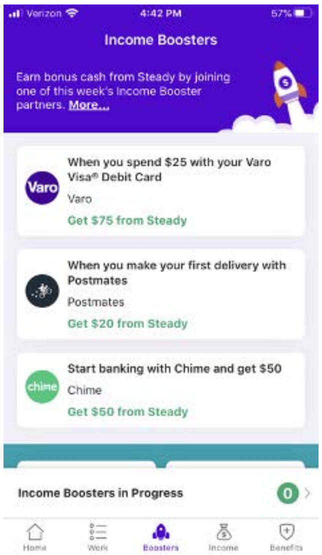
EXPERIMENT

CCL and Steady designed two experiments to test whether two different types of social proof would be effective in increasing Income Booster usage. The experiments ran over four weeks to over 62,000 Steady users. Both experiments tested:

1. **Control:** No social norms
2. **Social Norms:** Dollar amount paid to Steady members
3. **Social Norms:** Number of Steady members paid

In the first experiment, featuring all of the Income Boosters that were not Steady's top 5 most popular, on the Steady Income Boosters main screen:

Control



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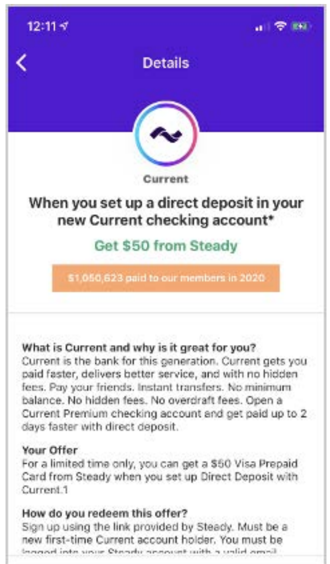

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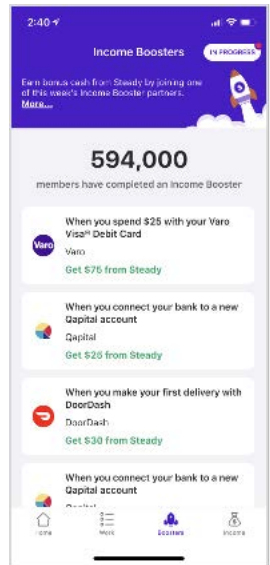
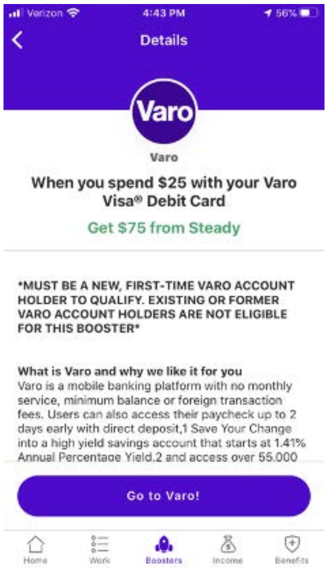
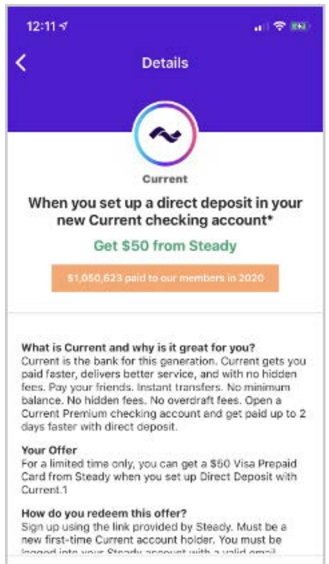


The second experiment, featuring Steady's top 5 most popular Boosters, featured the same three social proof versions. **In addition to the main Income Boosters screen variants, the second experiment also featured modifications to the individual Booster screens with social proof in the experimental conditions.**

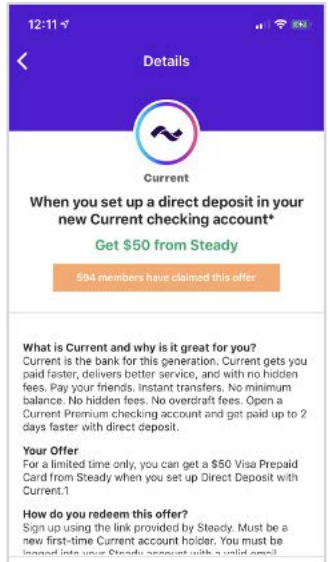
Control



Amount Paid

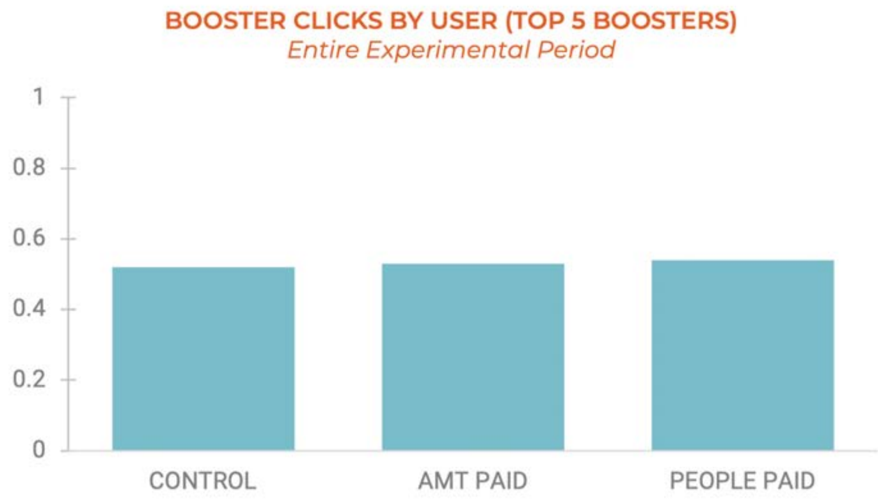


of People Paid



RESULTS

There was no difference across conditions in terms of getting more people to use Income Boosters in either of the experiments.



IMPLICATIONS

There are a few possible explanations as to why none of the experimental conditions lifted the number of people taking advantage of Income Boosters.

The first explanation involves limited attention: either people ignored the social proof messaging, or it is possible that people's actual behavior on the Income Boosters screen is a quick scroll, and without the social proof pinned to the top of the screen, people missed it.

Alternatively, it is possible that people took in the information, but it did not change their decision-making. It may have either not changed their opinion on the likelihood of getting paid, or they may have been equally likely to have applied regardless of the perceived odds of not being paid for an Income Booster.

This project was in collaboration with Irrational Labs.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
FinTech	**2020**	**Field Study**	**Complete**

Steady

Using Goals to Encourage Account Linking and Increase Earnings

BACKGROUND

A recent salary report by Indeed found that 81% of workers in the US don't feel like they're earning enough. When asked how much more it would take for them to feel good about their earnings, the majority of participants said they'd need to make at least $6,000 more per year, or just $500 more per month.

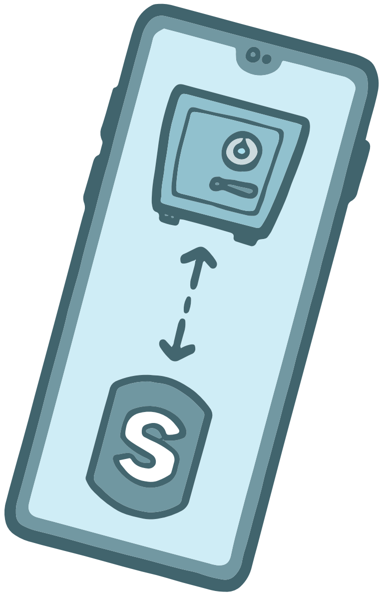
One of Steady's core intentions is to help gig workers attain their financial goals, which frequently includes increasing income; on average, users have earned more than $5,500 with Steady. To help in the most effective manner possible, Steady needs users to link their bank account to the app.

Together with Steady, we designed an experiment with the objectives of 1) boosting the number of users who linked their bank account to the app; and 2) increasing Steady user income.

KEY INSIGHTS

Our two primary questions for this experiment:

- Is it more effective to ask members to link their account before or after they set a Goal?
- Do Goals motivate people to work more and make more money?



In the experiment, we tested the impact of a Goal feature vs. a historical monthly income tracker. We also tested whether prompting people to link their bank accounts first or set their income goals first maximized bank account linking. There were three conditions:

1. **Control:** Income Tracker (existing feature) + Link Bank Account First
2. **Goals Feature:** Link Bank Account First
3. **Goals Feature:** Set Income Goal First

Key insights for the link-bank-account experiment

Link account first conditions:

- Making the link account **salient** could maximize bank account links.
- Bank account linking feels **incomplete**.
- The obfuscated feature behind the CTA creates **curiosity** about the **benefit** (feature).

Set-goals-first condition:

- This utilizes the **"foot in the door"** technique, which is to make a small request (set an income goal) followed by a larger request (link your bank account).
- Provides a **logical reason + product benefit** for linking a bank account.

Key insights for the goals feature experiment

- The feature is highly **salient**.
- **Goal setting** and **goal gradient** theory could lead to additional effort and income.
- A **weekly goal** is the time frame we believed most **immediate** and **easiest** to track and remember for people looking for gig-type work.
- We use **implementation intentions** to strengthen the impact of the goal feature, prompting a user to establish **how** they will reach their weekly goal.

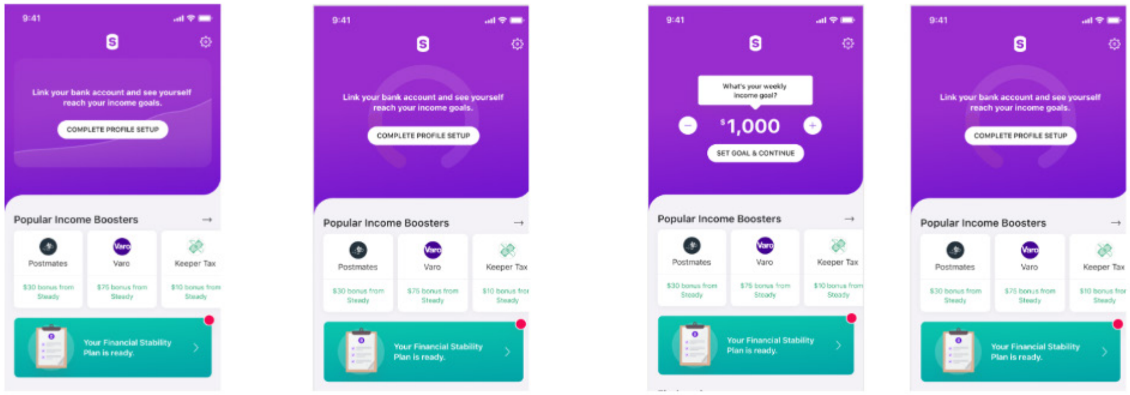
EXPERIMENT

There were three conditions in the experiment:

1. Link Account > Income Tracker (Control)
2. Link Account > Set Goal > Goals Feature
3. Set Goal > Link Account > Goals Feature

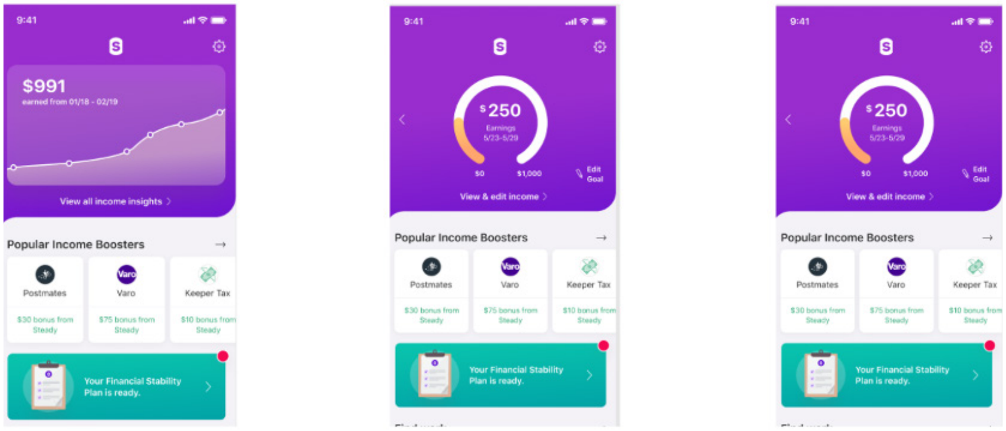
Account Linking Conditions

Control | **Goals: Link Acct. First** | **Goals: Set Goal First**



Account Linking Conditions

Control | **Goals: Link Acct. First** | **Goals: Set Goal First**



For users in all conditions, push messages designed to encourage goal-setting and plan-making (while remaining congruent with the Income Tracker) were sent every Monday and Wednesday at 11:35 local time. **All conditions received the same messages**. Examples:

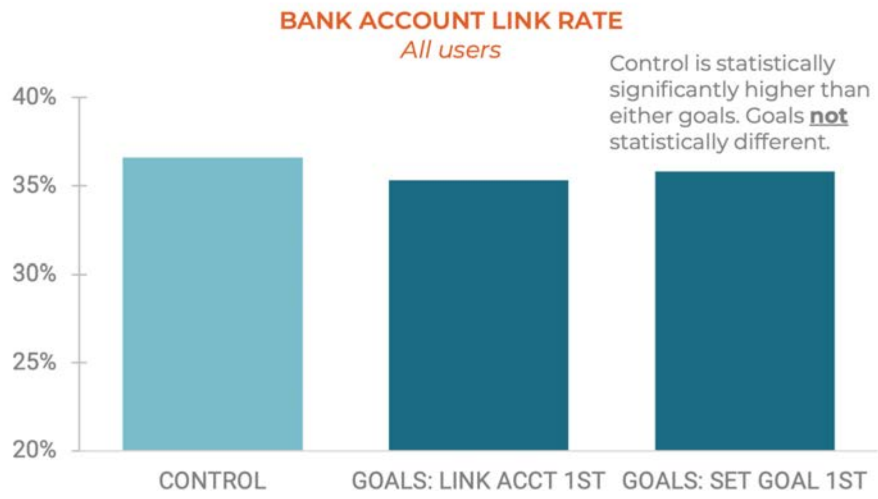
> **Monday: New week, new chance to earn!** Check your 💰 from last week & plan how to meet your income goals this week 📝

> **Wednesday! Half-way through the week** 📝✅ou got this! Check your 💰 vs. your goals & handle your business! ✊

RESULTS

Account-linking experiment

Surprisingly, the control resulted in the highest bank account link rate (p<0.014). There was no difference between the Goals variants in terms of bank account linking. Having users input their Goal first did not boost the number of users who linked their bank account.



One possible reason for this unexpected effect is the visual of the rising line on the graph on the “view income” screen, which may make it attractive. It’s also possible that returning users recognized the graph, and its congruence with their experience made it compelling.

Goals Feature Experiment

The Goals feature clearly did increase user income. Users who linked their bank accounts in the Goals feature conditions made more money. In fact, having a Goals feature boosted user income by an impressive additional $7-20 per week (2-6%). The 6% effect represents the impact for users of all incomes over the entire experimental period, the 2.3% effect removes potentially outlying incomes (1.1% of data) across the entire experimental period, and a 4.3% effect represents the impact for users (excluding potential outliers) with exposure to the experiment for a full 3-4 weeks over the experimental period. Less than two weeks in the experiment would have provided less than optimal exposure to the Goals feature, and if enrolling in Steady mid-week, the first week of exposure a user would not have received the goal-related push messages.

It didn't matter which Goal variant was used. Both were statistically significantly higher than the control ($p<0.015$), with no difference between variants. Other key metrics (such as number of app opens, and number of job applications submitted through the app) were largely unaffected by the Goals feature.

Both Goals variants are statistically significantly higher than the control. No difference between Goals variants.

In addition, the Goals feature appears to have a greater impact over time. The characteristics of the people in each condition were the same, and as people had time to set and track their goals, their income ultimately rose.

IMPLICATIONS

We included ~80,000 Steady users in the experiment, with ~40,000 in the control, and ~20,000 in each of the Goals variants. The bank account link rate was ~36%. We ran the experiment over 4 weeks, so over the course of that time frame ~14,400 users increased their incomes $28-$80 (2-6%) over that month, for an overall increase in income of $400,000-$1.15M due to the Goals feature.

Since the experiment, Steady has rolled the Goals feature out to its entire user base and through modifications to its onboarding has raised bank account linking to ~45%. We estimate that since August 2020, on average 36,000 users per month have increased their incomes $28-$80, for an additional increase in income of $1M-$2.88M per month due to the Goals feature.

This project was in collaboration with Irrational Labs.

Partner Type: **Non-Profit Organization**

Partner Cohort: **2019**

Project Type: **Field Study**

Project Status: **In Field**

Can Benefits-Framed Messaging and Personal Testimonials Increase Rates of Student Financial Aid Application Completion?

BACKGROUND

As the cost of college continues to rise, it has become increasingly important for students to apply for financial aid. However, the process of completing the Free Application for Federal Student Aid (FAFSA), which requires detailed information on a student's family composition, income, and other household assets, can be daunting for many low-income students. In fact, recent data estimates that only 61% of high school graduates completed the FAFSA in 2019. Even when students complete their FAFSA before their first year of college, many are unaware that they will have to complete it again the following year. A recent study found that among returning college students, there is a link between failing to fill out the FAFSA and dropping out of college.

To better understand how we could nudge students to complete their FAFSA, we partnered with the College Hub, a program of Foundation Communities, a community non-profit organization in Austin, Texas that assists clients in completing and submitting both their FAFSA and Texas Application for State Financial Aid (TASFA).

KEY INSIGHTS

Despite the importance of personal assistance in filling out the FAFSA, many of the students that Foundations Communities (FC) serves do not take advantage of the personal assistance for FAFSA completion offered by the organization. Prior to our partnership, FC sent monthly texts to their current College Hub clients reminding them to make an appointment in order to get help filling out their FAFSA. However, in consulting with FC, we found that many of these students were unaware of all the benefits associated with filling out the FAFSA. We also found that many of FC's Tax Help clients who previously enrolled in college were also unaware of these benefits. Given relatively low take-up rates from texts in previous years, we sought to use behavioral insights to augment both the content and the format of the messages. Specifically, we focused on benefits-framed messaging, highlighting how filling out the FAFSA could make college more affordable, and also included testimonials from the FC team describing how they have personally benefited from filling out the FAFSA.

As many low-income students aren't aware of all the benefits associated with FAFSA completion, we incorporated benefits-framed messaging into our experiments with FC, which has been shown to have positive impacts on FAFSA completion and college enrollment. While personalization, conversational messaging, and mentoring have also been shown to have positive impacts on FAFSA completion and college enrollment, these can often be too expensive for non-profit organizations—especially when taken to scale. Thus, we decided to use personal testimonial text messages as well, which may be especially salient for low-income students who may not personally know someone who has filled out the FAFSA or gone to college.

EXPERIMENT

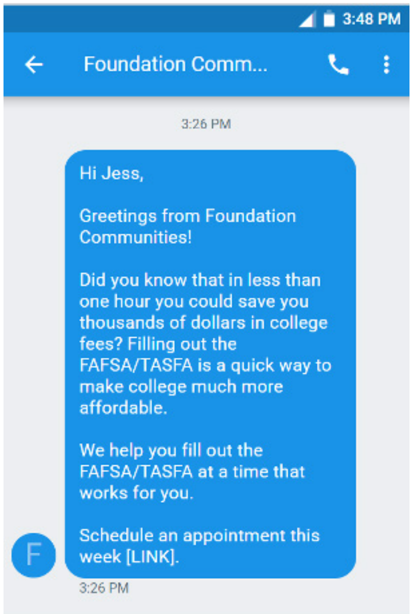
To nudge students to fill out their FAFSA/TASFA before their respective priority deadlines, we designed a text message-based experiment with three arms. In each condition, participants were prompted to schedule an appointment to complete their FAFSA/TASFA application with a College Hub staff member. Each condition consisted of 8 text messages delivered roughly every two weeks from late September (a week before the FAFSA opening date) to early March (before the priority deadline for local community colleges in Austin, TX). The 3 conditions in this experiment are:

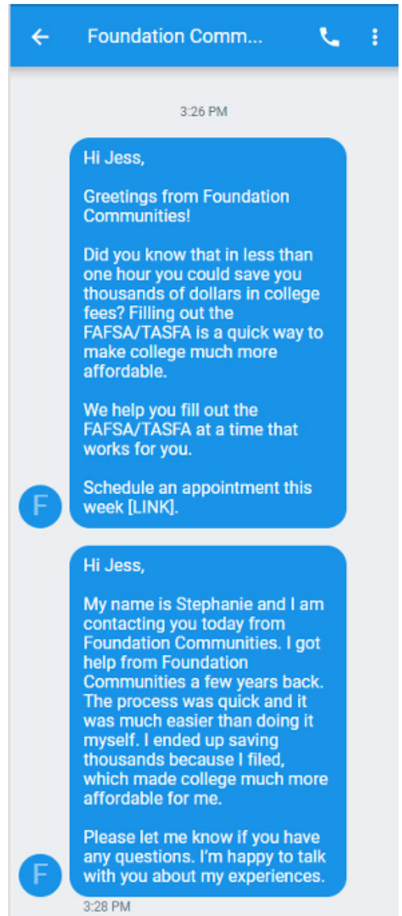
» **Control Group:** This group is our "business as usual" group that simply receives the periodic reminders that the College Hub staff sends to all their FAFSA/TASFA clients. These messages acknowledge the upcoming FAFSA/TASFA deadlines and invite recipients to sign up to complete the application through the College Hub.

» **Treatment Group 1:** Participants in this group receive a series of text messages that highlight the benefits of filling out the FAFSA/TASFA along with invitations to sign up to complete the application through the College Hub. Highlighted benefits include the minimal time costs of filling out the applications, access to grants, access to work-study opportunities, access to loan forgiveness, and lower interest rates on debts.

» **Treatment Group 2:** This treatment couples the benefit framings from Treatment 1 with a social proof element. Specifically, in this group, we use group texting to provide participants with both benefits-framed texts and additional testimonial texts from College Hub staff. The testimonial messages are designed to complement the benefit information from provided in the non-testimonial texts. For example, if a benefits-framed text discusses the minimal time required to fill out the FAFSA/TASFA, the testimonial will reinforce that benefit.

Account Linking Conditions





RESULTS

This experiment was launched in September 2020 and is currently in-field with 745 recipients in each of the three groups. After the first 4 text messages were sent out, we are pleased with our preliminary results: the Control Group has 13 FAFSA/TASFA completions; Treatment Group One has 23 completions; and Treatment Group Two has 25 completions.

This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

2

REDUCING EXPENSES

Reducing expenses is a key enabler of many of our other target financial behaviors like increased savings and reduced debt. In order to create enough slack in budgets to be able to save for unexpected expenses, one generally has to either increase their income or decrease their expenses. For many, looking for ways to decrease expenses can feel like a more immediate and achievable path. But it's usually not easy to break our spending habits.

These expenses come in many forms: some are fees incurred because of the mismatch between income and payments, some are temptation purchases that we later regret (see our Regret Spending case study in our 2017 Annual Report), some are subscriptions that we've forgotten to cancel, some are compounded because we delayed the expense, and many are essential to our health and happiness. It is tricky business sorting out how to reduce expenses when most of a budget goes to food and housing.

In 2020, the traditional pattern of increasing spend year-over-year changed dramatically. We saw spending on services such as dining, personal care and entertainment declined significantly due to lock downs but spending on goods increased substantially as people tried to cope with the pandemic at home. In our partnership with Varo, we surveyed households across the U.S. and found that about half were spending less. However, high-income earners have managed to reduce their expenses by 17%, whereas low-income earners are only able to reduce their already tight budgets by 4%.
Typically, if someone wants or needs to reduce their expenses, they are advised to make a budget and are then encouraged to reduce expenses by cutting out the fancy cup of coffee or bringing in homemade lunch to work. However, there's little evidence that budgeting, in the traditional sense,

actually works to reduce spending. In our partnership with Clarity Money, we found that traditional budgeting had no positive or negative impact on spending, even though it did increase engagement with the App. Read the full case study on page 42.

Reducing expenses is difficult. And there are two key barriers that we focused on this year:

1. Inertia: We may need to make significant changes or upfront investments to reduce some of our large expenses, for example, changing health insurance or applying for financial grants. These actions make take substantial time to complete but allow us to reap ongoing savings. Sometimes, we need an added push to help us get past the first needed action.
2. Overcorrection: Just as we might feel entitled to splurge on desserts following a week of lots of exercising, Kan, Fernbach and Lynch found that we are prone to overcorrect our spending behavior following a reduction in expenses in a previous period. This causes us to take one step forward but two steps back from our goal, and struggle to make significant progress.

This year, we tackled these barriers in a variety of ways:

1. **Nudges to get started:** Sometimes ongoing benefits take significant upfront investment. We can help by reducing the investment required or providing enough motivation to get people over the hump.
   » In partnership with PerkUp, we are encouraging users to seek out financial assistance using precommitment, nudges, and text reminders. Read more on page 58.
   » With Duke Kunshan University, we are designing a campaign, focused on village providers, to make it easier for chronic disease patients to enroll in a medication discount program. Read more on page 49.
   » With LISC, we designed a digital intake tool for financial coaching to ensure that the first session can lead to deeper conversations and connections. Read more on page 55.
2. **Budget feedback:** By providing real time, relevant feedback on spending progress, we may be able to help people stick to their spending goals and address overcorrection.
   » In a lab experiment, we found that using a stacked bar to clearly show what had been spent already, what was committed to be spent before the next paycheck, and what was left over for daily purchases increased intention to spend less in a hypothetical scenario. Read more on page 61.
   » To prevent overcorrection, we are working with Branch to test providing more ambiguous feedback when things go well and more specific feedback when things don't go as well. Read more on page 38.

In 2021, we anticipate sharing out our learnings from these studies while continuing to explore new ways to help struggling households reduce fees, free up cash to put towards future goals, and maximize their paycheck.

Partner Type: **Tech** | Partner Cohort: **2020** | Project Type: **Field Study** | Project Status: **In Design**

Increasing Account Balance Through Better Spend Feedback

BACKGROUND

With the onset of COVID-19 stay-at-home orders, 56% of hourly employees experienced reduced hours, unpaid leave, or job loss. Even before COVID, a survey of U.S. households found that 60% experienced at least one financial shock in a 12-month period, with $2,000 being the median most expensive shock. Half of these households struggled to make ends meet after their most expensive shock. Earned wage access (EWA), giving employees access to their earned wages before the normal payroll cycle, allows people to tap their funds to help pay bills and make rent while under financial distress without resorting to payday loans. However, research by Wendy De La Rosa and Stephanie Tully shows that higher payment frequencies can lead to greater perceptions of subjective wealth, and consequently increase discretionary spending.

Branch, a fintech company that partners with employers to offer free, instant access to earned wages and other digital payments to employees' Mastercard® Branch card, partnered with the Common Cents Lab to explore how to help users decrease their discretionary spending, take fewer pay advances, and ultimately increase their account balance.

HYPOTHESIS AND KEY INSIGHTS

The Common Cents Lab began the discovery phase to understand what barriers exist to planning for expenses, how users are currently budgeting, and what kinds of information a budgeting visual could convey that might help decrease spending. As the first step in exploring these questions, we turned to the literature and to CCL's past research, which highlighted that:

» People are overly optimistic about future expenses and set demotivating budgets.

» Going through a budgeting exercise decreases financial confidence.

» Categorization can make overspending more likely.

» People who track their budgets are more likely to overspend after a period of fiscal restraint than those who do not track their budgets.

Since Branch's budgeting screen was already focused on providing automated insights into spending habits, rather than category budgeting, these potential pitfalls were fairly easy to avoid. As our next step in exploring these questions, we conducted 11 in-depth interviews with Branch users. From these interviews, we learned that:

» Most interviewees were not budgeting primarily in a digital application.

» Some interviewees had lost trust in budgeting apps either because of faulty information, or because they didn't fit their mental model.

» Those who used budgeting apps used them to assess what they may have spent too much on in the past, but this didn't necessarily translate into future action.

» Interviewees wanted to do minimal thinking, be shown accurate calculations, and have bills paid on their behalf.

» Interviewees expressed interest in being reminded of the future consequences of their spending decisions.

Ready to begin exploring solutions, we designed a survey to test out some new budgeting visuals on Branch users. We wanted to see which new budgeting visual had the most potential for influencing spending decisions, as well as helping users understand the future consequences of their spending decisions. For more information on the survey design and detailed findings, see Learning from the Lab: Building Better Spending Visuals on page 61. At a high level, we tested three different visuals, each with two different messaging types ("doing great" versus "overdraft risk").

Out of the three visuals, the stacked bar visual:

» Was best at helping users spend less when faced with a hypothetical choice.

» Left the strongest impression that users had been spending too much.

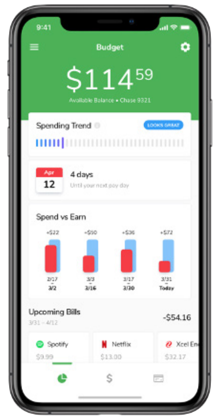
» Created the most confidence that money would last until the next pay period when things were going well.

» Performed best at helping users understand how much they had committed to upcoming bills, versus available to spend.

EXPERIMENT

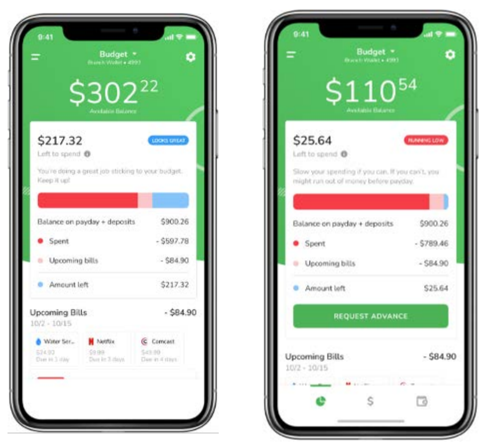
Leveraging survey findings, we refined the stacked bar visual to clarify a few things users found confusing. The experiment will have one control condition (the budgeting screen without the new stacked bar visual), and four experimental conditions, all of which contain the stacked bar visual. The four experimental conditions vary the level of specificity of the text feedback that sits above the stacked bar, in order to test the following hypothesis: If users receive specific feedback when their money is running low, but vague feedback when they are doing well, they will be less likely to view underspending as a license to spend more.

Control



Experimental 1

Ambiguous feedback for both “looks great” and for “running low”

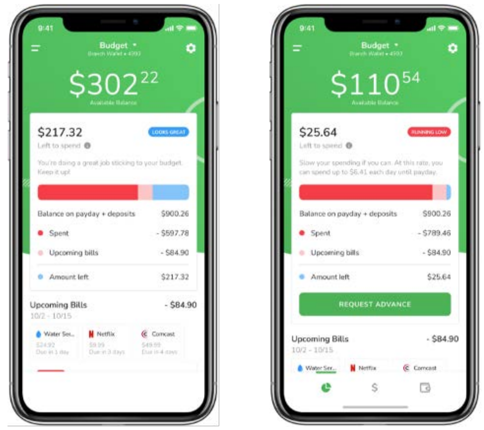


Experimental 2

Specific feedback for both “looks great” and for “running low”

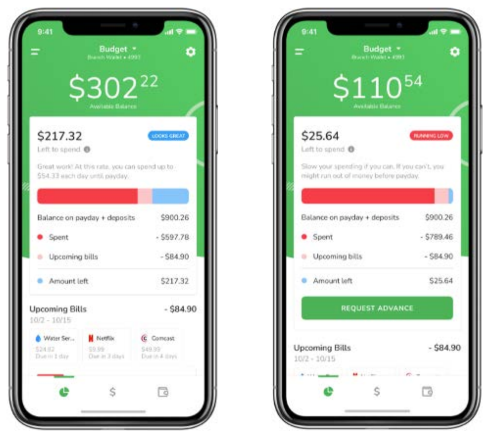
Experimental 3

Ambiguous feedback for "looks great," but specific feedback for "running low"



Experimental 4

Specific feedback for "looks great," but ambiguous feedback for "running low"



Once the experiment is launched, users will be randomized to see one of the five conditions, which they will see for the duration of the experiment. The stacked bar visual emphasizes how much they have already spent, how much is committed to upcoming bills, and how much they have left until their next payday. Users shown specific feedback will also see how much they can spend each day in order to make it to payday without overspending. We will then track actual spending, as well as pay advance frequencies and amounts, to understand whether the refined visual improved spend behavior.

RESULTS

This experiment will be launched in 2021, with results included in the 2021 Annual Report.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Tech	**2019**	**Field Study**	**Complete**

Measuring Spending With Budgeting

BACKGROUND

Among financial educators and within personal finance circles, budgeting – both tracking expenses and planning how much to spend in a specific category of expenses – is heralded as a way to reduce expenses and focus spending on areas of personal importance. However, much remains unclear about the best ways to structure budgets, as well as how to help people adhere to them. Furthermore, the extent to which budgeting actually helps people to reduce expenses even in the short-term, let alone in the longer-term, is equally uncertain, especially given the behavioral challenges associated with creating and adhering to a budget.

The experiment explored how people approach and use budgets to guide their financial behavior. Clarity Money, which was acquired by Goldman Sachs in 2018, was a fintech app that offered insights into user's finances with the aim of giving them a greater sense of control and improving their financial behavior. Clarity Money was decommissioned in 2021, but some of their features are now incorporated into Marcus Insights, available in the Marcus by Goldman Sachs app. Together, we developed an experiment so Common Cent Labs could explore whether traditional-style budgeting is effective at changing behavior and how we might use findings from behavioral research to improve budgets. As with all Common Cents Lab projects, Clarity Money provided an anonymized data set for this project.

HYPOTHESIS & KEY INSIGHTS

Common Cents Lab began by researching budgeting first through in-person interviews and auditing financial education courses. We wanted to learn how people think about budgets and how efforts to encourage budgeting suggest that people begin using them. We also conducted online surveys and analyzed engagement and behavior through the Clarity Money app.

This background work highlighted several behavioral challenges that people face when budgeting:

» Just sitting down and thinking through a budget requires significant self-control and time. Getting started on a budget is a daunting activity and procrastinating is easy – busy people already find it difficult to carve out time for things that they actually want to do. People easily push off the planning until tomorrow, and then six months have passed with no progress.

» Once a person has undertaken the seemingly monumental task of creating a budget, the self-control struggle has only begun since then they must actually adhere to that budget.

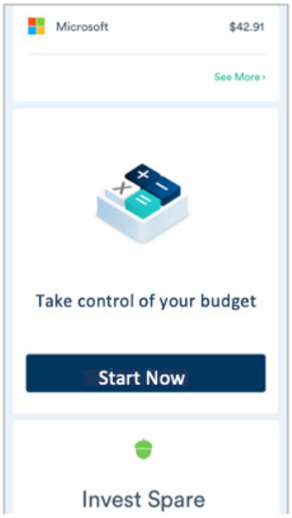
» Creating a budget and adhering to a budget requires combating information aversion. Budgeting forces a person to take stock of previous financial decisions and reflect on life decisions that might be unpleasant to revisit. On top of that, when someone does not follow their budget, chances are high that they do not want to be reminded – or worse, feel shame – that they did not spend their money as planned.

» Creating a budget also requires fighting inattention and forgetting. Once a budget is actually created, a person must remember how much spending is allowed in a particular category over the budget period. They must also track and be able to recall how much has been spent so far across all categories for a month (or more) at a time.

EXPERIMENT

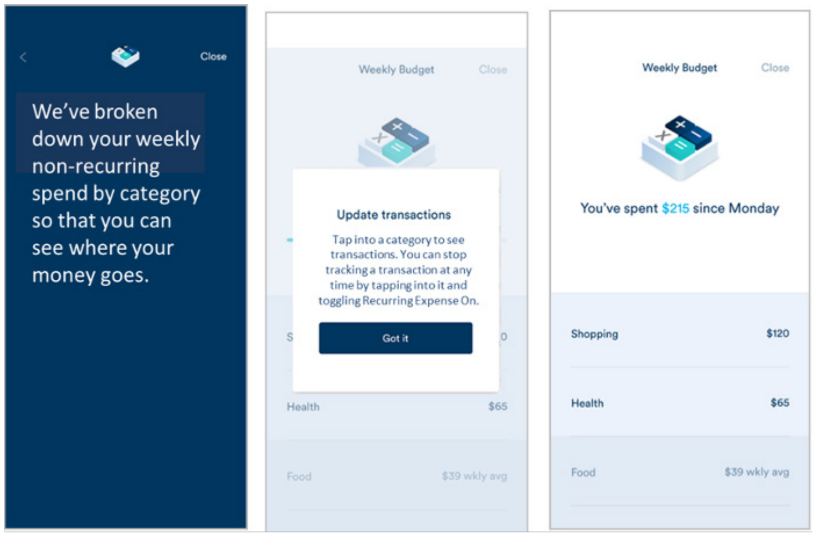
We worked with Clarity Money to develop and test three different approaches to budgeting. We randomized 9,035 people into one of three conditions: 1) Informational Control (N = 4368); 2) One-Number Budgeting (N = 2723); and 3) Category Budgeting (N = 1944). We initiated the experiment September 30, 2019 and ran it for 13 weeks.

To eliminate selection bias, we showed Clarity Money Android users the same tile screen, prompting them to "Take control of your budget."



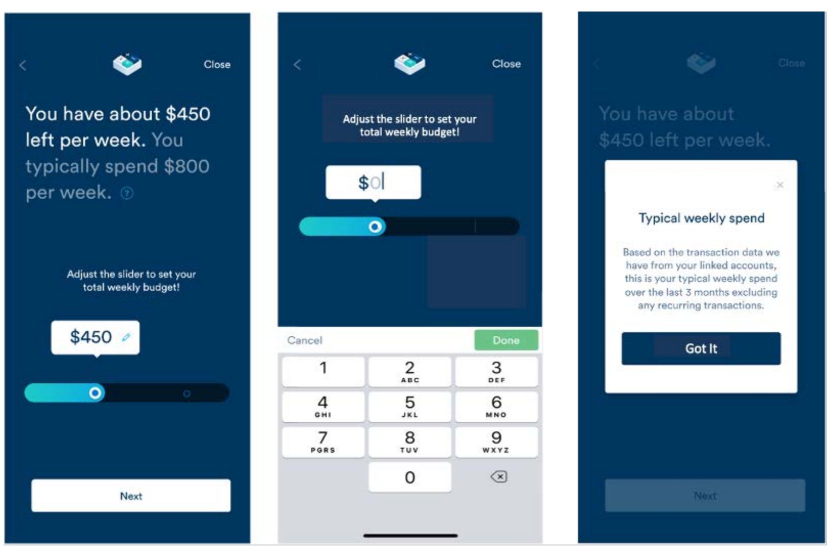
Those users that clicked this tile were opted into the budgeting experiment and were randomized into one of the three budgeting conditions.
The conditions were as follows:

1. **An informational control** where people are presented with a sum of their overall weekly spending, broken down into transactions by category.

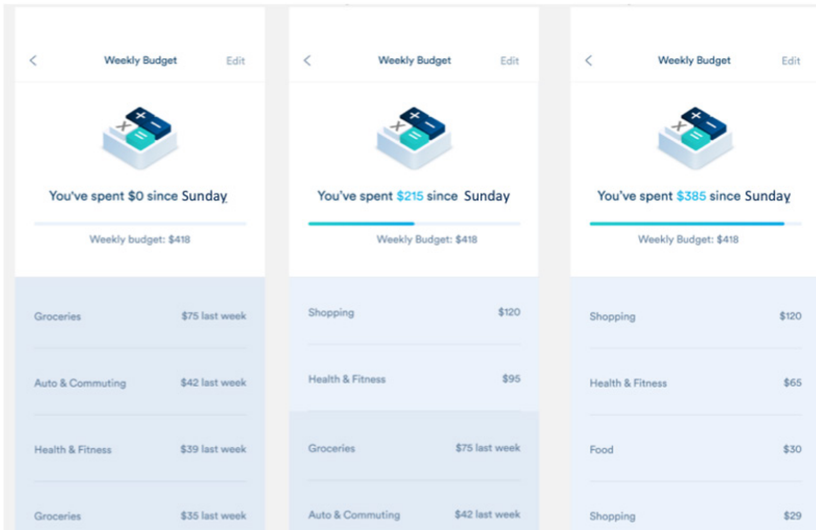


2. **An overall budget-setting condition** where people are guided to set up a one-number budget for the week.

Setting the Budget

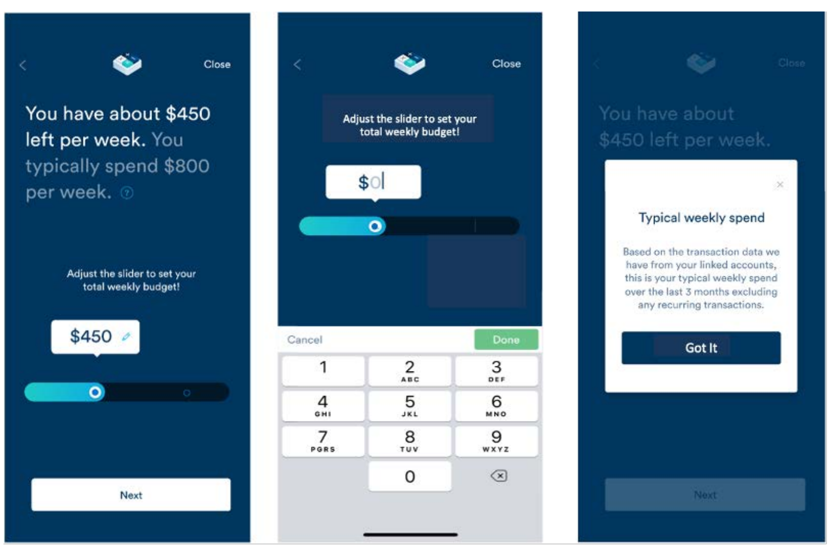


Clarity Money Feature Details View

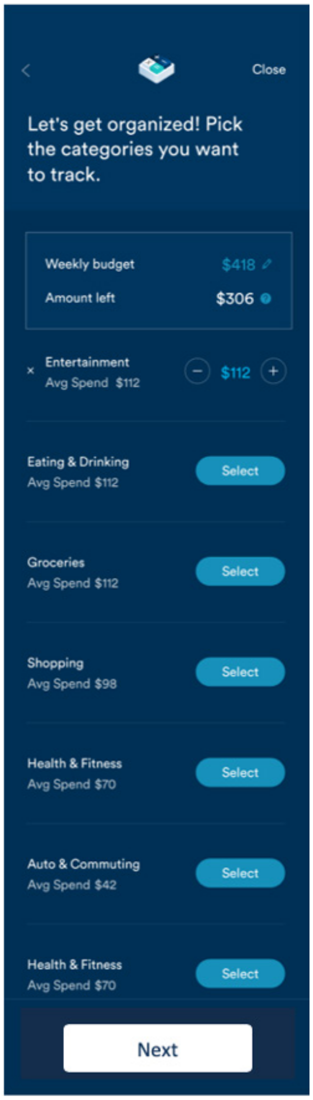


3. **A category-by-category budget setting condition** where people are prompted to set up an overall weekly budget number then to select specific categories of expenses to set goals for.

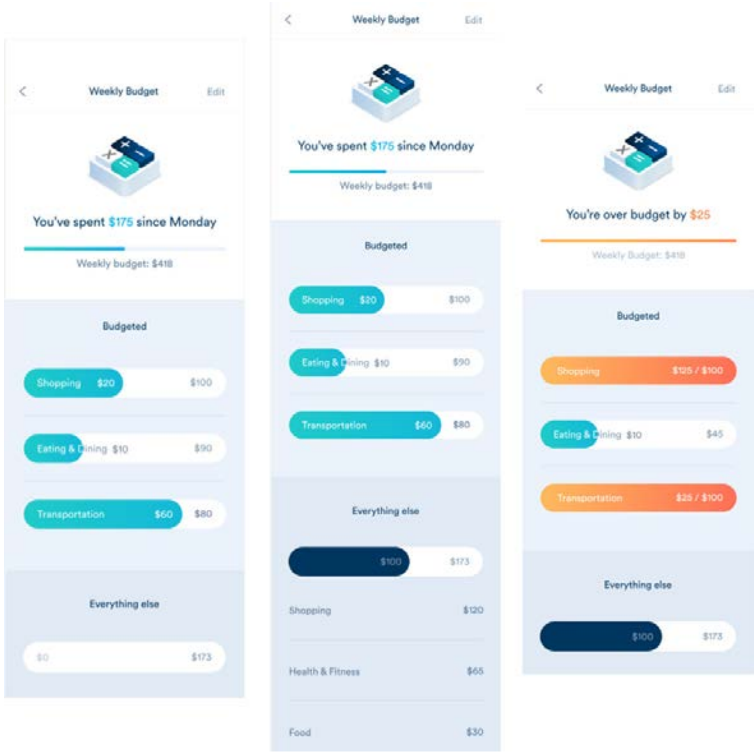
Setting the Budget



Setting the Budget (continued)



Clarity Money Feature Details View



We tracked how budgeting affects subsequent spending behavior to see if budgeting helped participants to reduce their expenses more than an informational control.

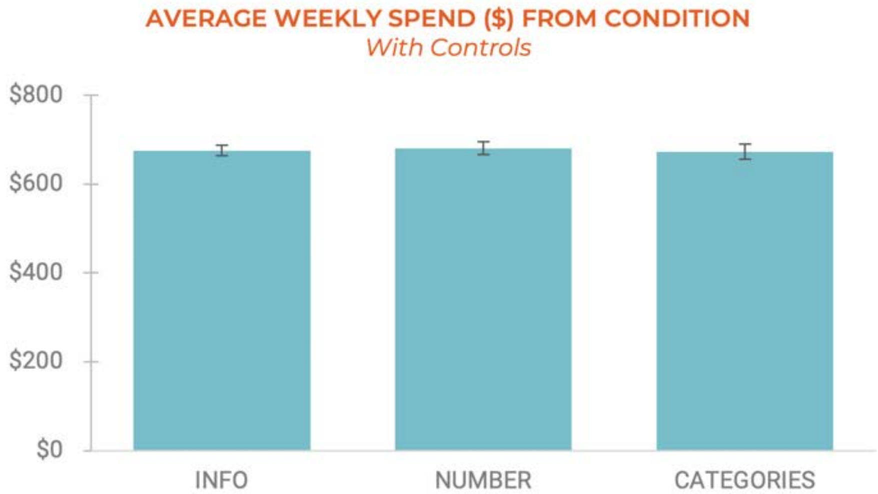
RESULTS

Although some differential drop-off occurred due to effort between conditions, budgeting inherently requires some level of effort and active participation. For example, in a hypothetical two-condition paper-and-pencil budgeting intervention which placed people in two separate rooms--one in which people are asked to complete a budget, and one in which they would be asked to wait or perform some other activity such as reflection--someone who did not lift a pencil to participate in the budgeting experiment would not be considered to have budgeted.

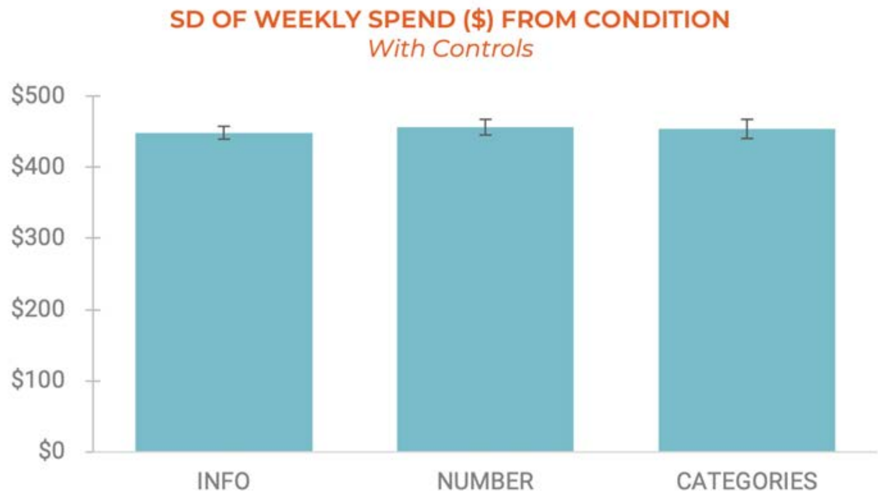
The budgeting experiment that we conducted randomized someone's chances of being placed in one of the three conditions due to the identical opt-in screen, and the feature lowered the amount of effort required to participate in budgeting as low as reasonably possible with pre-populated budgeting options. There were no observable pre-existing differences between the budgeting groups on income or spending patterns.

In terms of engagement with the budget, about 10% of the users in the experimental condition saw the budget 8 times or more, while a majority of the users (84%) saw the budget 5 or fewer times over the experimental period. Both budgeting variants statistically significantly increased engagement over the control from once every 4 weeks to once every 3 weeks ($p < 0.001$). However, in all conditions, engagement declined over time.

Overall, we found no significant difference between the average spending of the control group ($675.97) vs. the single budget ($681.08) or the category condition ($673.25) ($p$s > 0.4).



We also found no statistically significant difference in the variability in spending across conditions.



Budgeters generally overspent the amount they budgeted, spending 1.3-1.4 times what they intended. We did not see evidence that budgeters reduced their spending relative to their historic spend (*p*s > .15). We did not see spending differences by condition when we examined only the most frequently budgeted spending categories (food, groceries, shopping, and transportation) (*p*s > .5). Even after controlling for usual spending patterns, we found that spending in a budgeted category was about $30 higher than spending in non-budgeted categories (*p* < .001). We found no differential impact for users that checked their budgets more frequently, (*p*s > .1).

So while the budgeting feature increased engagement with the Clarity Money app, overall we found neither positive nor negative financial impacts from budgeting.

This project is in collaboration with Irrational Labs

Partner Type:
Local Government

Partner Cohort:
2020

Project Type:
Field Study

Project Status:
In Design

Promoting Enrollment in a Reimbursement Program for Chronic Disease Medication

BACKGROUND

Chronic disease is a significant issue in China, and up to 75.8% of Chinese people over age 60 have one or more chronic diseases. Furthermore, people with chronic diseases in rural areas are more likely to live in poverty, and the cost of medication for chronic disease management can be a significant financial burden, forcing them to choose between basic needs and their medication. In rural China, the number of people in poverty due to an illness was 44.1%, and those in poverty due to long-term chronic diseases was 22.8%. In 2019, following national guidelines on reducing outpatient costs for residents with hypertension and diabetes, the Nantong city government instituted a reimbursement plan that covers 50% of hypertension and diabetes medication costs for all registered hypertension and diabetes patients if they refill their medications at designated public medical institutions or pharmacies. However, many rural citizens with chronic diseases are often not aware of this new policy, and either are not registered or are refilling their medications at local pharmacies and missing out on the significant cost reductions. This limits the program's positive effects on reducing the financial burdens of the patients.

Led by a research team from Duke Kunshan University, in collaboration with Nantong University and the local health insurance bureau, we are designing a pilot to increase enrollment rates of patients in the program, which should decrease costs for patients, and ultimately benefit the population's financial health and physical health.

HYPOTHESIS AND KEY INSIGHTS

In the diagnosis phase, we found several key insights:

The information gap among patients: The patients have limited access to information, and there is no established channel to inform patients about this reimbursement program. Therefore, most of them are not aware of this policy.

Village doctors lack incentives to promote the program: Theoretically, doctors in township hospitals and upper-level hospitals ought to recommend and enroll patients in reimbursement programs like this. However, they are not keen to do so. Through prior interviews, we learned that village doctors (who interact directly with patients in rural areas) do not consider it their responsibility to recommend and enroll patients in this program, since it is not directly related to their work. If doctors do not recommend and publicize it, patients are unlikely to learn about the program or benefit from it.

A complex operation system reinforces the intention-behavior gap among village doctors: Through interviews, we determined that there were logistical barriers for some village doctors to operate the reimbursement system for patients' registration.

The hypothesis is that the practical intervention led by village doctors can increase policy adoption measured by percentage of patients enrolled in the policy program as well as a number of other financial and health outcomes.

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EXPERIMENT

Using villages as clusters, we plan to adopt a cluster randomized controlled approach, and randomize 30 villages to either the intervention group or the control group, stratified by township with an allocation ratio of 1:1. Each village is expected to have 400-500 patients registered, and the experimental group will have around 5,000 patients.

The control group would serve as a natural baseline and would not receive any intervention, and the intervention group would adopt a "cocktail treatment" that involves different kinds of interventions. All intervention-related tasks will be performed by village doctors allocated to the intervention group.

On the village doctor level:

- Conduct a performance-based incentive program among village doctors: Provide incentives to village doctors for the number of patients registered and the number of patients purchasing medications at designated medical institutions for reimbursement in the program.
- Provide action-oriented tips and rules of thumb about the operation system: Design a clear visualization of the enrollment process for the doctors; clear visualization (e.g. flow chart) of the registration process might increase their capabilities with regard to registering patients in the reimbursement system on computers. They also serve as a proxy for patients' registration under patients' consent by collecting their materials and handling their registration at township hospitals.
- Provide village doctors with scripts that use loss aversion and social norms to motivate patients to enroll in the program: Improve communication skills during policy promotion with patients. The script includes how much money patients would lose in one year if they don't enroll in the program, and the social comparison with other patients in the village.

On the patient level:

- Action-oriented tips and rules of thumb about registration: Hang up posters in public places in villages and provide policy leaflets to patients with the contact information of village doctors and quick steps to enroll in the program.
- Use reminders to increase medication pick-up from village and mark medication pick-up dates on the calendar on the same policy leaflet distributed to patients.

RESULTS

The experiment will last for 6 months and will be launched in Q1 2021, and we anticipate sharing the full results in the 2021 Annual Report.

This project is in collaboration with Duke Kunshan University

Partner Type: **Community Organization**

Partner Cohort: **2019**

Project Type: **Field Study**

Project Status: **In Field**

Improving Access to Publicly Subsidized Health Insurance through Text Messaging

BACKGROUND

Through the Affordable Care Act, many low- and moderate-income (LMI) households gained access to public subsidies that could be used to purchase private insurance on the ACA Marketplace. These subsidies can be quite substantial, sometimes valued at tens of thousands of dollars and representing up to 94% of the actuarial value of private insurance. However, around half of uninsured adults in the United States do not take advantage of the publicly subsidized health insurance available to them.

Foundation Communities (FC) is a community nonprofit organization offering free support services to thousands of families in North Texas. One of these services involves assisting individuals through the health insurance enrollment process, either through employers, the ACA Marketplace, or Medicaid. In this study, we partnered with Foundation Communities to test how sending redesigned promotional messages to prospective health insurance enrollees affects the total number of FC clients who receive public health insurance subsidies.

KEY INSIGHTS

There is ample research on the behavioral or cognitive barriers that make it difficult for people to access public benefit programs for which they qualify. For example, misperceptions of the costs and/or benefits of health insurance, procrastination during the open-enrollment period, and perceived stigma associated with stereotypes of public benefit recipients have been shown to reduce take-up of public benefit programs such as publicly subsidized health insurance.

Ordinarily, FC sends strictly informational messages to its clients about when, where, and how they can sign up to receive help enrolling in health insurance. In this study, we are testing how messages explicitly targeting the aforementioned behavioral barriers can affect participation in FC's health insurance enrollment program and the subsequent receipt of public health insurance subsidies.

A two-armed experiment that tests how behaviorally-designed promotional messages affect enrollment in publicly subsidized health insurance programs.

EXPERIMENT

We are currently working with FC to field a two-armed experiment that tests how behaviorally-designed promotional messages affect enrollment in publicly subsidized health insurance programs. In both the Treatment and Control groups, clients can receive up to nine promotional messages. All promotional messages (regardless of experimental group) conclude with an invitation for the client to fill out an intake form and schedule an enrollment session. These intake and scheduling materials are identical for Treatment and Control groups. This experimental structure allows us to test the effects of the redesigned promotional messages on health insurance enrollment.

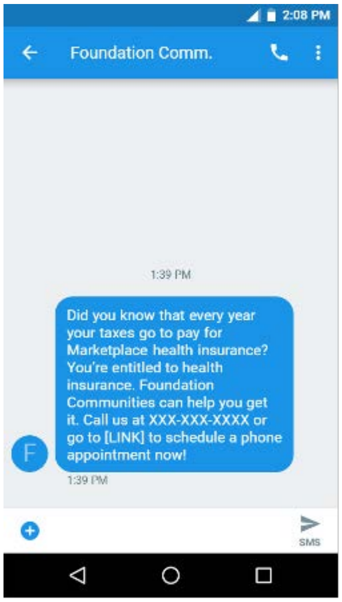
The sample in this study is made up of all FC clients who either utilized FC's health insurance services in a previous year (but need to re-enroll this year) or who indicated that they may be in need of health insurance when receiving other FC services in the Winter and Spring of 2020. All clients in the sample were randomly assigned to either the Control or Treatment groups, which we describe here:

» **Control Group (N=1,523):** Roughly half of the study participants were randomly assigned to the Control group. Messages received by those in the Control group are comparable to the messages that were sent to all clients during the 2019 open enrollment period which focused solely on informing the recipient when, where, and how FC can help them sign up for health insurance.

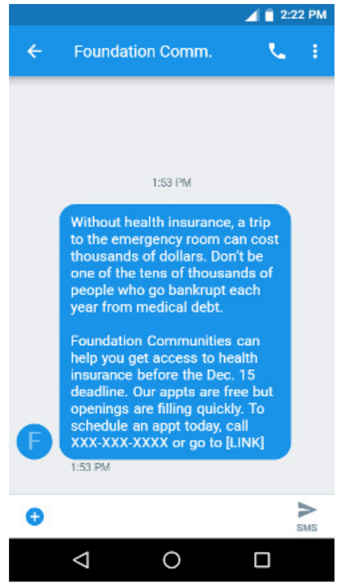
» **Treatment Group (N=1,522):** Study participants randomized into the Treatment group receive redesigned promotional messages that also address barriers to accessing publicly subsidized health insurance in addition to providing information about how to access FC's insurance services.

Illustrative examples of treatment and control messages can be found below.

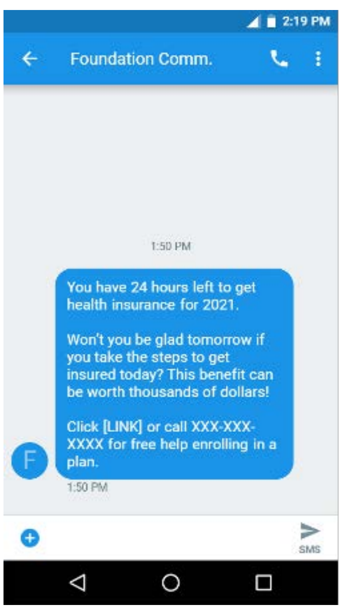
Treatment Group Example 1:



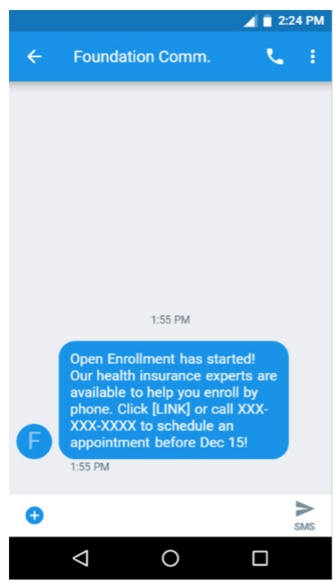
Treatment Group Example 2:



Treatment Group Example 3:



Control Group Example:



This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Community Organization	**2015**	**Field Pilot**	**In Field**

Using Technology to Increase Retention in Financial Coaching

BACKGROUND

Beginning in 2015, the Common Cents Lab and LISC began collaborating on strategies that leverage behavioral science to improve retention in financial coaching programs. We first designed a visual goal setting activity for coaches to use with clients during the first session. We found that the intervention significantly increased the number of clients that stayed engaged with financial coaching after three months, six months, and even nine months later.

This first intervention highlighted the importance of a client's early engagement with the financial coaching program. The way a client interacts with the coach during their first session has consequential, downstream effects. That insight inspired a second project that aimed to leverage technology to shape clients' early engagement with sites. The digital tool developed in that project, which came to be known as the ARC tool, primarily focused on providing technology that complements and supports financial coaching efforts.

HYPOTHESIS AND KEY INSIGHTS

We began this second project with a discovery phase where we tried to capture the motivations for both financial coaches and their clients. Using these as a framework, we then develop a wider range of potential opportunities to pursue. Ultimately, the ARC Tool aimed to increase engagement and retention with financial coaching in three main ways:

» Simplify and reduce friction for clients as they onboard with sites. Providing a digital intake that makes the onboarding process easier and clearly communicates the value of financial coaching will increase clients' motivation to engage with the site.

» Reduce the administrative burden on coaches. Much of a coach's time day-to-day is taken up by administrative duties that limit their ability to deepen their relationships with existing clients or work with new clients. Providing technology that automates and facilitates administrative responsibilities and data-entry for coaches will increase the amount of time spent on direct coaching-related activities and outreach.

» Prime coaches to have meaningful conversations with clients. Providing technology that accelerates the relationship-building process and ensures that the first meeting focuses on topics that are relevant and meaningful to the client will increase their motivation to stay engaged with the site.

PILOT

To achieve those goals, we developed a prototype of the ARC Tool that was comprised of four main features:

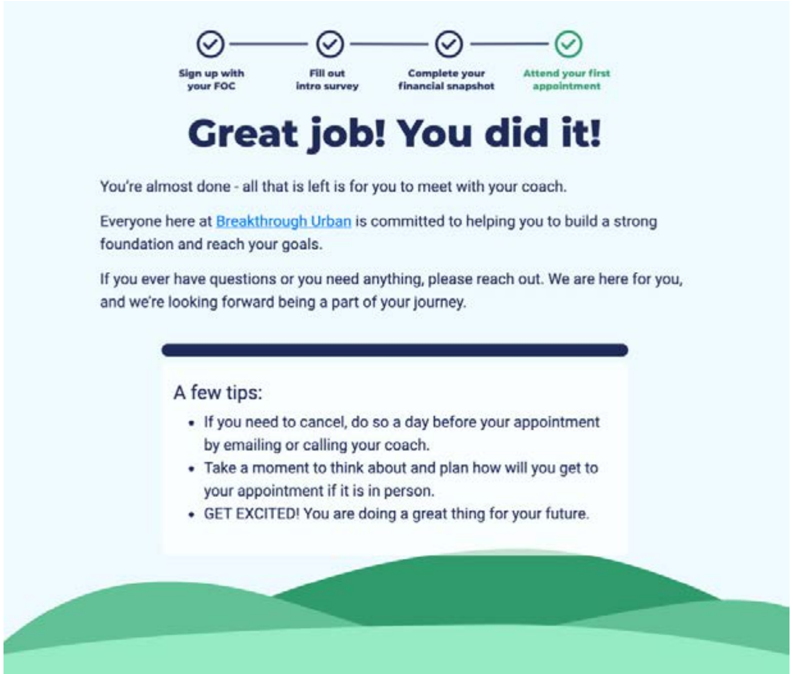
» A digitized version of the intake and onboarding that automatically uploaded the collected information into LISC's Salesforce system.

» A digital calendar system that gives clients the ability to schedule sessions themselves.

» An automatically generated report that summarizes the information collected as part of the intake that is sent to coaches prior to the first session. The report also gave coaches prompts, or "conversation starters", that provided high-level overview of a client's financial circumstances and information about their goals.

» A system of ongoing email or text message reminders.

The prototype of the ARC tool was piloted at the Jane Addams Resource Center (JARC) in Chicago. In total, 72 clients used the tool with a single coach. That initial pilot with JARC was instrumental in refining the ARC tool and helping to clarify critical barriers clients and coaches face when using the tool.



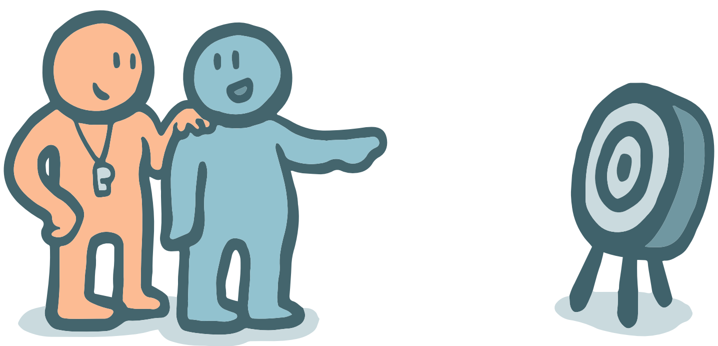
RESULTS

The original pilot was intended to include additional sites in Chicago and the sites that comprise LISC's Financial Opportunity Center® network in Houston. The pilot also included an evaluation component that would have allowed for us to assess the impact of the tool on client engagement and retention. We were in the process of rolling out the ARC tool to extend the pilot in early 2020 as the COVID-19 pandemic unfolded across the country, which significantly altered the direction of the ARC tool's development.

We were in the process of rolling out the ARC tool to extend the pilot in early 2020 as the COVID-19 pandemic unfolded across the country, which significantly altered the direction of the ARC tool's development.

Many sites faced challenges in recruiting and onboarding new clients remotely. Thus, the ARC tool and the digital intake offered significant value to FOC's. The team determined that the greatest value of the ARC tool would be to quickly scale the digital intake to be available across the FOC network. Scaling the original version from five to ten sites to more than 100 posed challenges and some of the tool's functionality needed to be scaled back.

Ultimately, the ARC Tool was scaled across the FOC network. Despite cutting the pilot short, we were fortunately in the right position to fulfill an immediate need and to support sites as they grapple with serving their clients during and after the COVID-19 pandemic. Furthermore, the ARC tool surfaced a large set of future functionality or directions for future research as LISC continues to develop and scale the ARC tool.



Partner Type:	Partner Cohort:	Project Type:	Project Status:
FinTech	**2020**	**Field Study**	**In Field**

Encouraging Unemployed and Furloughed Hospitality Workers to Use Covid-19 Financial Assistance for Basic Household Needs

BACKGROUND

PerkUp is a digital platform through which employees can access savings and loan products as an employee benefit. Through partnerships with credit unions, PerkUp offers loans of $500 to $2,500 over 12-month terms at no greater than 17.99% APR. Savings accounts include payroll-deducted deposits as a fixed amount or percentage of pay and prizes for making deposits. The digital platform also includes a set of curated financial education resources.

Prior to the COVID-19 pandemic, PerkUp was working with local foundations to market loans to hotel and restaurant workers in New Orleans as alternatives to payday loans and to test ideas for encouraging workers to transition from making loan payments to building savings. Most of these workers were laid off or furloughed, prompting Perk Up to plan an emergency financial assistance program with its philanthropic partners: the PerkUp COVID-19 Assistance Fund for Employees, or PerkUp CAFÉ.

The PerkUp CAFÉ program was launched in October 2020. This program includes an experiment to test persuasive messaging and pre-commitment nudges coupled with email and text reminders, with the aim of encouraging the use of emergency assistance for meeting basic needs.

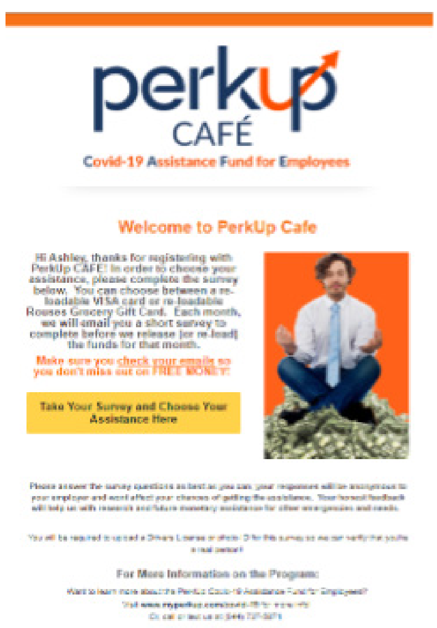
KEY INSIGHTS

A behavioral diagnosis for the PerkUp CAFÉ program was not possible because it is a new program. However, a principle concern among philanthropic partners is to ensure that limited financial assistance is used by workers to pay for essential household needs such as food and medicine. The timing of CAFÉ's launch was deliberate—after the CARES Act's Economic Impact Payments had been spent and supplemental unemployment benefits expired at the end of July, and before a second round of federal economic relief may be offered. Meanwhile, most of the furloughed and laid off hospitality workers are not expected to return to work until perhaps the second quarter of 2021. Thus, a key goal of the program was to help sustain households during a period of decreased public assistance and continued unemployment.

The idea of encouraging the use of assistance for basic needs tests a more efficient way to target financial assistance than traditional means testing (e.g., making workers document financial need) and/or attempts to condition assistance on certain behaviors (e.g., applying for other jobs). As such, the experiment tests whether need-based consumption can be encouraged through an unconditional cash transfer (UCT).

PERKUP CAFÉ PROGRAM IMPLEMENTATION

Workers who were working for one of three New Orleans' hotels on March 1, 2020 and who were subsequently laid off or furloughed are eligible to receive $600 in financial assistance over a three month period from November 2020 through January 2021. The human resources (HR) department of each hotel contacted employees to let them know they could apply for assistance by registering on the PerkUp website. Upon registration and identity and eligibility verification, employees receive an email with instructions to complete a brief survey and choose the form of assistance they wish to receive—a physical or digital re-loadable VISA debit or Rouse's (grocery store) card. Employees are also given an offer of speaking with a financial coach. Employees who do not complete the survey are sent a text reminder within seven days and must complete a survey each month to receive assistance in $200 increments.



EXPERIMENT

Employees of one of the three hotels will receive an intervention while employees of the other two hotels will receive the financial assistance alone. The intervention has three components:

1. **Persuasive prompt with pre-commitment:** In Survey 1, employees are told "We only have a limited amount of money to support people during the pandemic. We hope that you will use this money to help cover your essential expenses like groceries, gas, and bills." This prompt is followed by the question "Would you use the funds on essential expenses?"
2. **Basic Needs Nudge:** Later in Survey 1, employees are asked "How will you use your gift card? Select all that apply:" with a response list that includes "groceries, medical care, gas, utility bills, child-related expenses like clothing or school supplies, and other: please indicate." This "nudged" list of needs reflects needs employees could ostensibly pay for with $200 and is randomized across surveys.
3. **Text reminders:** Employees are reminded of their pre-commitment and intention to use their assistance through follow-up text messages.

RESULTS

Outcomes will be assessed in three ways. First, employees' survey responses on surveys 2 and 3 will be compared with respect to self-reported difficulty covering household expenses and food insecurity. Second, aggregated spending data by merchant category will be compared among employees who chose a VISA card. Third, the choice of whether to receive a general-purpose VISA versus a grocery store gift card will be compared between treatment and control group employees. Employee employment and demographic information on Survey 1 will be used to assess the degree of sample balance among the treatment and control samples.

As of November 16, 2020, 1,047 employees have registered for the PerkUp CAFÉ program, including 1,006 initial verified registrations. Most (N=963) of these employees have completed Survey 1, including 580 treatment and 383 control group employees.

This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
N/A	**N/A**	**Lab Study**	**Complete**

Learning from the Lab: Building Better Spending Visuals

BACKGROUND

With about half of Americans living paycheck-to-paycheck in 2020, appropriately planning for upcoming expenses is more important than ever. While there are a plethora of budgeting tools on the market, many of these budgeting tools are better at helping individuals assess their past spending than they are at providing instant feedback on how individuals are doing compared to their goals, and informing current and future spend decisions. Individuals also tend to forget about upcoming obligations, such as bills, and to anchor on the wrong number when determining how much money they have left, and what kinds of purchases they can afford.

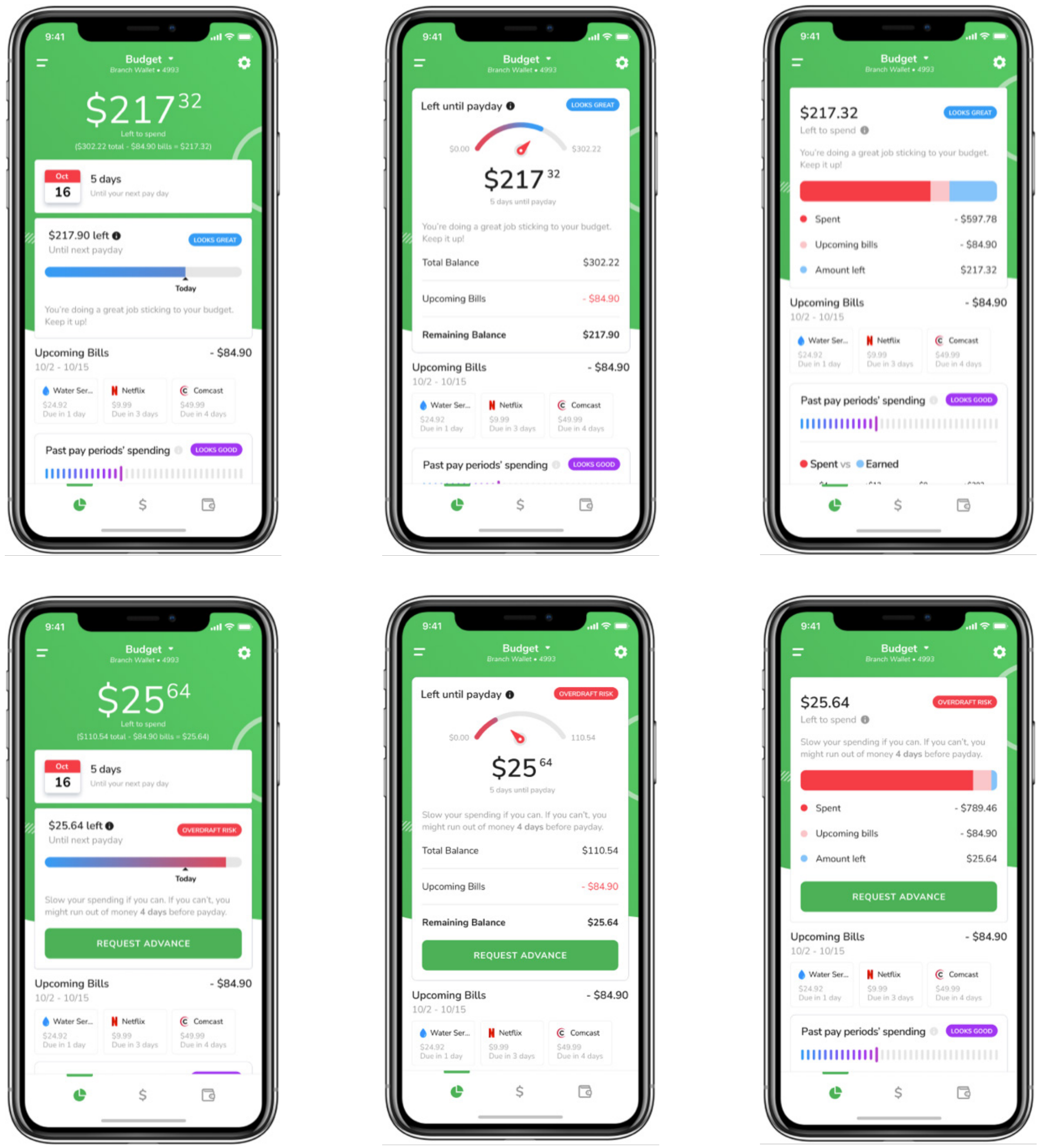
Branch [see case study on page 38] was interested in applying behavioral science to improve upon how a user's spending, balance, and bills were communicated in budgeting data visualizations. The aim was to make more salient: (1) the amount of money available to spend after upcoming bills were deducted, and (2) the impact of recent spending behavior on money available for the remainder of the pay period. The Common Cents Lab designed a survey to test three different redesigns of the budgeting screen to gauge behavioral intentions, interpretation of new graphics, and relative preferences between redesigns.

HYPOTHESIS AND KEY INSIGHTS

The Common Cents Lab tested three budgeting visuals that communicated either good financial standing (i.e., "looks great") or overspending (i.e., "overdraft risk"). The screens differed in how they communicated a starting amount, as well as how much of the remaining funds were committed to upcoming bills, versus available to spend:

- » **Progress bar:** Displayed a big "left to spend" amount at the top (available balance - upcoming bills), as well as the amount the user should have spent by today if they were to spend their paycheck at an even rate across the pay period.
- » **Gas gauge:** Displayed a small available balance (full length of bar) and subtracted for the user their upcoming bills to get to their large "left until payday" amount (what the dial points to).
- » **Stacked bar**: The full length of the bar represented their full paycheck, and was broken down into what had been spent, what was still in their account but committed to upcoming bills, and what was available to spend ("amount left").

Progress Bar | Gas Gauge | Stacked Bar



We had three hypotheses regarding how users would respond to these visuals:

1. Users would choose to decrease spending more often when shown an "overdraft risk" message.
2. Users would choose the most expensive decision in a hypothetical scenario less often when shown an "overdraft risk" message.
3. Users would correctly interpret the features of their assigned budgeting visual.

EXPERIMENT

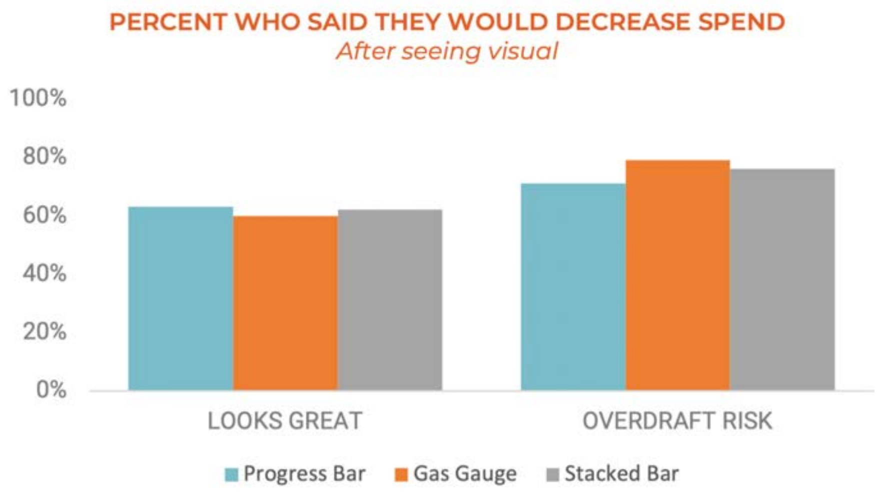
The experiment was implemented as a Qualtrics survey delivered directly to Branch users through a push notification in the Branch app.

The survey consisted of three parts:

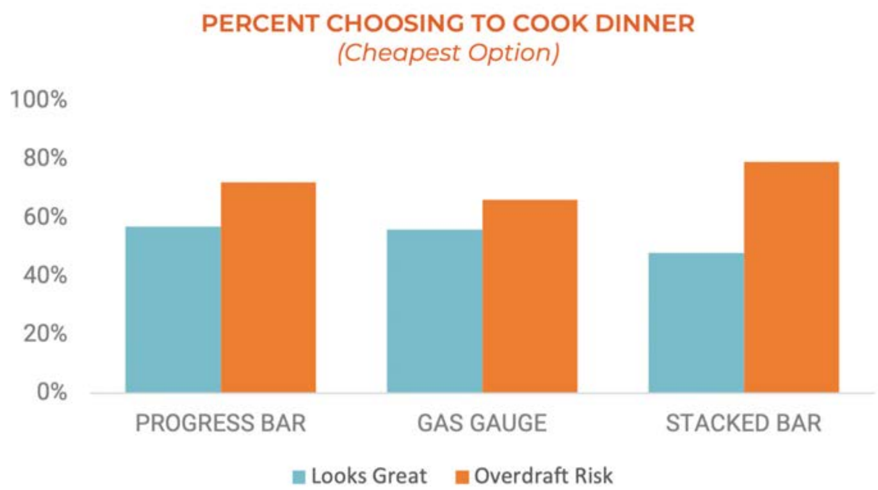
4. **Behavioral Questions:** Participants were randomly shown one of the three budgeting visuals displaying either positive feedback (i.e., "looks good") or negative feedback (i.e., "overdraft risk"), for a total of six conditions. Based on this screen they were asked: (1) how they would respond in a hypothetical scenario where they could purchase food, (2) how and whether they would change their spending if this screen reflected their current financial status, and (3) how this screen affected their perceptions of how they spend their money. There were 1,145 respondents that completed this section and were included in this part of the analysis.
5. **Visual Interpretation:** Participants were shown the budgeting visual they had been assigned and were asked to identify the meaning of the different features of the data visualization (e.g., the length of the bar, the fill of the gauge, etc.). There were 1,082 respondents that completed this section and were included in this part of the analysis.
6. **Choosing between Visuals:** Participants were shown all three sets of budgeting visuals (progress bar, gas gauge, and stacked bar) and were asked which set of visuals would be the most helpful to see used in the Branch app with their reasoning for their selection. There were 1,043 respondents that completed this section and were included in this part of the analysis.

RESULTS

Very few users responded that they would increase their spending regardless of whether they saw a "looks great" versus or an "overdraft risk" visual. The main trade-off was between choosing to maintain or decrease spending. Users presented with gas gauge or stacked bar visuals showed a significant difference in spending decisions when presented with "looks great" versus "overdraft risk" versions. They were more likely than expected to choose to "spend at the same rate" when presented with a "looks great" version. They also chose to "decrease spending" more than expected when presented with an "overdraft risk" version. This effect is highly significant for the stacked bar ($p = 0.0003$) and gas gauge ($p = 0.0007$) budget visuals. Responses for the progress bar users shows a similar trend but did not meet statistical significance ($p = 0.1639$).



All three visuals helped users curb spending when presented with an “overdraft risk” version versus a “looks great” version. For all three visuals, users said they were significantly more likely to cook dinner than get fast food or Uber Eats when presented with an overdraft risk. This effect is significant for the progress bar ($p = 0.007$) and gas gauge ($p = 0.004$), but is most visible when users rely on the stacked bar budget visual ($p < 0.0001$).



Users also interpreted the stacked bar correctly more often than the other two visuals, with 65% of users correctly interpreting the full length of the bar and 41% correctly interpreting the amount left. One reason for this could be that the bar represented their full paycheck, while the progress bar and gas gauge used the user’s available balance or the length (in days) of a pay period as reference points.

This study demonstrated that, at least when making hypothetical decisions, the amount an individual anchors on does have the ability to affect their spending decisions. The challenge comes in visually representing those anchor amounts in a way that is clear and intuitive, particularly when trying to introduce individuals to new numerical anchors that contrast their existing mental models. The key lessons we learned in testing out concepts aimed at doing so are:

» Users needed clearer explanations of what was represented by the “left to spend” amount than was shown in these survey mockups.

» Users got the strongest impression that they had been spending too much from the visual that showed them not just how much money they had left, but also the fraction of their paycheck they had already spent down (i.e., the stacked bar visual).

» Understanding a rate of spend (the amount the user should have spent by today if they were to spend their paycheck at an even rate across the pay period) required either clearer explanation or a higher level of data visualization literacy than was represented by this user base.

DECREASING (BAD) DEBT

American household debt has been steadily increasing, reaching a record high of $14.3 trillion before the pandemic even hit in the first quarter of 2020. At that time, the majority of the total debt was comprised of mortgages at $9.71 trillion and student loans at $1.54 trillion. By the third quarter of 2020, total mortgage debt rose to $9.9 trillion and total student loans rose to $1.6 trillion. Although total mortgage high-debt and student debt increased, total credit card balances decreased on average across both high- and low-income earners (likely due to less consumer spending), while the remaining households' debt remained relatively flat.

The delinquency rate, payments at least 30 days past due, is significantly lower than during the Great Recession. This is largely driven by the CARES act, signed into law on March 27, 2020. The legislation, alongside financial institutions that voluntarily offered loan forbearance agreements, allowed borrowers to put a pause on payments and reduced delinquency rates on mortgages, student loans, auto loans and credit card balances.

The pandemic and resulting policy responses, including loan forbearance programs, will continue to drive households' relationship with debt. Without ongoing government aid, we may see increases in debt delinquencies as people struggle to stay afloat. If the unemployment rate remains high, loan forbearance programs may only be delaying delinquencies and defaults. As the pandemic continues, it remains unclear what the economic impacts will be, including whether delinquencies will rise in 2021.

We led four projects in 2019 focused on debt management and learned how important picking the right product and making repayment easy are in reducing household debt. Building on those findings, in 2020, we led 15 projects with various financial institutions centered around making the debt management process easier for people. These projects focused across three main areas: loan payback, deciding if and how much loan to take on, and getting help for too much debt:

1. **Loan Payback:** On-time payment is critical to maintaining access to credit; keeping interest rates low; and avoiding additional fees. This year, we focused on loan payback by automating loan payments, messaging to continue making payments, and supporting people struggling with debt.

   Automating loan payments eliminates the need to remember to make a payment, but aligning the payment due date with the borrower's payday can further increase likelihood of making payments. The borrower is more likely to have the cash to cover the bill immediately following payday than later in their pay cycle. In a study with Beneficial State Bank, we found that texting people a form to align the due date with income doubled the number of borrowers that set up aligned, automatic payments versus a control group that was not sent the form. Read more on page 69. We're currently working with Turkish fintech Colendi to encourage users to make payments through the app with an intervention to launch shortly. Read more on page 72.

   We're also investigating what types of communication to borrowers increase repayment. For example, in an experiment to launch shortly with financial planner Justine PETERSEN we are testing the use of text message reminders for small business owner to repay their loans. Read more on page 89. With a large Midwestern credit union, we are comparing the effectiveness of different emails and refrigerator magnet at getting borrowers to make their payments. Read more on page 75. With Turkish Findecks, we are exploring potential ways to use credit reports to help improve debt repayment. Read more on page 86.

   The content or presentation of the messaging could also have an impact on behavior. In two separate studies with a large Midwestern credit union, we are testing whether offering financial counseling in addition to payment reminders might decrease payment delinquency and how the seriousness of subsequent messaging impacts delinquency. Read more on pages 78 and 80. In partnership with Cura Deuda, we are testing whether a contest to pay-off debts can increase payment rates. Read more on page 83.

In addition to making payments on time, we also want to encourage households to pay down expensive debt more quickly, and one sure way to do that is to make sure credit card users pay more than the minimum monthly payment. We are working with Schools First Credit Union to compare how different payment rules of thumb encourage members to pay more than the minimum payment. Read more on page 101.

2. **Deciding where and how much to borrow:** Not all loans are equal and borrowing the maximum allowable is not always good for the end user. Prior research shows that people often overlook additional costs and total loan costs when determining how much payment they can afford, making them one unexpected expense away from missing a payment.

   With Patelco Credit Union, we designed a "right-sizing" loan calculator for members interested in a Credit Builder Loan to verify that members will have enough money to save for the unexpected even with their new loan payments; while the experiment is still in the field, preliminary data show that requested loan sizes are smaller for members that use the calculator, indicating that using the calculator may help borrowers not to overextend themselves financially. Read more on page 98. We are also working with Turkish fintech Tarfin to diagnose why some farmers do not continue to use Tarfin's competitively priced loans to buy farming supplies and may instead be relying on higher-cost lenders. Read more on page 104.

3. **Getting help for too much debt:** When debt becomes over-burdensome, consumers can seek options to lighten the load, but they usually need help navigating what those options are. With Washington State Employees Credit Union (WSECU), we redesigned how feedback is displayed to members who complete a financial health assessment to nudge financially stretched members to take action or ask for help. Read more on page 107. Additionally, with Money Management, Inc. we tested whether we can increase trust in debt counselors by using empathy, expertise and social norms to encourage borrowers to complete debt counseling. Read more on page 94.

Read on for a deeper dive into these case studies and more.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Bank	**2018**	**Field Study**	**Complete**

beneficial state bank

Aligning Automatic Payments with Income

BACKGROUND

There are many reasons someone may default on an auto loan: job loss, health emergency, an expensive car repair, or income and expense volatility. Brian Baugh and Jialan Wang found that financial shortfalls—particularly payday loans and bank overdrafts—are more common when there is a greater mismatch between the timing of someone's income and the bills they owe.

We partnered with Beneficial State Bank, a California-based community development bank beginning in 2017, to design solutions that help make repaying car loans easier. We developed a recurring payments form designed to encourage borrowers to repay their loans automatically when they are paid.

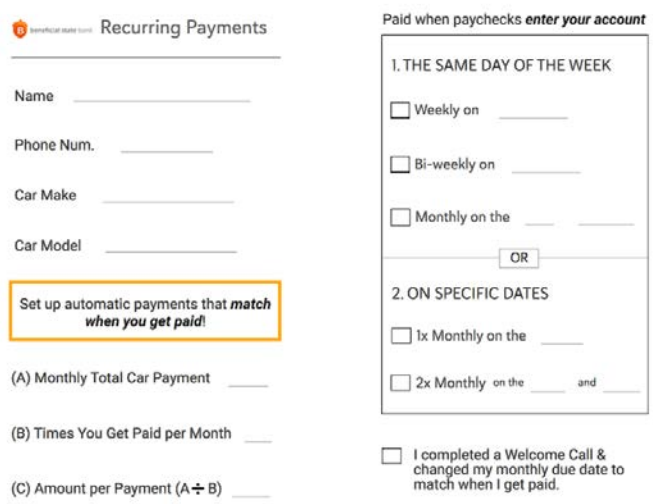
HYPOTHESIS AND KEY INSIGHTS

We began with a behavioral diagnosis that detailed each step in the entire auto lending process to better understand that process from the perspective of both the borrower and the loan issuer. Our behavioral analysis revealed a number of insights specific to Beneficial Bank's internal processes and barriers to repayment, as well as insights relevant to auto loan repayments broadly.

- Monthly loan repayments are almost universally due on the day that a borrower bought their car. In some cases, this arbitrary choice does not cause any problems. If their repayment due date falls far from a payday, though, creates a disconnect between someone's expenses and income, making it more difficult to consistently make payments on their car loan.
- While a loan payment is due on a specific date (e.g. the 15th), many people are not paid on specific dates (e.g. every other Friday). In these cases, simply changing the date their payment is due is not sufficient and borrowers still run the risk of having income come just after their due date some months.

EXPERIMENT

We randomized over 1000 new Beneficial State Bank indirect auto loan customers into either a control or an experimental group. Beneficial State Bank conducts a welcome call that is required for all new loans or loan refinancings to confirm borrower information and to offer repayment information. During the welcome call, the experimental group was texted a Recurring Payments form designed to establish automatic loan repayment timed with when customers were paid. The control condition did not receive the form.


Recurring Payments

Name

Phone Num.

Car Make

Car Model

Set up automatic payments that ***match when you get paid!***

(A) Monthly Total Car Payment

(B) Times You Get Paid per Month

(C) Amount per Payment (A÷B)

Paid when paychecks ***enter your account***

1. THE SAME DAY OF THE WEEK

☐ Weekly on

☐ Bi-weekly on

☐ Monthly on the

OR

2. ON SPECIFIC DATES

☐ 1x Monthly on the

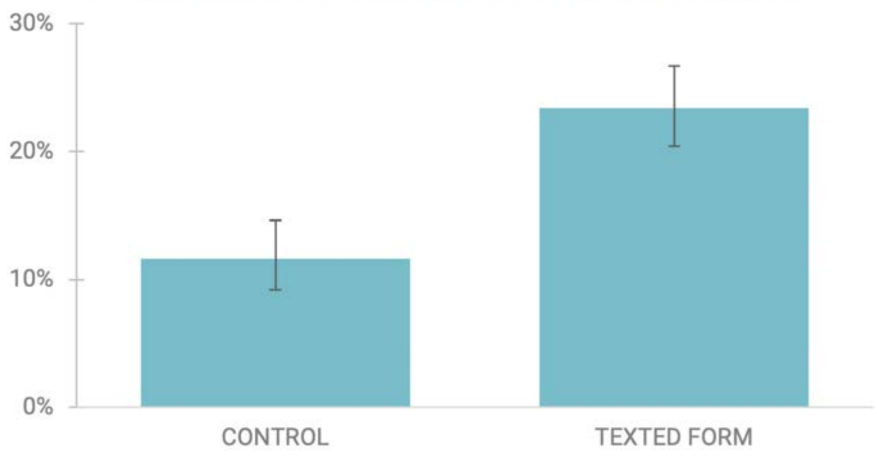
☐ 2x Monthly on the and

☐ I completed a Welcome Call & changed my monthly due date to match when I get paid.

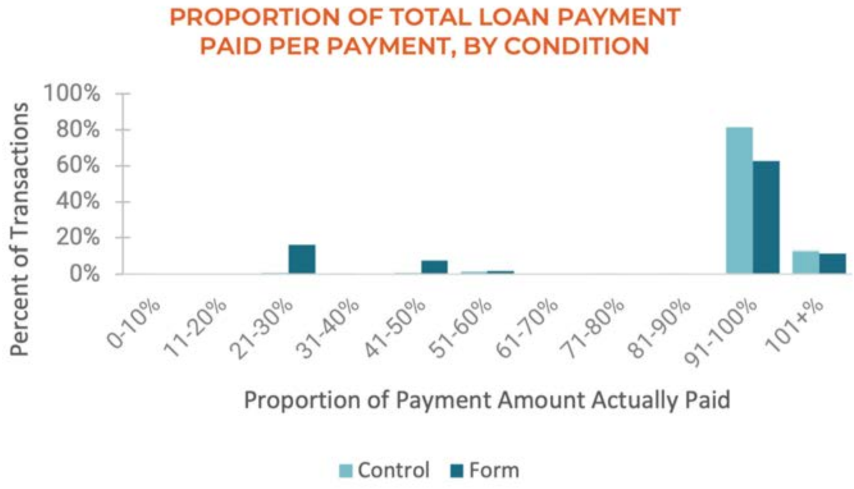
RESULTS

Over 50% of customers in both the control and experimental group expressed high levels of interest in automatic, recurring payments timed with income. However, people who were texted an automatic recurring payments form were **twice as likely** to enroll in automatic payments (23% compared to only 12%), *p* < .001. Turn-off rates were equivalent across the two groups (about one third), so the proportion of members enrolled in automatic payments remained higher in the experimental group (15% vs. 8%), *p* < .001.

LIKELIHOOD OF ENROLLING IN AUTOMATIC PAYMENTS



There was some evidence suggesting the form successfully encouraged individuals to time their payment with their paydays. The automatic payers in the experimental condition made 1.2 payments/month compared the control group's 1.05 payments/month, $p < 0.001$. In examining payment patterns, it seemed that about 10% of members in the experimental group had set up these smaller, more frequent payments.



We hypothesized that timing loan payment with payday would improve loan performance. On average, we find that members in both payment groups pay the appropriate amount by the monthly due date. However, members in the experimental group have fewer late payments ($M = 3.83$) compared to the control group ($M = 5.29$), $p < .001$, and members in the experimental group have paid more toward their loan overall (104% vs. 94.2%), $p < .001$.

There were 17 loan defaults during the study period, and all were in the control group, $p = .128$. This is not a statistically significant difference, but is a strong directional effect.

This project was in collaboration with Irrational Labs.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Tech	**2020**	**Field Study**	**In Design**

COLENDI

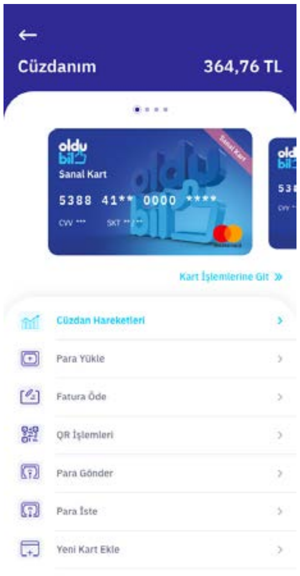
Encouraging Digital Payments Among Turkish Households

BACKGROUND

Turkey's economy has been particularly impacted by the COVID pandemic. A sharp decline in different economic sectors brought losses in employment and income reduction, together with rising inflation, a weaker currency, and volatile purchasing power among households. In fact, as of June 2020, 52% of households reported a loss in income, 65% of households saw their savings plummet, and 45% of Turkish households reported increased expenses. Under these circumstances, many households, especially those with less financial slack, faced the risk of being unable to cover their essential expenses, including utility bills.

Working closely with Boğaziçi University's Center for Applied Research in Finance (CARF), we partnered with Colendi, a Fintech that provides alternative credit scoring and access to credit options for the unbanked in Turkey. Colendi is working closely with Limak, one of Turkey's largest electricity companies and a customer solutions platform with around three million users. Recently, they launched OlduBil App, powered by Colendi for Limak, a mobile payment platform and prepaid card that makes it easier for unbanked users to make financial transactions such as paying their electricity bills. OlduBil works as a digital wallet that also allows users to pay their bills in installments (at a very low interest rate) when they face financial shortfalls, while helping them build an alternative credit score. Currently, OlduBil has more than 6,000 users.

Given the recent launch of OlduBil App, we decided to focus this project on how to get Limak users to download the app, register and make a first bill payment. We believe that using the app can provide an alternative when households face financial hardships or serve to make online payments easier and safer.



HYPOTHESIS AND KEY INSIGHTS

We are currently in the process of implementing diagnosis tools with Limak users to understand the specific barriers that prevent them from enrolling and using the OlduBil App. To date, we have gathered some insights from the literature and from Colendi's user reports:

» As a result of the pandemic, Turkey has seen a decrease in the usage of physical payment and consumption channels, as well as an increase in online transactions.

» However, 74% of Limak account holders are age 45 or older, which could suggest a generational barrier in the adoption of new technologies. Changing the **status quo of how they typically make electricity payments could be a challenge to overcome.**

» **On the other hand, among age groups, Colendi's data shows a negative correlation between age and payment delinquency;** younger users have reported more months without paying utility bills in the recent year.

» Finally, using a machine learning algorithm, Colendi has estimated a credit score based on Limak users' bill payment performance and additional user characteristics. Interestingly, those who are ranked in the lowest credit score group (meaning a worse payment performance) also show the highest electricity consumption on average. This could be reflecting a subset of large LMI households that are struggling to pay their bills on time.

From these insights, we hypothesize that some relevant barriers to the adoption and use of OlduBil App could be lack of trust in, and experience with, digital payments (typically lower among LMI and older individuals). Also, LMI households could be experiencing a scarcity mindset during a financially hard year, which captures their limited attention and depletes their cognitive bandwidth, making it harder to adopt a new tool and change the status quo.

EXPERIMENT

We are currently finalizing a survey to Limak and Oldubil users to identify their behavioral barriers and opportunities for a behavioral intervention.

RESULTS

We expect to finalize the behavioral diagnosis and launch an intervention in Q1 2021.

This project is in collaboration with the Center for Applied Research in Finance (CARF) at Boğaziçi University.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Credit Union	**2019**	**Optimization**	**In-Field**

Preventing Debt Payment Delinquencies with Behavioral Interventions

BACKGROUND

Falling behind on debt payments can happen for a number of reasons, including procrastination, inattention, financial constraints, and a misunderstanding of the costs of delinquent payments (e.g., higher borrowing costs in the future). Regardless of the reasons, these delinquent payments can pose financial risks to households. Sometimes these risks are small, like a modest decline in a credit score, and sometimes these risks are large, like a loss of access to credit or vehicle repossession.

Given the diversity of potential reasons for payment delinquencies, we wanted to compare a diverse array of behavioral interventions—some common, some less common—to determine which approach was most effective at preventing debt payment delinquencies. To do so, we partnered with a large Midwestern credit union to implement an experiment incorporating emailed payment reminders, reminders placed on refrigerator magnets, and access to a new type of savings account, each of which may impact payment delinquencies through different behavioral channels.

KEY INSIGHTS

In developing our approach to designing this multi-faceted intervention, we drew on three insights from existing research:

» One of the most common behavioral interventions to address payment delinquencies and other financial behaviors is the use of payment reminders. These reminders, often delivered by email and text message, have been established as a cost-effective way to improve financial outcomes. We wanted to use debt payment reminders to both remind credit union members about upcoming debt payments and increase the salience of information that may further nudge them to make timely debt payments, such as the costs of delinquencies and the opportunities to set up automatic payments.

» At the same time, recent work has pointed to the potential effectiveness of reminder-oriented refrigerator magnets, which are designed to be placed in a highly-trafficked part of the home, in preventing delinquency. Magnets can act as a single, physical reminder of an obligation, in contrast to the recurring, digital content of email reminders, and may therefore reach credit union members that may lack access (or be less responsive) to email reminders.

» Finally, there is ample work demonstrating a relationship between holding even small amounts of emergency savings and having a reduced risk of missing bill payments. As such, helping credit union members build savings automatically may help them better manage unexpected financial volatility without missing debt payments.

Building on these insights, we developed an experiment to test the efficacy of email reminders, magnet reminders, and a savings intervention at helping debt-holding credit union members prevent payment delinquencies.

EXPERIMENT

This study involved a five-arm experiment in which each of the above experimental components were tested against a control both independently and in conjunction with one another. The groups in the experiment were:

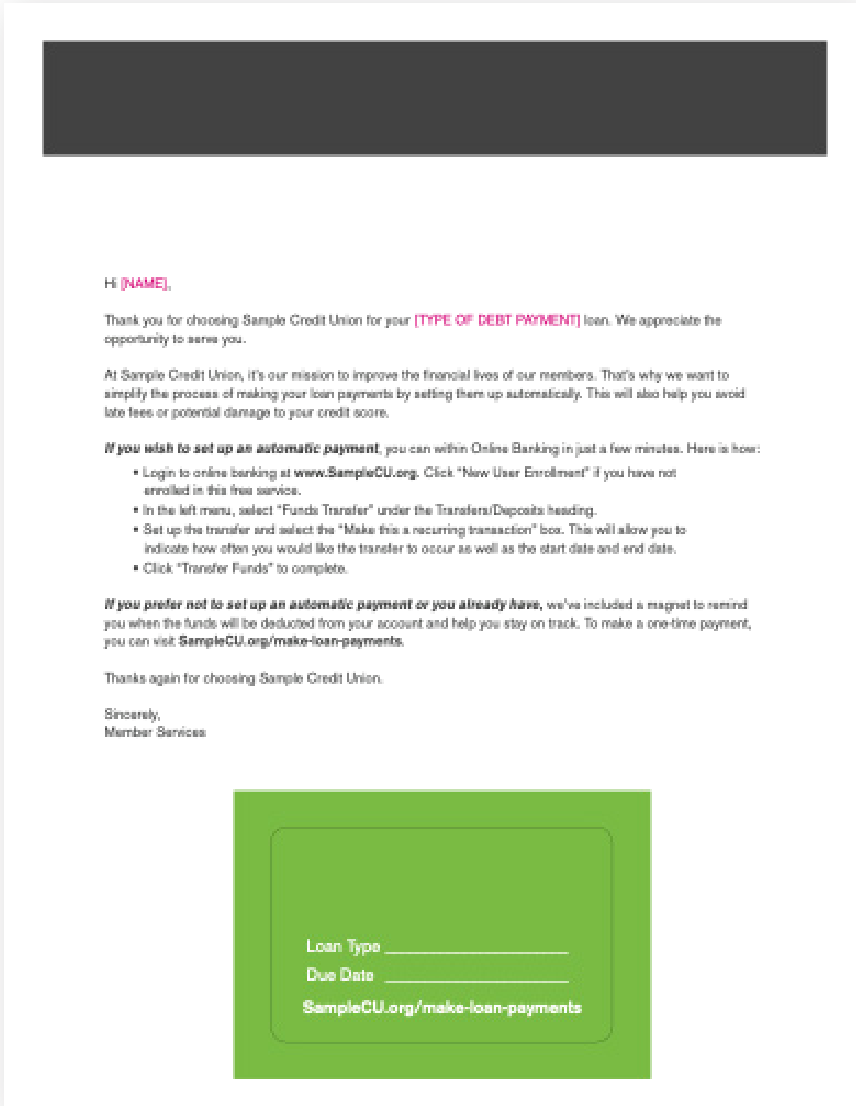
» **Control group:** Received no payment reminders or any communications from the credit union other than standard communications, such as marketing emails or account statements.

» **Treatment group 1:** Received monthly emails reminding them about their upcoming debt payments, and providing one of six additional informational nudges to motivate timely debt repayment. These email nudges aimed to address debt payment issues related to inattention, procrastination, status quo bias, income constraints, budgeting difficulties, and misunderstanding the costs of delinquency.

» **Treatment group 2:** Received a refrigerator magnet and letter reminding them of their upcoming payment and inviting them to record their due date on the magnet.

» **Treatment group 3:** Received a series of emails inviting them to enroll in the newly-designed Rainy Day Savings Account, in which 2% of every deposit made into the credit union's checking account is automatically deposited into the Rainy Day Savings Account.

» **Treatment group 4:** Received a combination of Treatments 1, 2, and 3.



Hi [NAME],

Thank you for choosing Sample Credit Union for your [TYPE OF DEBT PAYMENT] loan. We appreciate the opportunity to serve you.

At Sample Credit Union, it's our mission to improve the financial lives of our members. That's why we want to simplify the process of making your loan payments by setting them up automatically. This will also help you avoid late fees or potential damage to your credit score.

If you wish to set up an automatic payment, you can within Online Banking in just a few minutes. Here is how:

- Login to online banking at **www.SampleCU.org**. Click "New User Enrollment" if you have not enrolled in this free service.
- In the left menu, select "Funds Transfer" under the Transfers/Deposits heading.
- Set up the transfer and select the "Make this a recurring transaction" box. This will allow you to indicate how often you would like the transfer to occur as well as the start date and end date.
- Click "Transfer Funds" to complete.

If you prefer not to set up an automatic payment or you already have, we've included a magnet to remind you when the funds will be deducted from your account and help you stay on track. To make a one-time payment, you can visit **SampleCU.org/make-loan-payments**.

Thanks again for choosing Sample Credit Union.

Sincerely,
Member Services

Loan Type ____________________
Due Date ____________________
SampleCU.org/make-loan-payments

RESULTS

The experiment launched in October 2020, to 23,361 members of a large Midwestern credit union, and will be administered for six months. Measured outcomes will be drawn from credit union data and include the incidence and frequency of debt payment delinquencies, the length of delinquencies, savings amounts, the incidence of setting up automatic debt payments, and the rate of opening Rainy Day Savings Accounts.

This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Credit Union	**2019**	**Optimization**	**In-Field**

Using Reminders to Encourage Credit Union Members to Resolve Delinquent Payments

BACKGROUND

Payment delinquencies can have high direct and indirect costs for households. Even modest payment delinquencies can incur fines and fees, while longer-term delinquencies may result in foreclosures, repossession, and substantial harm to credit scores. While there has been ample research on ways in which behavioral economics can help prevent payment delinquencies—through the use of payment reminders or setting up automatic payments, for example—there is less work on ways in which nudges can help households "cure" existing delinquencies. This is important because, despite the advances of behavioral economics, delinquencies are a fact of life.

> There is less work on ways in which nudges can help households "cure" existing delinquencies.

We wanted to investigate the extent to which behaviorally-informed delinquency notices could impact the rates of households becoming current on their debt payments. To do so, we partnered with a large Midwestern credit union to design delinquency notice emails that would be delivered to any members who became delinquent on their installment debt payments.

KEY INSIGHTS

Through conversations with the credit union and reviews of the research literature, we identified four potential drivers of delinquency that we wanted to address with these interventions.

- Inattention to payment dates, which may be resolved simply by providing members with timely notices that they were overdue on their payment.
- Misunderstanding of the costs of delinquency, which may be resolved by making these costs more salient in the delinquency notices.

» Financial constraints—a particularly relevant driver during the COVID-19 pandemic—which may be resolved by offering credit union members loan supports, such as the option to defer a payment or to go through a loan modification.

» Procrastination, which may be resolved by offering members a backup payment deadline by which they can make a payment without it harming their credit score.

EXPERIMENT

To test these approaches to resolving payment delinquencies, we administered a four-arm experiment to credit union members who had at least one installment debt.

» **Control Group:** Received no payment reminders or any communications from the credit union other than standard communications such as marketing emails or account statements.

» **Treatment Group 1:** Delinquent members received a series of reminders that escalate in seriousness as the delinquency worsens. At roughly two weeks' delinquent, they received a simple reminder of their delinquency and an offer of loan deferral/modification programs (if they qualify). At 45 days delinquent, they received a reminder informing them that falling two payments behind can have a severe impact on their credit score. At 75 days delinquent, we informed them that three missed payments in a row (or 90 days delinquent) can be as damaging to their credit score as if they filed for bankruptcy.

» **Treatment Group 2:** Two weeks after their first delinquency, members in this group received a message telling them that, if they can pay off their debt within 27 days of their original due date, their delinquency will not be reported to credit bureaus. The messages for more severe delinquencies are similar to those of Treatment Group 1.

» **Treatment Group 3:** This is a combination of Treatments 1 and 2. That is, it combines the offer of loan deferrals and modifications with the pledge not to report their delinquency to credit reporting bureaus if they can get the payment in before 27 days past their due date.

RESULTS

This experiment was launched in September 2020, to 31,133 debt-holding members of a large Midwestern credit union and is currently in-field. Key outcomes for this study will be drawn from credit union data and include the rate of delinquency resolution, the time to delinquency resolution, and the occurrence of future delinquencies.

This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Partner Type: **Credit Union & Non-Profit**

Partner Cohort: **2019**

Project Type: **Field Study**

Project Status: **In-Field**

Linking Payment Reminders and Financial Counseling Services

BACKGROUND

Payment reminders and financial coaching and counseling services are two key ways by which programs can help people stay on track with their debts. Payment reminders, which alert people to an upcoming payment due date, are an extremely low-touch way of doing so. Financial coaching and counseling services, which work directly with clients to identify and address their financial needs and goals, represent a high-touch way of keeping people on track with their debt obligations.

Though each of these approaches can be effective on their own, they may also complement one another. One recent study, for example, found that recipients of credit counseling were more likely to avoid payment delinquencies post-counseling if they received emails reminding them of their payment due dates and/or their financial goals. Building off this research, we wanted to test the extent to which payment reminders could complement financial counseling services by partnering with a large Midwestern credit union and Horizons, a multi-service community organization that provides financial counseling services. Specifically, we designed an experiment testing the impact of offering indebted credit union members the opportunity to receive free financial counseling from Horizons coupled with debt payment reminders provided by the credit union in order to help them avoid delinquencies on their debt payments.

Recipients of credit counseling were more likely to avoid payment delinquencies post-counseling if they received emails reminding them of their payment due dates and/or their financial goals.

KEY INSIGHTS

One of the credit union's primary concerns is reducing loan payment delinquency rates in their membership. However, the drivers of delinquency are complex and can range from budgeting issues to cognitive biases to financial constraints. Financial counseling services of the type offered by Horizons may serve as a way to offset the risk of payment delinquencies by helping credit union members with their unique financial needs. For example, a participant who falls behind on payments because of budgeting issues may receive guidance on how better to track their spending, while a participant who falls behind due to inattentiveness may get help in setting up automatic debt payments.

However, while counseling services have shown promise in improving the financial outcomes of participants, they are often limited to relatively few interactions between counselor and client. This may lead to quickly dissipating benefits from these services after clients exit counseling, as has been observed in financial education programs. To address this risk, we wanted to couple the offer of Horizons' counseling services with regular monthly payment reminders to help credit union members stay on track with their payments.

EXPERIMENT

To test the efficacy of coupling payment reminders with financial counseling, we developed a three-arm experiment.

» **Control group:** Received no payment reminders or any communications from the credit union other than standard communications such as marketing emails or account statements.

» **Treatment group 1:** Received three emails at monthly intervals offering three free financial counseling from Horizons via emails sent by the credit union. These emails highlighted the benefits of financial counseling as well as the types of financial issues counselors can address, and included persuasive messaging elements to encourage counseling take-up.

» **Treatment group 2:** Received the three offers of free financial counseling coupled with monthly emails reminding them about their upcoming debt payments and including one of six additional informational nudges to encourage members to pay their debts on time. These email nudges aimed to address debt payment issues related to inattention, procrastination, status quo bias, income constraints, budgeting difficulties, and misunderstanding the costs of delinquency.

> These email nudges aimed to address debt payment issues related to inattention, procrastination, status quo bias, income constraints, budgeting difficulties, and misunderstanding the costs of delinquency.

In structuring the experiment this way, we are able to test both the impact of offering the counseling services themselves, as well as the combined impact of pairing these services with payment reminders.

RESULTS

This experiment was launched in September, 2020, to 18,355 debt-holding members of a large Midwestern credit union and is currently in-field. Measured outcomes will include the rate of financial counseling takeup as well as an array of relevant financial indicators captured through credit union data, including checking and savings account balances, account opening behavior, debt payment delinquencies, and new debts incurred.

This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Partner Type: **Tech** | Partner Cohort: **2020** | Project Type: **Field Study** | Project Status: **In Design**

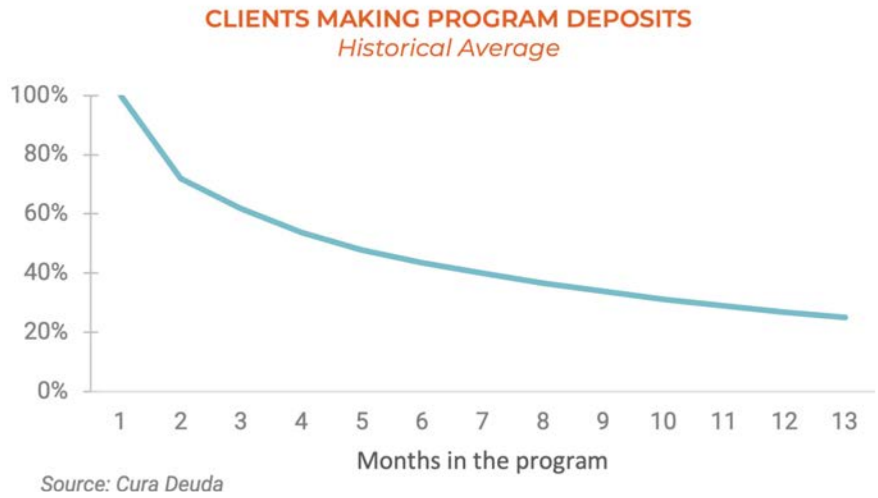
Incentivizing Savings for Debt Repayment With a Contest

BACKGROUND

According to recent reports, 8 out of 10 Mexicans have some type of debt and, on average, personal debt represents three times their monthly income. Failing to pay debt on time can have detrimental effects for financial health, both by pushing people into debt cycles and by reducing their capacity to build savings.

Working with Cirklo, an innovation consultancy firm in Mexico, we partnered with Cura Deuda, a debt-repair organization that helps Mexicans consolidate, refinance, and make deposits towards repaying their outstanding debts. After enrolling with Cura Deuda, users agree to a monthly deposit plan using a newly opened debt repayment account. Funds in this account can only be used for the repayment purpose. However, while all Cura Deuda users make the first month's deposit, less than 72% make the second deposit, and the rate keeps dropping as they move forward with the program.

In this sense, we focused on helping Cura Deuda users make their next loan repayment deposit on time, to continue progressing in their program towards debt repayment.



HYPOTHESIS AND KEY INSIGHTS

Our behavioral map revealed several barriers in the customer journey that discourage clients from keeping on track with their repayment program. Low- to moderate-income indebted users might suffer from cognitive overload and avoid paying attention to reminders and communications (ostrich effect), while progress towards debt repayment is less salient.

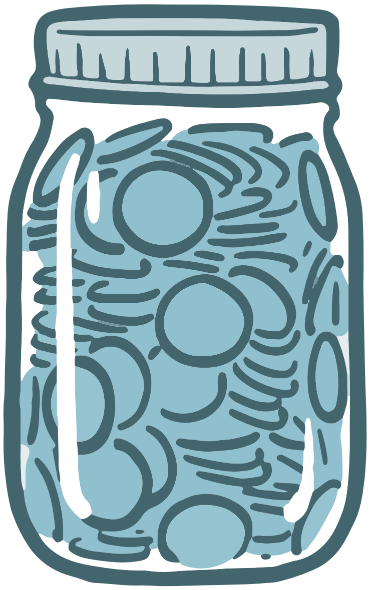
Cirklo ran diagnostic interviews with Cura Deuda's customer service team, reviewed user comments on social media and tested the enrollment process. Results revealed the following insights:

1. Clients are uncertain about the backend process that Cura Deuda does to negotiate their debts and have many doubts about how the process works.
2. Clients frequently avoid or miss reminder communications from Cura Deuda.
3. Clients feel that the deposits they make are not tangible enough, given the uncertainty associated with the debt negotiating process. Payments don't provide immediate positive feedback for the user.

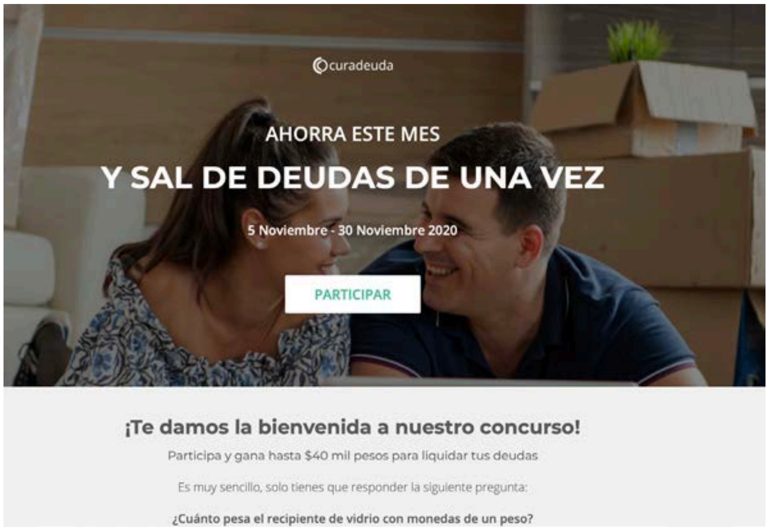
In this sense, we decided to focus on making communications and payments more salient by making them more attractive. Previous research has shown that lotteries and prizes can incentivize savings, given that people tend to overweigh low probabilities. We hypothesize that pairing communications and payments with an opportunity to win a monetary prize (in a contest setting) will make the message more salient and encourage clients to make deposits towards their repayment program. Moreover, by framing the prize as a "chance to get out of debt", we expect that clients will make more on-time deposits compared to those that don't know about the contest.

EXPERIMENT

We designed a study to test whether "knowing about a debt-free contest" increases the likelihood that a client makes their next deposit on time. Currently active Cura Deuda clients were randomized to one of four study groups, depending on whether they received a control reminder email or a reminder email informing them about the contest. The contest will be run twice. Clients who make their deposits on time during November will be invited to participate in Contest 1, while clients who make their deposits on time during December will be invited to participate in Contest 2.



The contest works as follows: Eligible clients are automatically enrolled in the contest. If they make their deposit on time, they receive an opportunity to win, for which they must access a website to guess the weight of a jar full of "1 peso" coins. Whoever guesses the correct weight or gets closest will win up to $40,000 pesos (roughly USD$ 2,000) put towards their debt repayment program. Since 80% of current debt amounts are below the prize amount, the contest was framed as a "debt-free contest", which we hypothesize will make the prize more attractive.



In addition to active clients, inactive clients were also randomized into the same study groups to test whether the same intervention re-activates these clients and re-engages them with their debt repayment program, by making an on-time deposit.

RESULTS

The experiment was launched on November 1st, sending users control and contest reminders. We expect to begin analyzing the results after the end of the second contest in January 2021.

This project is in collaboration with Cirklo.

Partner Type: **Tech** | Partner Cohort: **2020** | Project Type: **Field Study** | Project Status: **In Design**

FINDEKS

Leveraging Credit Score Reports to Encourage Debt Repayment

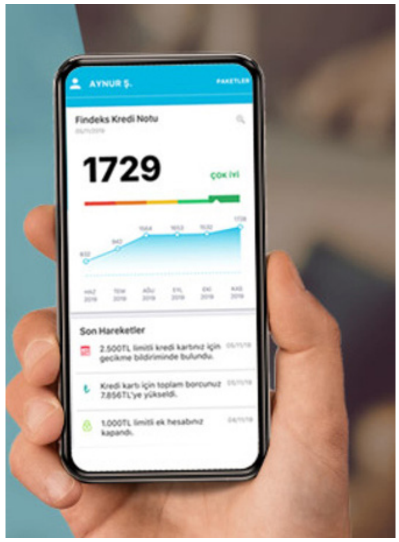
BACKGROUND

When facing financial challenges, people are more prone to neglect financial responsibilities and make unwise financial decisions. Among those responsibilities, repaying debt is particularly challenging, given the behavioral biases that have been shown to influence this behavior. For instance, we know that people have limited attention and can forget to make payments on time and that they can experience liquidity constraints due to a mismatch between income and payments. Also, we know that they are present biased and fail to accurately estimate the costs of late payments, and that when deciding how to pay off debts, people choose the smallest debts first instead of the most expensive ones (we are debt averse).

In 2019 there was a five to nine percentage point increase in the share of households holding any debt.

Turkish households are not exempt from these biases when dealing with debt repayment. According to a financial literacy survey, in 2019 there was a five to nine percentage point increase in the share of households holding any debt, and we estimate this number to be higher during the economic crisis generated by the COVID pandemic, where 69% of households have seen their incomes reduced.

In this context, we are working closely with the Financial Literacy and Inclusion Association of Turkey (FODER) and collaborating with FINDEKS, a service provided by the Kredi Kayit Bürosu (KKB), Turkey's largest credit bureau. FINDEKS currently has approximately four million users, and we are focusing on how we can use the credit reports to help users pay their overdue debts on time, while also encouraging them to engage more with FINDEKS and their financial services.



HYPOTHESIS AND KEY INSIGHTS

While we are still in the process of implementing our diagnostic tools, some evidence from past research can shed some light into some potential interventions:

» One of the barriers to on-time payments is limited attention, especially under stress conditions. Previous research by Cadena & Schoar has shown that sending timely reminders can have a positive effect on debt payment, even as big as the effect from providing financial incentives.

» We also know that people fail to follow through on their intentions. One way to help them stick to their plans is to make “implementation-intention” prompts. Past research by Mazar, Mochon & Ariely has found that personalized, yet non-binding, commitment statements reinforce individuals’ motivations to follow through on intentions and pay their credit card bills, by around two percentage points.

» Finally, we are taking into account that an intervention targeting credit reports is removed from the setting where the key behavior takes place (repaying a debt happens at a financial institution). In that sense, like providing users with an opportunity to elaborate an “implementation-intention” prompt, we can give them rules of thumb that guide them to repay their debts in a better way. A recent study by Kondratjeva and collaborators found that giving tax filers tips to pay their debts reduced the likelihood of having an unsecured debt by five percentage points.

We expect that these insights can help us leverage credit reports to help people improve their debt repayment behavior.

EXPERIMENT

Based on the results of an ongoing behavioral diagnosis and the feasibility, we expect to implement a study in Q1 2021.

RESULTS

After implementation, we expect to have results by the end of Q2 2021.

This project is in collaboration with the Financial Literacy and Inclusion Association of Turkey (FODER).

Partner Type: **CDFI** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **In Design**

Increasing The Number of On-Time Loan Payments Among Small-Business Borrowers With a Financial First Aid Kit

BACKGROUND

During times of crisis, a little encouragement can go a long way. A recent study conducted by Ideas42 aimed to nudge college students into using student support services through periodic SMS reminders. The Ideas42 team found that students who received weekly SMS reminders with encouraging messages were more likely to have positive educational outcomes than those who did not. In this experiment, we partnered with Justine PETERSEN, a St. Louis-based Community Development Finance Institution (CDFI) to see how the concept of encouragement could translate to increased loan repayment among small business borrowers.

KEY INSIGHTS

Low-Income households, and especially low-income small business owners, often have a wide range of financial obligations, making it difficult to stay on track with their obligations. Failure to meet these obligations can worsen financial outcomes, leading to lower credit scores and higher costs of borrowing over the course of their lives. The ongoing COVID-19 pandemic has further complicated matters, and has had disastrous implications for small business owners. As revenue drops and budgets tighten, it is becoming more difficult for business owners to meet their debt obligations and more important to avoid paying late fees or unnecessary interest payments.

The ongoing COVID-19 pandemic has further complicated matters, and has had disastrous implications for small business owners.

Targeted reminder messages have been shown to help individuals meet a wide range of financial goals, including loan repayment. Additionally, previous research has indicated that simply by developing a plan for executing a goal can increase the likelihood of following through on a wide range of goals. In this experiment, we test how restructured loan repayment reminder messages that use small business owners' goals and their own words of encouragement can affect the loan delinquency rates of Justine PETERSEN's small business loan borrowers.

> Previous research has indicated that simply by developing a plan for executing a goal can increase the likelihood of following though.

EXPERIMENT

Building on the above insights, as well as Justine PETERSEN's support-focused relationship with its borrowers, we wanted to design an experiment that would prompt borrowers to pay on-time and provide them with encouragement and support to manage any financial circumstances that may make on-time payments difficult. At the end of 2020, we are finalizing a four-arm experiment to test the best way of achieving this goal:

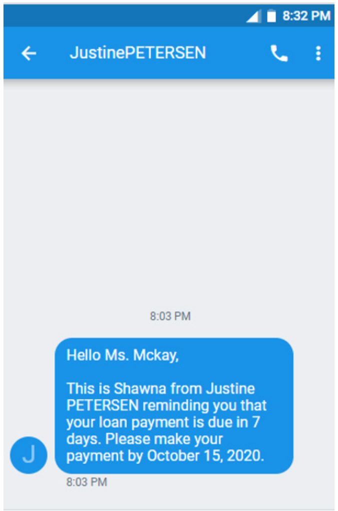
» **Control Group:** Participants in the control group will receive the standard notification from Justine PETERSEN, which includes monthly invoices sent through the mail or online statements available through a loan portal.

» **Treatment Group 1:** Participants will receive simple SMS payment reminders 14 days, 7 days, and 1 day before their loan repayment due date.

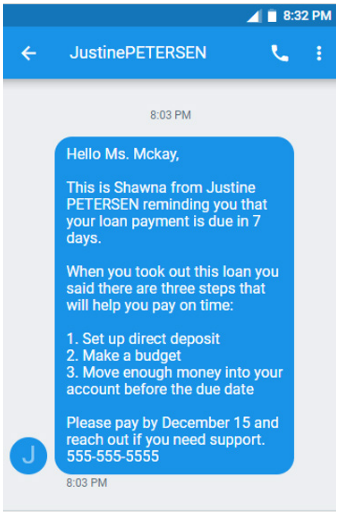
» **Treatment Group 2:** Before closing their loan, participants will complete a simple goal-setting exercise with a Justine PETERSEN staff member followed by the same SMS payment reminder schedule as Treatment Group 1, but messages will also include a reminder of participants' goals.

» **Treatment Group 3:** Before closing their loan, participants will complete the goal-setting exercise from Treatment 2 and a "financial health first-aid kit" with a Justine PETERSEN staff member. To build this kit, participants will answer a series of questions about how they will "get back on track" if they do not complete their loan repayment by the 15th. If participants do not make their loan payment by the 15th, they will receive six messages (three SMS and three email) that remind them that they have missed their payment and include a visualization of their financial health first aid kit, which depicts their strategies for getting back on track.

**Treatment 1:
Simple SMS
Reminders**



**Treatment 2:
Goal-Setting SMS
Reminders**



**Treatment 3:
Financial First
Aid Kit**

This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Tech	**2020**	**Field Study**	**In Design**

LendingClub

Decreasing High-Interest Debt Through Loan Consolidation Products

BACKGROUND

In recent years, American household debt has increased past $14 trillion, leaving the average household with nearly 20% more debt than they had at the height of the financial crisis in 2008. While certain types of loans (e.g., mortgages, student loans) can be useful and allow for important investments, the sheer amount of debt and number of individual loans families carry represents a significant burden on households. Debt payments, combined with the high interest they often come with, can create a debt spiral in which households need additional loans when they face an inevitable unexpected expense.

To address this growing concern, we partnered with LendingClub to test whether we can assist existing borrowers in paying their current personal loans closer to their payment due date each month, rather than using the grace period—a 15-day period after the loan payment is due, during which there are no late fees or negative marks on their credit, but during which interest continues to accrue on a daily basis. To achieve this, we designed an email test comparing LendingClub's business-as-usual emails with one that highlights the member's streak of on-time payments, the ultimate aim being to encourage sooner payment.

HYPOTHESIS AND KEY INSIGHTS

A payment grace period allows for a certain level of forgiveness: members can use the 15 days to make the payment without late fees or negative marks to their credit report. However, because interest accrues daily, members who habitually make their loan payment at the end of the grace period face extra interest costs and can therefore end up owing additional money.

There are multiple reasons why existing borrowers would use the grace period to make their loan payment instead of paying on the due date, including:

» **Cash flow and misalignment of pay cycles with loan due date:** A member's income pay hits their checking account within the grace period of the loan, only giving the member access to their money after the loan due date.

» **Forgetfulness:** Scarcity of mental bandwidth and lack of attention may lead the member to forget to pay by or on their due date, relying on emails to remind them to pay each month.

» **Habit:** Since there is little obvious reason not to use the grace period, members may choose the path of least resistance and fall into the habit of using the grace period.

We are seeking to nudge people to make their loan payments earlier in the grace period to help prevent members from accruing additional debt from interest. We will do so by leveraging a message that reflects the member's current streak of on-time payments, to encourage them to continue this streak and make their next payment. Research has demonstrated that "gamifying" behavior and displaying streaks of well-intentioned behavior can encourage habit formation and continued behavior. Here, we are testing whether similar streak messaging can help motivate people to pay their loans sooner in the grace period.

We predict that our treatment email will increase the number of people making payments within 72 hours of the email opening and that in the long term, the members who receive the treatment email will accrue less debt in the form of interest, compared to those who receive the control email.

EXPERIMENT

LendingClub sends all borrowers emails at multiple points during the grace period to remind them that their payment is due. One such email is sent on day five after the payment due date; we aim to leverage this touchpoint to introduce and test a new treatment email. Members who have made at least three on-time payments in a row and are currently on day five of their grace period will be randomized to one of the two conditions:

» **Control:** LendingClub's business-as-usual payment reminder email,

» **Treatment:** an email reminding them to make a payment and highlighting their streak of recent on-time payments

RESULTS

We anticipate launching this email intervention in the Spring of 2021 for approximately five months, for a total of approximately 10,000 members included in this study.

Partner Type: **Non-Profit**

Partner Cohort: **2020**

Project Type: **Field Study**

Project Status: **In Design**

Using Short Language Cues to Improve Debt Counseling Completion

BACKGROUND

The U.S has reached an all-time high in consumer debt, with more than 60% of U.S Americans reporting that they are weighed down by debt. In looking for solutions, one way of managing one's debt is through non-profit organizations that offer credit counseling. However, only 23% of U.S adults indicate that they would utilize this type of service. Considering that credit counselors have the potential to positively impact one's finances, there is a need to understand how to increase engagement with credit counseling services.

We partnered with Money Management International (MMI), a non-profit organization offering credit counseling and debt management services, to explore ways to increase the number of clients completing counseling sessions with the hope that this will then lead to more households reducing their debt load.

HYPOTHESIS AND KEY INSIGHTS

Our partnership began at our 2019 Durham Fall Workshop and was followed by a multi-day virtual workshop with MMI leadership and staff. We interviewed debt and budget counselors regarding how sessions start and progress as well as the common pitfalls that prevent clients from completing a session.

The diagnosis yielded a number of key insights into the barriers to completing the debt and budget counseling session.

1. **Lack of clear expectations:** The beginning of the counseling session is very important to building trust, but clients may not have clear expectations about MMI's function or purpose when starting a call.
2. **Lack of trust in credit counseling:** Trust may be critical for seeking financial advice and implementing the advice. A client's trust in credit counseling broadly depends on two

components: their perceptions of the counselor's expertise and the counselor's empathy. The counseling session may be the first time clients interact with or hear about MMI and its services. Sharing information with and accepting advice from an organization like MMI relies on clients trusting in both their ability to help and feeling that their own best interests are being considered.

3. **Overwhelming options:** When it comes to reducing overwhelming debt, there are also numerous options in the market and advice on every corner. Yet, it's difficult to sort through what works. We can get overwhelmed by the sheer number of options available to us and may choose to take our time making a decision or streamline our decisions by relying on mental shortcuts. This uncertainty can lead to procrastination.
4. **Limited time and attention:** Counselors have attempted to make debt and budget counseling easily accessible online and over the phone, but despite the convenient access to counseling, there is a time investment on the client's part. The client must wade through all the budgeting and credit information necessary just to determine their next steps. Callers feel that their time is limited and are unsure if the process is "for them". During moments of crisis, cognitive resources are strained, making it harder to effectively allocate attention. People tend to focus on finding seemingly immediate solutions whereas the issue of reducing debt requires a long-term mindset. With credit counseling, it's initially unclear that they'll get any benefit after this investment of time and information.

During moments of crisis, cognitive resources are strained, making it harder to effectively allocate attention.

Based on these findings, we designed an experiment similar to one that was launched with Navicore Solutions in 2017, which focused on increasing trust through the use of "Feel, Felt, Found" (FFF) statements.

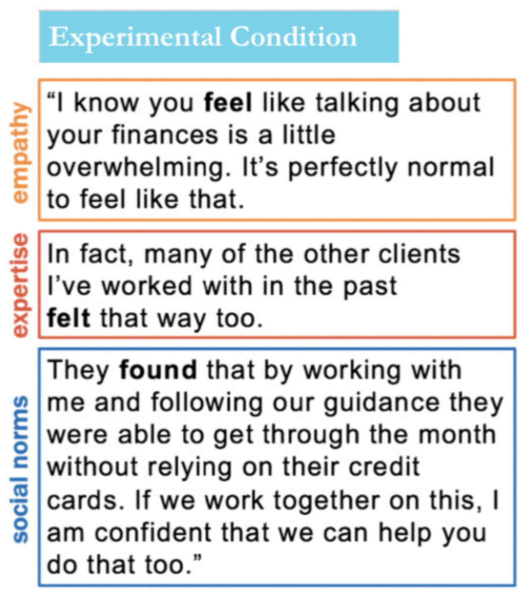
In the experiment, we trained debt and budget counselors to use a "Feel, Felt, Found" (FFF) statement. The FFF statement was designed to increase trust by incorporating an empathy statement ("I know how you feel") and by using social norms to signal expertise and encourage call continuation ("I've worked with a lot of clients and they found this successful"). We found that using an FFF statement did increase trust. We saw a significant difference in the percentages of clients who started the survey and a significant increase in information disclosure among callers. Based on these findings, we plan to replicate this experiment with MMI.

Increasing trust could lead to a greater uptake of beneficial products, and it may also help counselors make more personalized recommendations as participants share more details about their financial circumstances.

EXPERIMENT

In our experiment with MMI, we trained debt and budget counselors to use a "Feel, Felt, Found" (FFF) statement.

The FFF statement was designed to increase trust and was incorporated in the same manner as the Navicore Solutions experiment to highlight empathy, expertise, and social norms.



Sample FFF statement

We measured three main outcomes:

1. We asked every client that started a session to take a post-session survey. Previous research suggests that if counselors increase trust, callers are more likely to do small favors for them.
2. We will use MMI administrative data to track information among completed sessions to see if a client is more likely to share personal information.
3. Lastly, we measured the percent of clients that completed the counseling session.

Callers were randomly assigned to one of two groups of counselors. The first group was trained to use FFF statements, while the second group used the business-as-usual scripts for the session. The counselors in each group were randomly selected and balanced to ensure equal experience.

RESULTS

We are currently collecting responses for the intervention that was launched in November 2020. We expect to begin analyzing the results in Q1 2021.

Partner Type: **Credit Union** | Partner Cohort: **2020** | Project Type: **Field Study** | Project Status: **In-Field**

Patelco CREDIT UNION

Building Financial Resiliency With Credit Building Loans

BACKGROUND

The Consumer Financial Protection Bureau (CFPB) estimates that about 45 million Americans lack access to credit because they don't have enough credit history, and 30% of borrowers in 2019 had a subprime credit score according to the Federal Reserve Bank of New York. Poor or missing credit histories significantly reduce access to credit or make the use of credit much more expensive. While "credit" or "loans" can be "dirty" words, having access to credit is essential for financial stability, resiliency, and growth. Credit building products exist to build or rebuild credit scores so that people can grow their assets (e.g., home loan or car loan) or invest in themselves (e.g., student loan or business loan). However, credit building products have historically had limited success as found by the National Bureau of Economic Research and CFPB. The most common credit building product, secured cards, require households already have money saved to use as collateral for credit. And many people fail to complete the terms of unsecured credit building products, and therefore see little improvement to their credit scores and credit access.

> Credit building products have historically had limited success.

California-based Patelco Credit Union, with more than 380,000 members, has been committed to improving members' financial wellbeing and fueling hope and opportunity for over 80 years. Delivering on this mission, Patelco launched a new credit building product ScoreUp in 2020 that helps members forge a positive credit history while also creating a saving nest egg. We partnered with Patelco to see if we could use behavioral science to keep members making payments and build personal finance skills, and thus actually realizing the benefits of a credit building product.

HYPOTHESIS AND KEY INSIGHTS

We looked to the literature on behavioral biases to understand potential reasons why borrowers using unsecured credit-building products may fail to complete their product payment terms. We identified the following potential barriers:

» Optimism bias. People often are often overly optimistic in their ability to handle the future; for example, research by Seaward and Kemp showed that students overestimated their future incomes and their ability to pay back their student loans. Looking to get a boost in their credit score as quickly as possible, households may be signing up for payments with very little slack in their budget. If they are faced with an emergency expense, or even an unusual or forgotten expense, they may have no choice but to stop payments on the credit building product. We may be able to combat this optimism bias by getting applicants to assess their budget before applying for the product and ensure that even with new payments that they will still have slack to cover unexpected expenses.

» Lack of visible progress. We are more motivated to complete things that we feel we are making progress on, but building credit takes time, so we are more likely to give up. Monitoring progress towards goals have been shown to increase attainment goals.

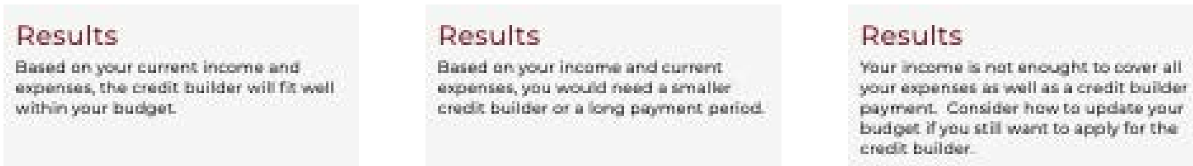
» Limited attention. Research indicates that limited attention may be partially at fault for poor financial behaviors, for example, overdrafting accounts. We have limited attention to give to the world around us, and sometimes our finances may not be our number one priority. While the ScoreUp loan requires the payments to be automatically drafted from their checking account, borrowers could miss a payment if there isn't enough money in their account. Automatic alerts to the borrower for low balances in their account may help overcome this challenge.

EXPERIMENT

In order to test our hypotheses, we designed two experiments around elements of the ScoreUp program: the Credit Builder calculator and gamified emails.

First, to combat optimism bias, we created a Credit Builder calculator that identified if users had enough room in their budgets to afford the product with slack for emergencies or if they needed to adjust the terms. The Credit Builder calculator was randomly assigned for use by branch team members at half of Patelco branches; the team members at the other branches were asked not to use the calculator. Additionally, half of marketing emails for ScoreUp sent interested members to the calculator while the other half of emails sent interested members directly to the ScoreUp application.

Potential outputs from the calculator showing if ScoreUp is affordable.



The calculator should ensure that households are not overextending themselves financially, but they may still need tools and motivation to make on-time payments.

To help make the loan more salient and help members feel progress, we created gamified emails to celebrate payment streaks, but also to encourage people to learn more about how to improve their finances and be successful in ScoreUp. ScoreUp participants can receive badges for learning about financial tools and deploying them, including setting up balance alerts to ensure borrowers have enough funds in their account or automatic transfers between checking and savings. ScoreUp participants have been randomly assigned to receive gamified emails or standard emails.

RESULTS

The calculator and the gamified emails launched in September and October 2020, respectively and will collect data through 2021. We anticipate sharing out the results in our 2021 Annual Report.

Partner Type: **Credit Union** | Partner Cohort: **2020** | Project Type: **Field Study** | Project Status: **In Design**

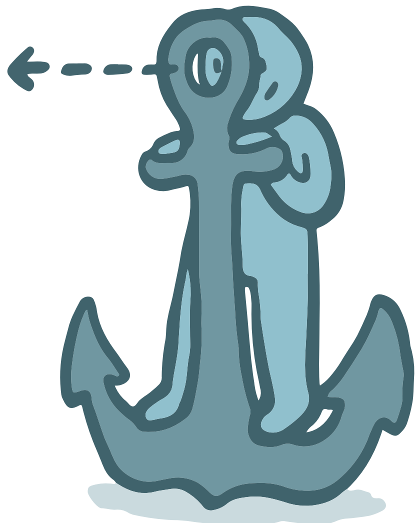
SchoolsFirst FEDERAL CREDIT UNION

Using Rules of Thumb to Impact Minimum Payment Behavior

BACKGROUND

Credit card balances in the US have been rapidly growing over the past few years to form one of the most common types of debt held by US households. At the end of 2019, total debts from credit cards stood at $930 billion, a record high and a more than 30% increase since 2009. While access to credit can help individuals manage income fluctuations and cope with unexpected shocks, many consumers are unable to actually afford the total debt loads they accumulate, resulting in a huge strain on their finances. In fact, in 2019, 52% of all cardholders carried a balance at least some of the time, and 29% of cardholders consistently made just the minimum payment. Further, households with revolving credit card debt carried an average balance of $6,849 and incurred as much as $1,162 in annual interest costs alone. With debt levels of this magnitude being approached through minimum or partial payments, it's incredibly difficult for households to make progress on their financial goals.

To address this growing concern as well as explore ways to help individuals better manage their credit card debt, we partnered with SchoolsFirst Federal Credit Union (FCU). SchoolsFirst FCU noticed that some of their Members were going into debt on a regular basis and were often using their credit cards to fund their overspending. When surveyed, most Members said getting out of debt was a top priority, yet many of them continued to carry high revolving balances while only making minimum payments. We therefore worked together with SchoolsFirst FCU to develop an email intervention. The purpose was to examine how we can motivate Members to pay more than the minimum balance due each month, with the eventual goal of helping them reduce their total credit card debt.



HYPOTHESIS AND KEY INSIGHTS

Past research suggests that there are several reasons why people tend to make minimum or near minimum payments, despite having the means to pay more than the minimum, or even their total card balance:

1. Research by Keys and Wang found that minimum payment amounts anchor people to lower values when making credit card payment decisions. They also serve as a reference point for what is and what isn't an acceptable payment amount, especially for those who are unsure about how much they should be paying.
2. Research by Lusardi and Tufano found that individuals are often unaware of the interest costs associated with making minimum or near minimum payments. Moreover, Salisbury and Zhao report that while minimum payment warnings (MPW), i.e. alerts that highlight the costs of minimum payments have a positive impact on repayment behavior, these disclosures are typically embedded in credit card statements, a document that less than ten percent of consumers typically view, let alone read.

Through our partnership with SchoolsFirst FCU, we sought to address these barriers by designing email communications that make the cost of minimum payments more salient, as well as provide alternate payment amounts to anchor Members on higher values and counter the minimum effect. Our emails leverage rules of thumb, i.e. easy and actionable heuristics that are useful in helping people make financial decisions. Research by Theodos et al. as well as Kondratjeva et al. has found that such strategies are effective in guiding debt repayment decisions, and help people better manage as well as reduce their credit card debts. Similarly, this project utilizes rules of thumb as a means of providing alternate payment anchors and increasing payments.

Research by Sussman and Alter found that consumers are fairly adept at budgeting for and predicting their ordinary expenses. Consequently, by prompting Members to think about and pay their ordinary expenses over the past month, we can provide them with a higher yet achievable number to anchor their payment decisions. On the other hand, a comparatively lower anchor, such as add $10 to your payment might seem more approachable. This experiment aims to test both variations.

EXPERIMENT

Through our experiment, repeat and recent minimum payers will be randomly assigned to receive one of four types of communications:

1. No communication (pure control)
2. Control email with salient MPW but no alternate anchor
3. Email with salient MPW + rule of thumb to pay minimum + $10 (low alternate anchor)

4. Email with salient MPW + rule of thumb to pay off ordinary expenses, such as gas and groceries (high alternate anchor)

Control Email

Low Anchor Email

High Anchor Email

RESULTS

Our experiment is expected to launch in the field in Q1 of 2021. We plan to measure the impact of our intervention on minimum payment behavior, as well as total payment amounts over two consecutive pay cycles following the experiment launch.

Partner Type: **Tech**

Partner Cohort: **2020**

Project Type: **Field Study**

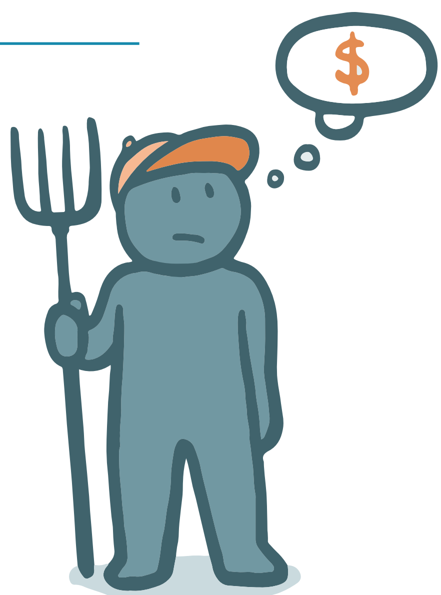
Project Status: **In Design**

Redesigning Communications to Increase Farmers' Engagement With a Sustainable Financial Alternative

BACKGROUND

Agriculture is one of the major contributors to Turkey's GDP, employing around 25% of the population, mostly in rural areas. Income, however, tends to be seasonal in the farming business; farmers earn from selling their crops during one harvest season and must stretch their budget for several months until the following harvest season. Previous research by Mani and collaborators has shown that this dynamic can have negative effects on cognition and financial decision-making; for instance, farmers are more likely to give their land and tractors as security to apply for expensive loans before harvest, when their income is running out.

> Farmers are more likely to give their land and tractors as security to apply for expensive loans before harvest, when their income is running out.



Working closely with BUBA Ventures, we partnered with Tarfin, a Turkish fintech start-up that was launched in 2017 with the mission to help farmers improve their business and their financial wellbeing. They provide farmers with a loan alternative, allowing them to purchase farming inputs at retail stores and repay them after harvest. By aligning debt payment with income (harvest season), Tarfin helps their farmers manage their cash flow and avoid late fees. Tarfin currently serves approximately 15,000 farmers with a repayment rate above 95%. However, per Tarfin's 2020 customer research, while 90% of these farmers express their interest to re-engage with them in the following season, only around 50% apply again. Instead, farmers purchase inputs through informal loan agreements with retail owners (29%), or banks and cooperatives (33%) that can be either more expensive or more restrictive, or purchase with cash (26%).

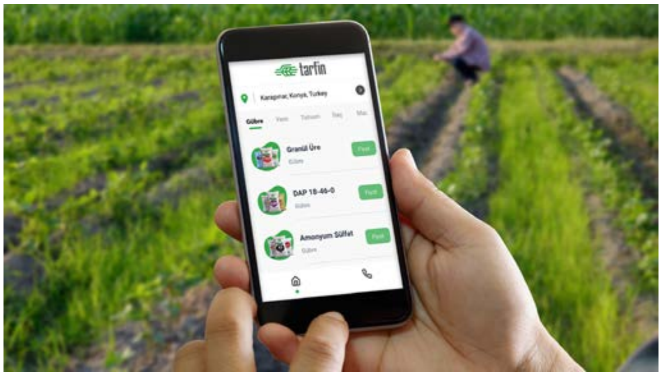
Given the financial benefits of Tarfin's loan alternative, we decided to focus on an intervention that encourages farmers to re-apply to Tarfin after a first financing experience.

HYPOTHESIS AND KEY INSIGHTS

Tarfin has implemented two customer studies in 2020, including a survey developed with CCL exploring the financial challenges that farmers are facing during the COVID-19 pandemic. Upon analysis of both qualitative and quantitative responses, we've identified the following insights:

- Farmers' main reason to choose Tarfin is harvest payment terms and competitive prices. However, during the harvest season, farmers are not fully satisfied with the repayment journey. While they value calls from representatives (80%), they perceive that Tarfin sends them too many reminders and communicates too intensely with them.
- Moreover, Tarfin does not fully align with the social norms around debt repayment in traditional farming communities. While Tarfin follows more predefined standards, farming communities follow a less structured approach, where both lenders and farmers engage in informal conversations and social activities as part of building trust between them. Previous research by Kuhfuss and collaborators has explored the role of social norms influencing farmers' behaviors.
- Farmers value the social connectedness of other business alternatives such as cooperatives and retailers. Tarfin is a distant actor (fully virtual) from farmers' perspective.
- Farmers are averse to being rejected at the retail location by Tarfin, since the financing application occurs at retail stores, where farmers typically have existing relationships with retail owners. Customer reports show that some farmers prefer to avoid being rejected and use alternative payment means or informal loan agreements with the retail owner, even if they have never been rejected before. Past research by Bone and collaborators has shed some light into how choice restriction can affect self-esteem and autonomy; farmers could be protecting it by choosing a loan alternative that gives them more control.
- Farmers value recommendations from peers and colleagues; however, they are wary of making recommendations themselves for fear of their fellow farmers not being approved by Tarfin.
- Newer customers appear to be more skeptical of Tarfin and have low trust in Tarfin and in the repayment process.

In line with these insights, we are redesigning the re-engagement and repayment processes, to incorporate social norms, give farmers autonomy, and reduce the social distance between Tarfin and farmers.



EXPERIMENT

Based on the results of the diagnosis survey, we will begin designing an intervention that will focus on improving the repayment and re-engagement process and addressing the specific barriers identified in the survey.

RESULTS

We expect to design and launch the main re-engagement study by Q1 2021 and begin analyzing the results in Q2 2021.

This project is in collaboration with BUBA Ventures.

Partner Type: **Credit Union** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **In-Field**

WSECU

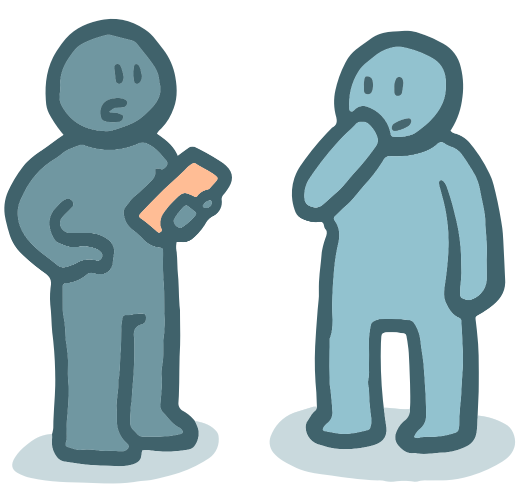
Giving Feedback that Prompts Action

BACKGROUND

The Financial Health Network's (FHN) FinHealth Score is used by financial service providers to assess where members or clients are struggling and to track their financial progress over time. The FinHealth Score assessment includes eight survey questions to gauge how people spend, save, borrow, and plan for the future; typically, respondents are designated as Financially Healthy, Coping, or Vulnerable. The 2020 FHN Pulse Trends report indicates that only about a third of Americans are Financially Healthy.

While these metrics can be useful as a way of summarizing past behavior and comparing someone's circumstances to others, they may provide little context for what behaviors to change or how to prioritize changes. Even worse, sharing these results in the wrong way could have negative consequences—sharing negative feedback at the wrong time potentially could demotivate individuals from engaging in behaviors that would improve their situation at all. For example, German researchers found that negative feedback decreased students' intrinsic motivation. A CCL lab study undertaken in 2019 suggested that providing sub-scores for different focus areas motivated users to take relevant action more than providing a single assessment score. It was not possible to distinguish a difference in motivation between people given descriptive labels of how they fared in each category versus numeric scores. Read about that study in our 2019 Annual Report.

We partnered with Washington State Employees Credit Union (WSECU) to better understand how we can display the results of a financial health survey to encourage more members to complete targeted recommendations for improving financial health based on their survey responses.



HYPOTHESIS AND KEY INSIGHTS

WSECU wanted to offer the FinHealth Assessment to their members to help understand the member's needs, but they wanted to optimize the feedback output to motivate behavior change towards improving financial health.

In addition to allowing a credit union to have a better understanding of their members and their financial needs, the individualized survey assessment results could increase a member's motivation to change their behavior. However, there are several reasons why the way the survey results page was originally designed might actually discourage members from seeking strategies for improving their financial health:

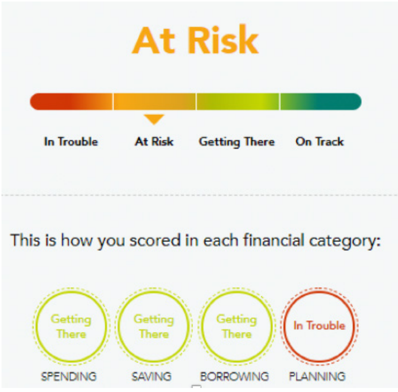
» The survey results page currently offers little to no context for the overall financial health score. Without contextual cues as to how to interpret their responses, members may struggle to understand what a numerical score means for them.

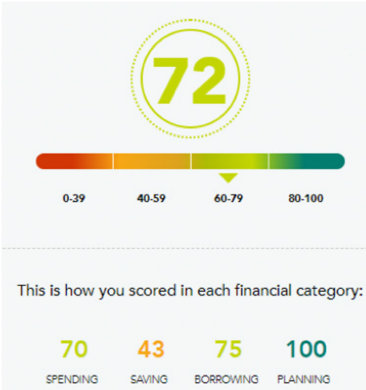
» Relatedly, the results of the survey are presented in categories that may be unfamiliar to the member. This could further exacerbate the tendency to shut down and avoid undesirable information.

We hypothesized that communicating the results of the survey in ways that highlighted participants' strengths and weaknesses and suggested specific next-step actions would increase the likelihood that users take action to improve their financial health.

EXPERIMENT

Starting in October 2020, WSECU offered members the chance to take the Financial Health Network's Financial Health Assessment. Currently, the assessment works as follows: After completing a survey, members are given an overall score based on their responses. In addition to the overall score, members are also given four sub-scores based on specific questions related to spending, savings, borrowing, and planning. The members were presented the scores in one of two ways depending on the experimental condition to which they were assigned randomly: in the numerical condition, the overall score and sub-scores were assigned numerical values from 0-100, and in the descriptive condition, the overall score and sub-scores were assigned descriptive values of "In Trouble", "At Risk" "Getting There", and "On Track", in ascending order from low to high scores.





Based on the participant's responses to the assessment questions, the participant will be shown a suggestion for how to improve financial health, e.g., decrease spending by getting rid of unused subscriptions or talking with a financial counselor. The participants will be asked if they intend to follow the suggestion. If they do intend to take action, a follow-up survey will be sent to the participant 6 weeks later to see if they completed the action.

RESULTS

The Financial Health Assessment test is currently in the field and is expected to run through the middle of 2021, with at least 2,000 responses split between the two conditions.

Partner Type: **N/A** | Partner Cohort: **N/A** | Project Type: **Lab Study** | Project Status: **Complete**

Learning from the Lab: Optimism and the Likelihood to Overspend

BACKGROUND

Budgets are thought to play an important role in shaping individual spending behavior—they provide rules that help us curb spending as we try to increase savings, repay debt, manage financial volatility, or to achieve any number of our financial goals. Furthermore, we often believe that budgets make us happier over time because they will help us spend more on things that make us happier and less on things that we regret. Budgets are often seen as essential for avoiding high-cost consumer debt, like credit cards.

However, there is plenty of evidence that we struggle to adhere to our budgets and that budgets are not all that effective in helping us reach our financial goals. People often find it difficult to rein in overspending, leading to revolving debt with high interest rates.

For this reason, we were interested in exploring how budgeting informs the ways individuals make singular spending decisions. Specifically, we were interested in better understanding how individuals incorporate budget reference points into their spending decisions, both within a single time period and across multiple time periods.

HYPOTHESIS AND KEY INSIGHTS

There are many behavioral and psychological factors that are believed to be why people struggle to adhere to the budgets they set for themselves. We wanted to isolate two specific factors in this experiment.

- The what-the-hell effect: When people break a rule such as overspending on a budget, people may feel license to spend even more. Once a rule has been broken, people may no longer feel constrained to engage in that behavior.
- Planning fallacy: People are often overly optimistic when assessing their capacity to achieve their goals in the future. One reason people may struggle to adhere to their budgets is they assume that they will compensate for temptation in the moment with strictly adhering to the rules they set for themselves in the future.

EXPERIMENT

To test these ideas, we created a simple hypothetical scenario. Participants were asked to imagine they are coming home from work. They were presented a choice: either to order take-out from their favorite restaurant or to cook at home. They are then told they have previously given themselves a budget of $30 to spend on food each week and shown a summary of their last ten expenses.

Participants are then randomly assigned into one of three weekly spending conditions.

» In the "under budget" condition, their spending on food this week adds up to $29, or just under their weekly budget.

» In the "at budget" condition, their spending on food this week adds up to exactly $30, or exactly their weekly budget.

» In the "over budget" condition, their spending on food this week adds up to $31, or just over their weekly budget.

Participants will also be randomly assigned into one of two future spending conditions.

» In the "reminder" condition, participants will be additionally told that even though ordering takeout will put them over their weekly budget, they have only spent half of their budget for the full month. They are also shown a "monthly budget" graphic depicting their spending showing opportunities to reduce future spending.

» In the "no reminder" condition, participants are not reminded of their monthly budget.

All participants were then asked, on a scale 0%-100%, how likely they are to purchase take-out even though they have groceries at home. Then, participants were also asked, on a scale 0%-100%, how likely they are to reduce spending on food in the following week.

RESULTS

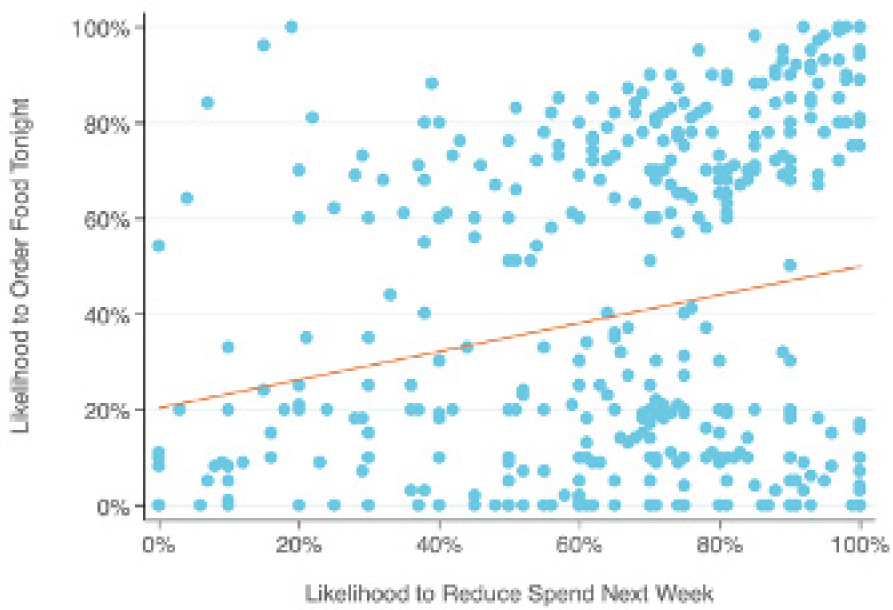
We recruited just under 500 participants to take our study. There was a wide distribution in ages, ranging from early 20s to mid-70s, about 66% of the sample was male, and the sample skewed lower income, with nearly 70% earning $60,000 or less.

We found that a majority (~67%) of participants said they would likely try to reduce their spending on takeout the following week. We did not find any effect of the reminder condition on either ordering food or reducing expenses in the future. However, the likelihood that a participant reported that they would try to reduce their spending was different between the budget conditions. As one might expect, participants who were informed that they had already overspent their budget were significantly more likely to report trying to reduce their spending in the future (p=0.04).

However, this did not change their likelihood of ordering take-out from their favorite restaurant. We found that across all conditions, about 40% of participants said they would order food and that this percentage was not meaningfully different between conditions. We also found that if someone said they would reduce their spending, they were also significantly more likely to say they would order food (p=<0.001).

Taken together, this suggests that people's optimism about their behavior in the future exacerbates willingness to spend today. The more people feel like they will adjust their spending in the future, the more likely they are to overspend in the present.

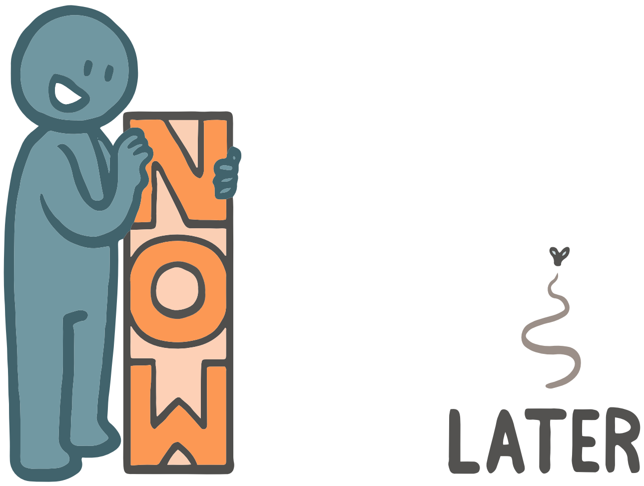
CORRELATION BETWEEN LIKELIHOOD TO ORDER FOOD TONIGHT AND REDUCE SPEND NEXT WEEK



INCREASING SHORT-TERM SAVINGS

It is always important to have liquid savings to cover unexpected expenses, but the year 2020 provided a stark example of another reason short-term savings is so crucial: covering unexpected lost income. An astounding 18.1 million Americans lost their jobs in April 2020 due to the global COVID-19 pandemic. Although public and private programs were launched to help households through these tough times, their assistance wasn't always sufficient or timely, leaving many households with financial gaps.

Many people who were in more fortunate positions shifted their savings behavior in meaningful ways. Starting in the first half of 2020, we observed that the proportion of users with an emergency savings goal at Qapital, a mobile banking app, had increased by four to five fold. Read the full case study on page 150. According to the St. Louis Federal Reserve, the personal savings rate (savings as a percentage of disposable income) reached an astounding high of 33.7% in April 2020 before dropping back down to about 13% by the end of the 2020. Despite the drop



in the savings rate from the peak, the current personal savings rate is still almost double what it has been over most of the last 20 years. The causes for the increase in personal savings are likely threefold: 1) some households had more spare cash when entertainment and travel expenses decreased during the pandemic, 2) COVID-19 stimulus put large sums in many households' hands, and 3) many people stowed away cash in case they became financially impacted by the pandemic.

Unfortunately, not everyone has been as able to increase their short-term savings. While high-income households were able to reduce spending by an average 17%, low income households could reduce spending by only 4%, given already tight budgets, and half of low-income households were subject to job loss or reduction in hours.

The barriers to saving for short-term savings include:

1. Lack of slack in current budget: When incomes are low and expenses are high, nearly every dollar is already accounted for. This makes it really difficult to find money to stash away for when an emergency happens, which forces a lot of households to fall back on less than optimal options, like high-interest credit.
2. Tunneling: When we lack slack and resources are scarce, we tend focus on what needs our attention right now and lack the cognitive bandwidth to see what may be coming down the pipeline. Households may not realize what type of financial shocks to expect. Unfortunately, this means we may not always be prepared for what's down the road, and we may not have the time or energy to take on processes like remembering to put aside part of our paycheck for a rainy day.

We've found some potential pathways to work around some of the barriers.

1. **Use windfalls as a source of savings:** We can overcome lack of slack in the budget by exploiting windfalls, amounts of money that aren't already accounted for in our budgets, when they occur. Windfalls may include income like work bonuses or income tax refunds, even collected spare change. We used windfalls from a variety of sources as reservoir for potential savings in 2020.

   At both WSECU and Digital Federal Credit, we nudged members to use reductions in loan payments following loan refinancing or modification to put that money towards savings; in both cases, we found that many members were interested in putting the payment reductions toward savings when they were asked. Unfortunately, it wasn't always easy to open that conversation, and challenges in setting up automated deposits to savings accounts prevented these interventions from significantly increasing the savings rate. Read more on pages 124 and 162.

   In partnership with Virginia Credit Union, we encouraged members to put credit card rewards in savings; results of our experiment are expected in 2021. Read more on page 159.

2. **Highlight importance of short-term saving, then make it automatic:** There were so many new problems to deal with and manage in 2020, that emergency savings may not have been top of mind for all households. We used a timely prompt to capture people's attention and then capitalized on this spotlight to get people to make a one-time action to sign up for automatic savings building. For example, in projects with Qapital, a large Midwestern credit union, and Inclusiv, we highlighted the importance of savings to get people to sign up for automatic contributions to savings.

   In Qapital app, we prompted new users to create an emergency savings goal within the app. The goal would be funded using one or more of Qapital's automated savings rules, for example, Round Up. We found that prompting users about emergency savings increased the proportion of users with emergency savings goals from 17% to 43%, a more than doubling of users, and median amounts saved were about $100! Read more on page 150. A large midwestern credit union also prompted new members at four of their branches to open a Rainy Day Savings Account (RDSA) when opening a checking account, with about a quarter of participants already taking up the offer. Read more on page 127. At Inclusiv, we are designing prompts to set up automated transfers to rainy day savings within online banking which are planned to launch in 2021. Read more on page 139.

   We also studied if who delivered the message to save changed willingness to save and how the saving behaviors of similar people to us might encourage us to save. In our study on the messenger effect, we found that messages coming from no messenger, an employer or a hypothetical financial group, resulted in more participants selecting a "Save More" option than messages coming from "experts" or financial advisors. Read more on page 168. In our study on the effect of social norms on saving and spending behavior, we found that participants who were told that people very similar to them were saving more predicted they would be more successful at saving than participants not given a comparison. Read more on page 171.

3. **Capitalize on relativity:** We tend to think about costs in terms of costs nearby; for example, $100 may seem expensive by itself but if we add $100 to the price of a $10,000 car, it doesn't seem consequential. Loan payment round-ups capitalize on the idea of relativity to get people to save for the short-term while making loan payments. We used this idea at Guadalupe Credit Union and Inclusiv, where we studied whether rounding up loan payments could be an effective way to build emergency savings. Read more on pages 130 and 136. Similarly, we are working with Self Help Credit Union to see if we can get employees to simultaneously save for short-term savings as well as their retirement. Read more on page 153.

When personal savings is not possible, people might need to rely on their community for support. An example of this is the Grant Circle at Canary, where we designed an intervention to encourage employees to donate to the emergency relief fund, that could help stand-in as emergency savings for their coworkers. Unfortunately, we did not find any significant increase in donations with our prompt emails, which may have been influenced by the financial environment at the time or a weaker than anticipated message. Read more on page 120.

Read on to find out what worked, what didn't, and what else we are trying.

Partner Type: **Tech** | Partner Cohort: **2020** | Project Type: **Field Study** | Project Status: **In-Diagnosis**

albo

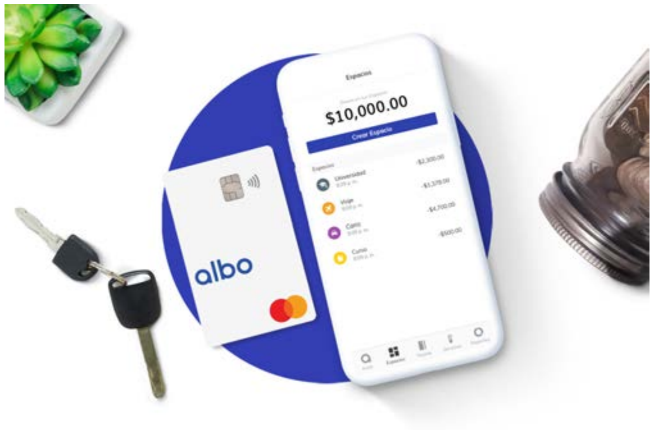
Building Emergency Savings Through Automatic Rules and Buckets

BACKGROUND

According to Mexico's National Financial Inclusion Survey, around 42% of Mexicans weren't able to cover all their monthly expenses at least once in 2018. Moreover, insights from Global Findex (2017) reveal that only 27% of Mexicans were able to come up with funds to face a financial emergency (of an amount equal to 5% of Mexico's Gross National Income per capita), down from 48% in 2014. During the 2020 COVID pandemic, it was reported that many families in Mexico tapped out their savings in the first few months and are struggling to build back a savings fund.

Working closely with Proyecto ICCE at UNAM University in Mexico, we partnered with albo, one of Mexico's largest digital challenger banks that offers a fee-free mobile wallet, app for money management, and a debit card. Among albo's over 400,000 users, those who have a more active engagement with this Fintech are independent or payroll workers, over 28 years old and use albo as a secondary account to make specific weekly or bi-weekly transfers. Also, albo has a tool called "Espacios" (Buckets), that allows users to partition their funds into different earmarked buckets. While only 20% of monthly active users have used "Espacios" so far, the most chosen purposes for these buckets have been "savings", "emergencies", "goals", or "left over money".

Since increasing emergency savings is a priority in the current Mexican context, and albo is motivated to generate higher user engagement, we decided to focus this project on helping users create an "Espacio" for emergency savings and make at least one transfer to it. By doing so, we expect users to familiarize with and see the potential of this feature and get them started on their savings track. Moreover, building emergency savings will prepare them better to face future financial emergencies and achieve their financial goals.



HYPOTHESIS AND KEY INSIGHTS

According to albo's user research earlier in 2020, 16% of their users perceive that they are unable to accomplish their savings goals, and 38% report not having enough money to cover their goals and expenses. Based on this research, we identified the following core barriers to saving with albo:

- Users tend to be present-biased, face many day-to-day struggles that capture their attention, and leave savings to the end of the month (i.e., they save what is left after paying bills and covering expenses). Planning to save is even more difficult for users who are independent workers and receive irregular incomes. This aligns with research from Hershfield, Shu & Bernatzi, which found that framing savings in more granular terms (i.e., daily versus monthly amounts) to match more granular incomes (such as those of independent workers) increases participation in savings across multiple income levels. Moreover, research by Madrian & Shea found that enrolling in automatic savings by default can increase participation significantly.
- Even users who are more engaged with albo are uncertain about how the "Espacios" tool works and how to build short-term savings with it. Under this uncertainty, they prefer to have their money combined together in their main account instead of using buckets. Previous research by Kempf & Ruenzi has explored how people tend to stick with their past choices, even when they are no longer the best option.

Research from Soman & Cheema shows that partitioning money into different earmarked buckets or envelopes can increase the amount of money saved by reducing withdrawals. Also, from a behavioral science perspective, making savings automatic reduces the friction associated with regular transfers to a savings bucket, and may help them establish new savings habits. In that sense, we are exploring how automatic saving rules and commitment mechanisms can help users create a savings bucket and start making transfers that build their emergency fund.

EXPERIMENT

In October 2020 we launched a survey to 840 albo users to understand their previous saving experiences and pre-test their perception of potential saving mechanisms such as:

» **Traditional automatic savings:** transfers of a fixed amount on a fixed day into a savings bucket.

» **Deposit-based savings:** Transferring a portion of every deposit into a savings bucket

» **Round-up:** rounding purchases to the nearest “10” or “100” and putting that extra into savings.

» **Self-tipping:** a percentage of every purchase is sent to your savings bucket

» **Commitment devices:** Choosing a target goal or a target date before your savings bucket is unlocked.

This survey will help us confirm and re-assess our previously identified barriers, as well as inform our main intervention design to build emergency savings using the “Espacios” tool.

RESULTS

We are currently analyzing the results of the user survey that was launched in October 2020, which will help us identify savings barriers and opportunities to inform our main study design. We expect to launch the main study in Q1 2021. We anticipate sharing the results in the 2021 Annual Report.

This project is in collaboration with Proyecto ICCE at Universidad Nacional Autónoma de México.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Tech	**2020**	**Field Study**	**Complete**

Canary

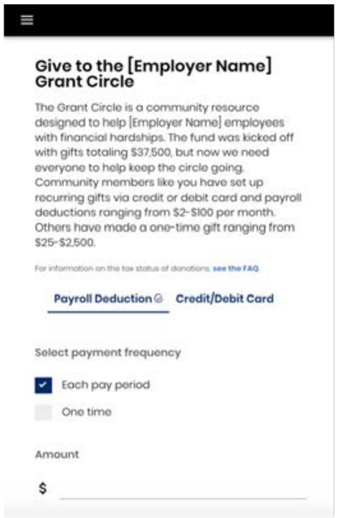
Increasing Donations to Grant Circle, an Employee Relief Fund

BACKGROUND

Many working families are one financial shock away from disaster. Natural disasters, reduced work hours because of the COVID-19 pandemic, or an unanticipated medical issue are among the types of emergencies that could set a household back on utility or rent payments. Missed payments for workers who already live paycheck to paycheck can quickly snowball into cycles of debt, and even eviction.

Employee relief funds are one mechanism to help individuals who experience a disaster-related or personal financial hardship. The way these funds typically work is that an employer and its employees contribute into a pool of collective savings, and when an employee experiences an emergency that leads to financial hardship, they can apply for a cash grant to help them stay afloat. Cash grants are a valuable tool to ease the financial burden of an individual or family who has experienced an emergency, filling in the gaps to provide a safety net and prevent major personal financial crises.

We partnered with Canary, a mission-driven organization that created an emergency relief fund platform called Grant Circle, which facilitates the provision of timely, small-dollar financial assistance in moments of need. Employee donations to the collective savings pool are critical for employer-sponsored relief programs to be sustainable, so we worked with Canary to see if we could increase the number of employees who donate to Grant Circle.



HYPOTHESIS AND KEY INSIGHTS

To inform the design of the Grant Circle's donation webpage, we turned to the wealth of behavioral science literature on charitable giving and donations, and built upon the following learnings:

» Researchers Shang and Croson find that mentioning previous donor contribution levels can increase donation amounts. So as to not anchor the folks who'd otherwise give larger amounts of money onto smaller donation amounts, we included a range of the amounts of previous donations: e.g., "People donate between $2 - $2,500.

» Researchers List and Lucking-Reiley find that seed money increases donations, likely because potential donors view the size of the seed donation as a reliable signal of the cause's worthiness. On Grant Circle's donation webpage, we included information about the seed donation(s) that started the Grant Circle.

» Brown, Meer, and Williams discovered that individuals are more generous if they feel they are earning directly for charity rather than donating income they have already earned. On the donation webpage, individuals could choose to donate via a payroll deduction or credit/debit card. In order to encourage the mental model that donors are earning directly for charity, we set the payroll deduction donation option as the default.

After redesigning elements of the Grant Circle donation webpage, we started to think through *when the best time would be to encourage employees to donate to their organization's Grant Circle fund, specifically in relation to an employee's payday.* Would employees be more likely to donate if they were prompted on the same day as their payday or if they were asked a few days before payday? To gather insight, we turned to previous similar research and found some conflicting evidence:

» When people get paid, they tend to feel a sense of abundance and are therefore less likely to consider trade-offs within their budget. This is the idea of opportunity cost neglect, as explained by Frederick et al.

» In a previous experiment CCL conducted, as seen on page 27 of our 2018 Annual Report, there were no statistically significant differences in whether or not people saved if they were reminded to save on payday vs. a few days before payday. However, people who received reminders a few days before payday saved about $30 more than those receiving reminders on payday.

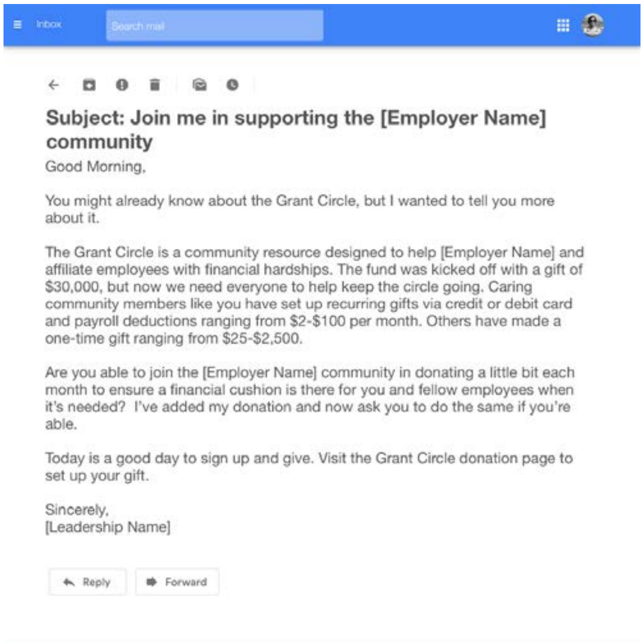
When prompted a few days before payday, it's possible that people feel close to their next paycheck, so they are willing to set aside more for donation. Conversely, on the day of receiving their paycheck, people might already be planning for how to spend their paycheck, and therefore be more conservative in the amount they are willing to set aside. Applying these findings to encouraging donations to Grant Circle, we hypothesized that more people would donate when prompted on payday, but the average size of a donation would be larger if prompted a few days before payday.

EXPERIMENT

To test our hypothesis, we worked with Canary and two of their employer clients who have Grant Circle relief funds. Employees at both organizations were sent an email encouraging them to donate to their respective Grant Circles. All employees were randomized into one of two conditions:

1. Half of employees received the email the day of their payday (on a Friday)
2. The other half of employees received the email the Monday before their Friday payday.

Every employee received the same email, which was designed with many of the same behavioral science insights applied to the Grant Circle donation page. If they opened and clicked the main call to action within the email, participants were redirected to the Grant Circle donation page. In the five days following receipt of the email, we tracked the number and size of all donations.


Inbox

Search mail

Subject: Join me in supporting the [Employer Name] community

Good Morning,

You might already know about the Grant Circle, but I wanted to tell you more about it.

The Grant Circle is a community resource designed to help [Employer Name] and affiliate employees with financial hardships. The fund was kicked off with a gift of $30,000, but now we need everyone to help keep the circle going. Caring community members like you have set up recurring gifts via credit or debit card and payroll deductions ranging from $2-$100 per month. Others have made a one-time gift ranging from $25-$2,500.

Are you able to join the [Employer Name] community in donating a little bit each month to ensure a financial cushion is there for you and fellow employees when it's needed? I've added my donation and now ask you to do the same if you're able.

Today is a good day to sign up and give. Visit the Grant Circle donation page to set up your gift.

Sincerely,
[Leadership Name]

Reply Forward

RESULTS

This experiment concluded active data collection in October of 2020. The email was sent to a total of 1,515 employees across two employers with Grant Circle relief funds. Due to data limitations, we only had access to email open and click rates for one employer. Interestingly, we found that the employees who received the email on payday (Friday) were significantly more likely to open the email, compared to those who received the email on Monday: 33.7% vs 13.3%. While we didn't have data on when employees opened emails, we wonder whether they were opened on Friday or over the weekend, since many of the employees in our sample are not office workers who spend their days in front of a computer.

In total, 16 employees (or 1% of our sample) donated within five days of receiving the email. Because few donations were made, we were unable to draw any conclusions around our hypothesis. It's possible so few donations were made for several reasons, including:

1. Employees who would normally be able to donate were struggling themselves due to COVID-19;
2. Workers might generally have email and donation solicitation fatigue;
3. The email wasn't connected to a particular milestone in time (such as Giving Tuesday or receiving a bonus), so it's possible the timing felt arbitrary for potential donors.

While we cannot know for certain what the cause of the low response was, we do know that:

1. Email open and click rates are generally low;
2. We did receive a handful of donations after the five-day window, suggesting that our window may have been too small; and
3. A subsequent Giving Tuesday campaign generated higher donation volume.

Partner Type: **Credit Union**

Partner Cohort: **2019**

Project Type: **Field Study**

Project Status: **Complete**

Increasing Savings Among Members Seeking Auto Loan Refinance

BACKGROUND

Although most people refinance their loan to get a better interest rate, they may end up with a smaller monthly payment as well. They might use this additional money to help manage other expenses, but this is also an opportune time to begin building their savings. Research by Katherine Milkman and John Beshears suggest that, due to mental accounting, we often treat windfalls like bonus money, not giving much thought to where this extra money will be the most effective. The refinancing process might present a kind of "golden moment," particularly for people who may not have already accounted for this surplus of money and therefore would find it easier to save a portion.

We partnered with Digital Federal Credit Union (DCU) to test whether we could nudge members to set up a recurring savings transfer as part of the refinancing process. Members with reduced monthly loan payments were encouraged to earmark a portion of the difference in monthly payments to be automatically transferred into a DCU savings account.

HYPOTHESIS AND KEY INSIGHTS

There are many reasons why someone might not save some or all of the difference in their monthly loan payment:

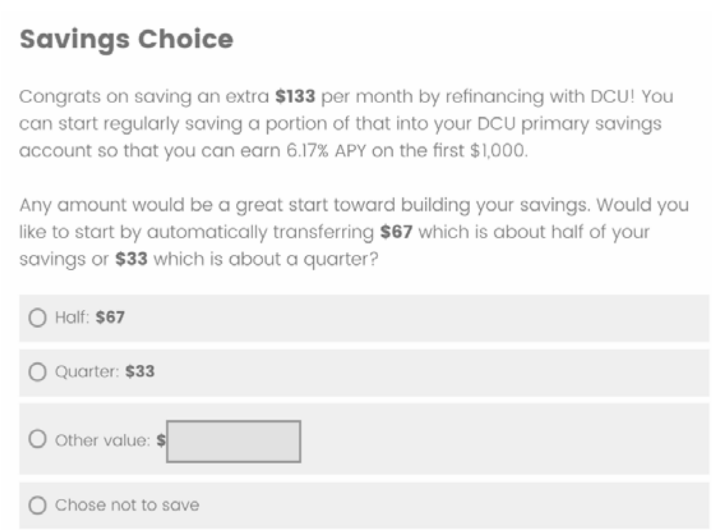
- Transferring a portion of this difference into their savings simply may not have occurred to members.
- Going through the process of setting up an automatic transfer is not necessarily easy and represents another step in the process at the moment of refinancing.
- The member may need or would prefer to have the difference in payment accessible for other expenses, rather than direct it to a savings account.

We sought to address these concerns by prompting members to set up an automatic transfer into savings. We predict that people refinancing an auto loan with DCU will be more likely to set up automatic transfers to savings when prompted to actively make a choice to save. We also predict that being prompted to save during the loan refinance process will result in increased savings behavior in the months following the intervention.

EXPERIMENT

To test these hypotheses, we worked with DCU to develop a system to prompt members to save during the refinance process. Half of DCU's loan agents were randomly assigned to ask members whether they would like to set up an automatic transfer of either 25% or 50% of their monthly loan payment to savings (treatment group) while the other half of the loan agents did not provide this offer (control group). Note that if a member was randomized into the treatment group, they received the savings prompt from the loan agent only if they were saving $20 or more on their new monthly loan payment.

We expected that a significantly larger number of people in the treatment group would agree to set up an automatic transfer of a portion of their monthly loan payment savings due to the active choice nature of the offer provided, and that this automatic transfer would be maintained for at least 3 months following the set-up.



Savings Choice

Congrats on saving an extra **$133** per month by refinancing with DCU! You can start regularly saving a portion of that into your DCU primary savings account so that you can earn 6.17% APY on the first $1,000.

Any amount would be a great start toward building your savings. Would you like to start by automatically transferring **$67** which is about half of your savings or **$33** which is about a quarter?

- Half: **$67**
- Quarter: **$33**
- Other value: **$**
- Chose not to save

Screenshot of data tracking form used by loan agents in the treatment group.

RESULTS

We concluded enrollment in the experiment at the end of January 2020, with 843 DCU members going through the loan refinance process. We found that 16% of members who were offered to set up automatic transfers said yes, and the desired transfers ranged anywhere from 6% - 100% of their savings in monthly loan payment (mean of 55% and median of 50%). We then measured actual savings rates for three months after refinancing. Surprisingly, we found no difference in actual savings behavior between the control (business-as-usual) and the treatment (active savings prompt) group, in spite of the 16% of members who said yes to the automatic transfer.

Due to technical constraints, loan agents were not consistently able to set up automatic transfers for those who expressed interest, and instead gave members instructions for how they could set up the automatic transfers themselves. We believe this is why we saw no significant differences when comparing the change in average savings rates before and after the loan refinance between members in the control and treatment groups.

Although there were no differences in savings rates, the 16% of members who initially agreed to set up an automatic transfer during the loan refinance process, and the fact that some of them chose to save up to 100% of the difference in monthly loan payments, indicates that there is latent interest and motivation for saving in this context, but the hurdles and friction in setting up an automatic transfer themselves deterred that motivation.

Partner Type: **Credit Union** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **In-Field**

Creating a New Automatic Savings Account to Build Financial Resilience

BACKGROUND

Emergency savings is low in the United States; only 49% of all and 23% of lower-income U.S. households have set aside three months' worth of emergency savings. Immediately prior to the COVID-19 pandemic, over a third of U.S. households could not fully pay a $400 emergency expense using cash or a cash-equivalent. These low rates of emergency savings put households at risk in the event of an unexpected income loss or significant expense. For example, they may not be able to cover their essential bills and debt obligations, which can in turn lead to the risk of housing instability, utility shut-offs, and credit score decreases. Households without emergency savings may also turn to high-cost credit products such as payday loans to cope with these events.

Emergency savings are often held in checking and savings accounts, and financial institutions therefore have an instrumental role to play in building these funds. We partnered with a large Midwestern credit union to develop a new product called a Rainy Day Savings Account. Our aim with this product was to help credit union members build savings automatically and avoid payment delinquencies on their debts, creating financial benefits for both the member and credit union.

KEY INSIGHTS

One of the most well-established findings in behavioral economics is that changing default options changes behavior. With respect to savings behaviors, changing retirement savings plans from opt-in enrollment structures to opt-out enrollment structures has been shown to lead to large increases in retirement (defined contribution plan) savings rates. However, relatively little research has been done concerning the effect of offering savings accounts that have the same opt-out structure as many retirement accounts. Similarly, there is limited research on the role that automatic transfers from checking account deposits to savings accounts can play in helping households build their emergency savings.

Through extensive conversations with credit union leadership, we identified several key priorities, including helping their members build financial resilience in order to avoid falling behind on their debt payments in the event of a negative financial shock like job loss. Many credit union members, like many households in the United States, often lack emergency savings to help them cover these shocks, which can then lead to financial risks to the members in the form of decreased credit scores, reduced access to credit, and repossession. These defaults also pose risks to the credit union itself, as their balance sheet is negatively impacted by loan defaults.

Building off existing experimental evidence on savings interventions and the insights of the credit union leadership, we designed the Rainy Day Savings Account (RDSA) to make building savings as easy and automatic as possible. This account works in conjunction with the credit union's checking account — 2% of every deposit made by the credit union member into the checking account is automatically transferred to the RDSA.

EXPERIMENT

To test the impacts of the RDSA, our partner identified four similar credit union branches at which we could test the impact of the RDSAs. We then divided these branches into treatment and control branches. At the treatment branches, new credit union members who opened checking accounts were enrolled in the RDSA by default; that is, they had to opt-out of the RDSA. New members at the control branches were not enrolled in the RDSA nor were they informed of its existence.

RESULTS

This quasi-experiment launched in September 2020 and enrollment is ongoing. Early results indicate that roughly 25% of credit union members who opened a checking account at one of the treatment branches also opened an RDSA as well. This study will be in the field for approximately six months, and measured outcomes will be drawn from credit union data and include savings account amounts, checking account amounts, account deposit and withdrawal frequency, and debt payment delinquency indicators.

This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Credit Union	**2019**	**Field Study**	**Complete**

Decreasing Pain of Payment to Save While Paying Off Debt

BACKGROUND

Many individuals view paying off debt, saving, and building assets as consecutive steps towards financial wellbeing. In reality, though, individuals rarely have the luxury of tackling their financial goals one at a time. A 2020 report by LendingTree found that Americans hold a total of $1.2 trillion in auto loan debt, paying an average of $550 per month on new car loans. With auto loan terms stretching an average of 69 months for new car loans, and auto loan debt comprising just 10% of the total national household debt, waiting to save until one is completely debt free could mean waiting a very long time. And for the 37% of households who report being unable to cover a $400 financial shock with cash or its equivalent, often all it takes is one unexpected expense or emergency to fall off track and deeper into debt.

Having a cushion of savings makes it more likely for someone to successfully pay off debt and to build assets and savings, but saving while paying off debt is challenging. We partnered with Guadalupe Credit Union (GCU), a credit union serving low-income members in Santa Fe, New Mexico, to help members who take out a loan to open and save by contributing to a Pay Yourself First CD (PYFCD) while paying off their loan. The PYFCD is unique to other savings accounts in that it matches the interest rate of the member's loan, meaning their savings will grow at the same percentage as their loan. Contributions to this CD cap at a maximum of 10% of each loan transfer, including both the loan principal and interest.

HYPOTHESIS AND KEY INSIGHTS

To collect information specific to this context at Guadalupe Credit Union, we conducted a behavioral diagnosis of their PYFCD product. This diagnosis included building a detailed process map by analyzing administrative data and conducting qualitative interviews with frontline staff. The following barriers emerged as especially relevant:

» Members view a savings contribution equally as painful as a loan payment. Every time an individual parts with hard-earned money, even if this money is for their future selves, it inflicts psychological pain. Members who are asked to sign up for another recurring payment into their savings immediately after discussing the recurring payment for their new loan feel a second instance of psychological pain.

» Members commonly budget in round numbers and lean towards them in both general use and under times of cognitive overload.

» Members do not consider the benefits of opening a PYFCD in the moment of decision making. There is a general tendency to be present biased and have disproportionately higher valuations of present benefits and extremely low valuations of future benefits.

EXPERIMENT

We hypothesized that presenting the PYFCD as a default part of a members' loan, rather than as an extra add-on, would increase the likelihood of enrollment and contribution to the PYFCD. By rounding up the payments to a round number, we hypothesized we could both decrease the psychological pain of payment and align with members' existing mental budgeting strategies, since they have likely already mentally rounded up their loan payment. However, we were also curious about whether it was important that the higher number was round, like $250.00, or not, like $249.97 or $251.56.

To test our hypotheses, we redesigned GCU's loan payment form to offer the PYFCD bundled together with each loan. Rather than view and approve two separate payments, members were presented with one monthly payment amount and shown how the amount included payments both to their loan and to their PYFCD, should they choose to open it. We also triggered loss aversion by showing members the amount they were likely to have saved at the end of their loan if they signed up for the PYFCD.

To help loan officers remember to offer the PYFCD, we integrated the new payment calculations into the debt ratio calculator that GCU team members already use and held training sessions on how to introduce the program to members. When members applied for a new loan, they were randomly assigned to see one of three different forms, where the only thing that varied was the round-up amount. The conditions were balanced such that on average, members would save about the same amount regardless of whether their payment was round or specific.

Specific 9.4% condition: Loan + PYFCD payments are presented as a specific number (9.4% of the member's loan principal and interest is calculated).

More than banking, we're family!™
GUADALUPE CREDIT UNION

C

Loan Payment Schedule
(Plan de Pagos Préstamo)

Member's Name: Jane Doe — Account Number: 463738293
(Nomber del socio) — *(insert spanish)*

Monthly Transfer Amount				
Monthly Transfer Amount: *(Monto Total Mensual)*	**$ 280.06**			
=	Loan Principal & Interest: *(Principal e Interés)*	$256.00	+	Savings: *(Ahorros)* $ 24.06

☐ I don't want to have $ *661.55* * in savings by the end of my loan payment period
(No deseo tener en ahorros al término de mi préstamo)

*This savings estimation includes your contributions, interest, and dividends. This estimation only holds true if all monthly transfers are paid in full and at the time of they are due.

1st Payment Date *(1ra Fecha de Pago)*: 15-Jul-2019

Number of Payments *(Total de Transferecias)*: 24 at 13.10% APR for CD

Upon loan approval, I hereby autorize the Credit Union to transfer funds from my account(s) to the designated account(s) on the specified date(s) for the specified amount(s) as listed above.

(Autorizo a la Cooperativa a transferir forndos de mi cuenta de origen a las cuentas designadas, en la fecha estpecificada y por el monto establecido aquí.)

Member Signature *(Firma del Socio)* — Date *(fecha)*

Employee Signature *(Firma del Empleado)* — Date *(fecha)*

Specific 10% condition: Loan + PYFCD payments are presented as a specific number (the maximum 10% of the member's loan principal and interest is calculated).

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GUADALUPE CREDIT UNION

B

Loan Payment Schedule
(Plan de Pagos Préstamo)

Member's Name: Jane Doe — Account Number: 463738293
(Nomber del socio) — *(insert spanish)*

Monthly Transfer Amount				
Monthly Transfer Amount: *(Monto Total Mensual)*	**$ 281.60**			
=	Loan Principal & Interest: *(Principal e Interés)*	$256.00	+	Savings: *(Ahorros)* $ 25.60

☐ I don't want to have $ *661.55* * in savings by the end of my loan payment period
(No deseo tener en ahorros al término de mi préstamo)

*This savings estimation includes your contributions, interest, and dividends. This estimation only holds true if all monthly transfers are paid in full and at the time of they are due.

1st Payment Date *(1ra Fecha de Pago)*: 15-Jul-2019

Number of Payments *(Total de Transferecias)*: 24 at 13.10% APR for CD

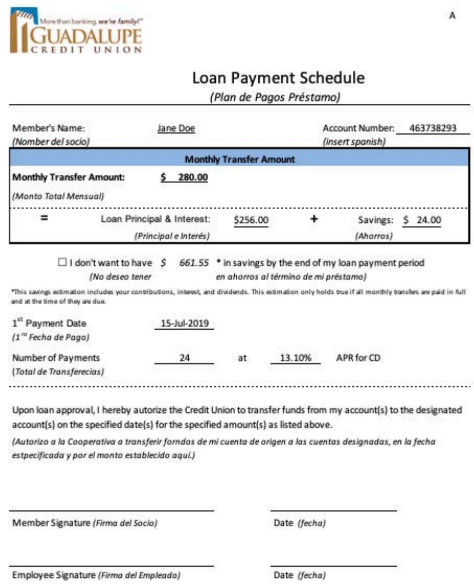
Upon loan approval, I hereby autorize the Credit Union to transfer funds from my account(s) to the designated account(s) on the specified date(s) for the specified amount(s) as listed above.

(Autorizo a la Cooperativa a transferir forndos de mi cuenta de origen a las cuentas designadas, en la fecha estpecificada y por el monto establecido aquí.)

Member Signature *(Firma del Socio)* — Date *(fecha)*

Employee Signature *(Firma del Empleado)* — Date *(fecha)*

Round condition: Loan + PYFCD payments are presented as 10% of the member's loan principal and interest rounded down to the nearest $5.00.



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GUADALUPE
CREDIT UNION

A

Loan Payment Schedule
(Plan de Pagos Préstamo)

Member's Name: Jane Doe
(Nomber del socio)

Account Number: 463738293
(insert spanish)

Monthly Transfer Amount

Monthly Transfer Amount: $ 280.00
(Monto Total Mensual)

= Loan Principal & Interest: $256.00 + Savings: $ 24.00
(Principal e Interés) *(Ahorros)*

☐ I don't want to have $ 661.55 * in savings by the end of my loan payment period
(No deseo tener en ahorros al término de mi préstamo)

*This savings estimation includes your contributions, interest, and dividends. This estimation only holds true if all monthly transfers are paid in full and at the time of they are due.

1st Payment Date 15-Jul-2019
(1ra Fecha de Pago)

Number of Payments 24 at 13.10% APR for CD
(Total de Transferecias)

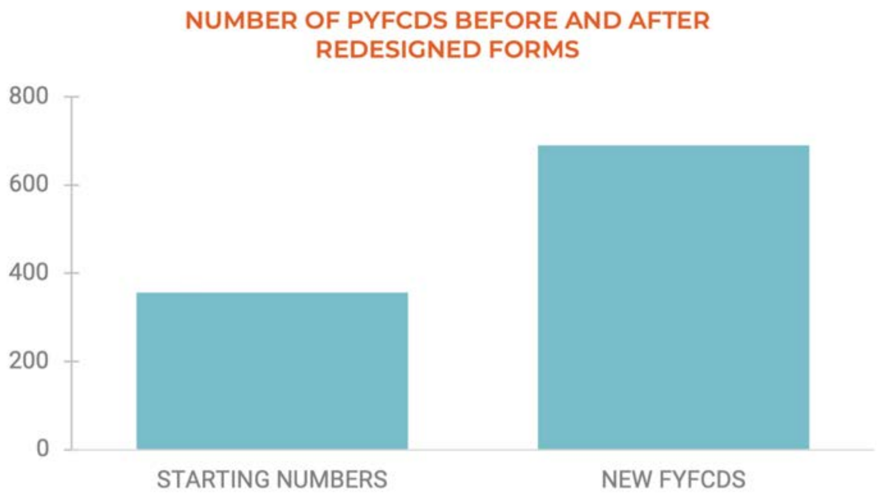
Upon loan approval, I hereby autorize the Credit Union to transfer funds from my account(s) to the designated account(s) on the specified date(s) for the specified amount(s) as listed above.
(Autorizo a la Cooperativa a transferir forndos de mi cuenta de origen a las cuentas designadas, en la fecha estpecificada y por el monto establecido aquí.)

Member Signature *(Firma del Socio)* Date *(fecha)*

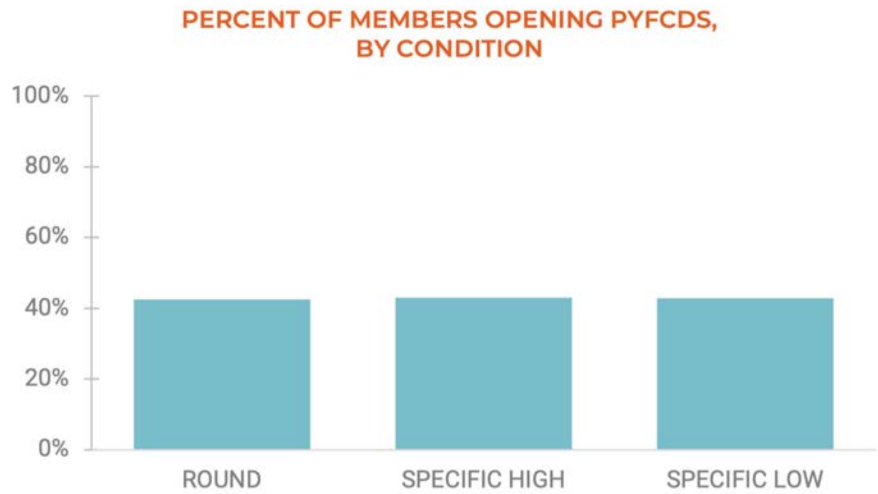
Employee Signature *(Firma del Empleado)* Date *(fecha)*

RESULTS

We ran our intervention for 12 months, collecting data from 1610 new loans at GCU branches. When we began our experiment, there were 356 open PYFCDs throughout the history of the product. In the 12 months that we ran our intervention, members opened 690 new PYFCDs, nearly doubling the previous total number of PYFCDs. When our redesigned forms were used, 42% of members opted to open a PYFCD and save off of their loan. These 690 members will save an average of $1,872 each by the end of their loan. Overall, these members will have a combined total of $1,829,967 in savings by the end of their loans.



We found no significant difference between our conditions. Around 42% of members chose to open a PYFCD regardless of whether their payment was presented as a round or specific number. This might be because the details of the transfer amount do not seem salient for the member at the time of signing the loan. They may not be thinking of how the payments will fit into their monthly budgets as they make the decision about whether to open a PYFCD.



At the time of our analysis, 78% of the members who chose to open a PYFCD had an active CD account. Six percent of members had matured CDs, taking home an average of $1,566 per account. Only 15% of members had chosen to close their CD prematurely.

We found that as loans got bigger, members were statistically significantly less likely to open a PYFCD. Similarly, projected amount saved and acceptance rate were significantly negatively correlated: as the amount to be saved grew larger, people were less likely to open a PYFCD. This could be because members taking out larger loans may have less money to spare for the PYFCD. It may also seem intimidating to lock a larger amount of money away until the end of a loan. It's possible that savings mechanisms that bundle together savings with payments might be best suited for smaller dollar loans. Similarly, credit score was a significant predictor of PYFCD status, with participants with lower credit scores tending to close their CDs earlier and more frequently than participants with higher credit scores (p<0.04***, α = 0.05). It may be that bundling loan payments with a CD is a savings mechanism that works best for those with higher credit scores, who may be better able to participate in less liquid forms of savings such as putting money into a CD and waiting for it to mature.

While we failed to see any evidence that rounding up a loan payment affects uptake of this savings product, this experiment did demonstrate the importance of creating smart defaults and embedding savings into existing processes. Thanks to thoughtfully crafted defaults, Guadalupe Credit Union's new automobile loans are encouraging nearly half of new borrowers to begin a savings habit and start to build their financial cushions. At scale, Guadalupe Credit Union can expect to help nearly 700 members a year stow away almost $2,000 in savings each by the end of their loan terms.

Partner Type: **Credit Union** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **In-Design**

/ inclusiv /

Bundling Savings With Loans: Saving While You Pay Off Debt

BACKGROUND

People commonly approach the dual problems of paying down debt and building savings in a linear way. First, the common thinking goes, you should pay off all your debts. Once you're free of the expensive interest and monthly payments, you can focus on building savings. However, according to the Federal Reserve's 2019 Survey of Consumer Finances, over 75% of Americans have some form of debt, and the average amount of debt measures in the tens of thousands: to focus solely on paying down debt might mean putting off saving for a very long time. And living without the safety net of an emergency fund means being at risk of falling into deeper debt when an expense comes up that you don't have the funds saved to cover.

For this reason, the Common Cents Lab is keenly interested in investigating different ways to bundle savings products with loans, to encourage consumers to save while they pay down debt. In 2016, we partnered with FinTech startup EarnUp to help Americans pay off their home mortgages faster and increase long-term savings. Using small messaging tweaks, we tried to encourage EarnUp users to add more money to their mortgage payment each month, an action that ultimately leads to less total interest paid and a shorter loan term. Knowing that people find round numbers more appealing, we asked one group to round up their mortgage payment to a round number, and another group to simply overpay on their mortgage. We found that 'round up' framing increased the number of people who opted in by 3.1%. Read the full case study in our 2016 Annual Report.

In 2020, we began planning to replicate and extend this research in partnership with Inclusiv, a national nonprofit organization that provides capital, builds capacity, develops innovative products and services, and advocates for community development credit unions (CDCUs). Inclusiv's national network of CDCUs serves over 11 million residents of low-income urban, rural and reservation-based communities across the US and provides access to a large base of members to help us learn more about the most effective way to help members save money while paying down debt.

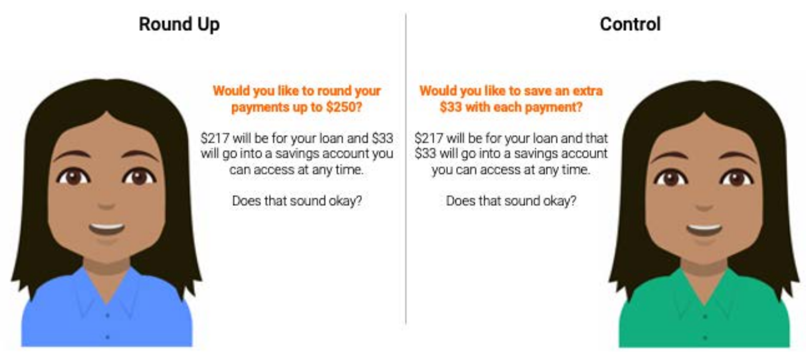
HYPOTHESIS AND KEY INSIGHTS

Replicating results is an important part of the research process. By re-running experiments in new settings and with new populations, we can see if results hold true across a variety of contexts. This allows us to state with confidence that new credit unions can introduce the same intervention and get the same results, without having to test each time to be sure.

We began with a review of our work on other bundled savings programs at credit unions, such as our work with Latino Community Credit Union (LCCU) in 2017. Back then, we looked at background research like our project with EarnUp to determine how to frame savings to appeal to people taking out new loans. We developed a set of recommendations for LCCU, such as presenting payments in round numbers and bundling savings with the price of the loan in order to reduce the pain of paying associated with the decision. Harnessing the power of defaults by presenting the product as opt-out, rather than opt-in, also helped inform our design for LCCU's savings program. Finally, in our work with LCCU we highlighted the amount members would have saved at the end of their loan if they remained in the program. We theorized that emphasizing this amount would trigger loss aversion and encourage uptake of the program.

Using that work as a basis, we set out to replicate our project with EarnUp within a new context: automobile loans taken out at credit unions within Inclusiv's network. We are building off our work with LCCU, using elements such as loss aversion and opt-out framing to create an attractive savings opportunity across conditions. Given the combined insights from EarnUp and existing literature on rounding, we want to test if rounding loan payments to psychologically pleasing numbers can encourage people to save more effectively than simply asking them to save. We plan to find out by presenting revised versions of EarnUp conditions to members of several credit unions from Inclusiv's nationwide network.

Conditions



EXPERIMENT

To satisfactorily extend our original research and allow us to understand how the intervention is received in different geographical regions, we assembled a selection of credit unions in different locations across the United States. To address our limited sample in the first iteration of the experiment, we hope to collect data from over 4,000 new auto loans across all credit unions. In partnership with those credit unions and Inclusiv, we will present members taking out new loans with revised versions of the bundled savings offer. We plan to measure both uptake rates and longevity of savings deposits, to learn more about what type of offer is more likely to attract attention and more likely to result in actual money saved.

RESULTS

We are currently onboarding credit unions and are looking forward to rolling the experiment out in 2021.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Credit Union	**2019**	**Field Study**	**In-Design**

/ inclusiv /

Building a Better Automatic Savings Tool

BACKGROUND

Building short-term savings is an incredibly important part of staying financially healthy. Yet it is something that many Americans struggle to do—according to the Federal Reserve's 2019 Survey of Household Economics and Decisionmaking, at the end of 2019, 37% of Americans reported that they could not cover a $400 expense using cash or a credit card paid off at the end of the month.

One of the easiest ways to save is to do so without even noticing. So-called 'set it and forget it' automatic contribution rules work well because they operate in the backgrounds of our lives—savings quietly accumulate without the need to make repeated difficult decisions to save. However, these automatic savings tools are not readily accessible to everyone. Variable income in particular can make it difficult to choose to save automatically—and at the end of 2019, 30% of workers had income that varied month to month.

To better understand how to maximize the usefulness of an automatic savings tool for the greatest number of people, we partnered with Inclusiv, a national nonprofit organization that provides capital, builds capacity, develops innovative products and services, and advocates for community development credit unions (CDCUs). Inclusiv's national network of CDCUs serves over 11 million residents of low-income urban, rural and reservation-based communities across the US. Through our partnership, we plan to design, build, launch and study an automatic savings feature intended to meet the needs of LMI populations.

HYPOTHESIS AND KEY INSIGHTS

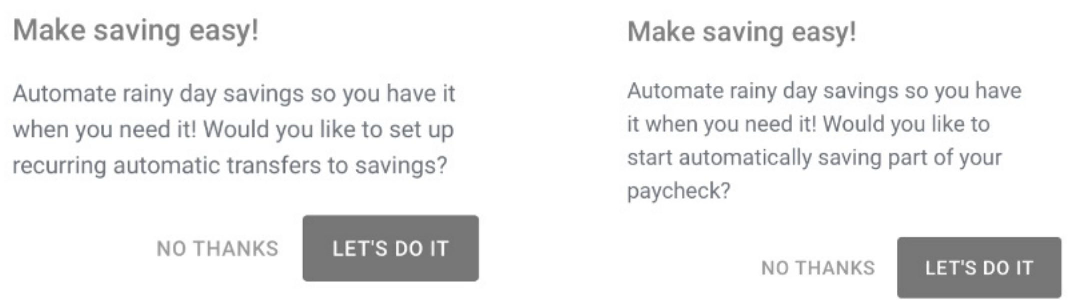
To design an automatic savings tool that would be useful for the users of Inclusiv's credit unions, we first looked at saving tools currently offered in the financial world. One of the most common short-term savings methods is setting up a flat transfer amount on a fixed day of the month to transfer money from a deposit amount into a savings account. But researchers have suggested that paycheck splitting, a common and highly effective retirement savings tool where a predetermined portion of a users' paycheck is parceled into savings, may be very effective for building short-term savings as well.

Through a survey we conducted with Inclusiv last year, we found that variable income was a large barrier to setting up contributions based on paychecks—nearly one third of respondents who didn't set up paycheck savings stated that they just weren't sure how much they would be able to save from paycheck to paycheck. These are individuals who may be interested in using an automatic saving tool, but who need one that is designed to work with their lives. Inclusiv and CCL decided to focus on developing an easy, automatic credit-union based tool that offers different ways of building short-term savings using paycheck splitting and flat transfer amounts.

EXPERIMENT

With these insights in mind, we focused on building a tool designed to help credit union members build savings and help us understand uptake, dropout rates and savings outcomes associated with variants on an automatic savings tool. To test the effect of different types of automatic savings tools, users at Inclusiv's credit unions will see a pop-up notice upon login asking if they would like to set up an automatic savings rule. Half of our participants will be asked to designate a percentage of each paycheck to save. The other half will be asked to set up a recurring transfer to savings on a custom basis, such as once a week or once a month. We hope to understand how uptake and savings outcomes are affected by the type of automatic savings tool offered.

Experimental conditions



RESULTS

Currently we are preparing to roll the savings tool out among several of Inclusiv's credit unions to maximize the reach of this experiment and better understand which tool works better for whom. We expect to launch in Q1 of 2021 and see results by end of Q2 of 2021.

Partner Type: **Credit Union**

Partner Cohort: **2019**

Project Type: **Field Study**

Project Status: **In Design**

/ inclusiv /

Increasing Deposits Among Check Cashers, Again

BACKGROUND

In 2016, the Latino Community Credit Union partnered with Common Cents to find ways to help members manage their cash flow by increasing short- and long-term savings. In particular, LCCU wanted a way to encourage their members to save a portion of their paychecks, rather than cashing the full amount. The result, a check cashing slip behaviorally designed to encourage savings, led 9.26% of members in the treatment conditions to save part of their paycheck—an average of $169 in savings per member. Read about the first project in our 2016 Annual Report.

In 2020, saving feels more important than ever. 53% of Americans report not having a sufficient emergency fund, and 49% expected to live paycheck-to-paycheck even before the financial effects of the Coronavirus pandemic were felt in the United States. Unfortunately, those who manually cash their paycheck cannot participate in automatic saving or paycheck splitting programs that make it easier to save. To encourage saving among this group, we began planning to launch a new intervention that aims to replicate and extend our former paycheck research with new populations. We partnered with Inclusiv, a national nonprofit organization that provides capital, builds capacity, develops innovative products and services, and advocates for community development credit unions (CDCUs). Inclusiv's national network of CDCUs serves over 11 million residents of low-income urban, rural and reservation-based communities across the US, including Puerto Rico. Together, we are developing a new version of the behaviorally-informed check cashing slip to roll out in Inclusiv credit unions across the US.

HYPOTHESIS AND KEY INSIGHTS

Replicating an experiment does more than deliver the benefits to a new population. By testing if experimental results hold true in new settings and with new populations, we gain a deeper confidence in the generalizability of our results—whether the effect is likely to occur in a variety of contexts with a variety of people. After successfully replicating results across a variety of contexts, we can feel confident that our intervention

generally works. This allows us to recommend more credit unions introduce the intervention in the future without having to test it every time.

We began our replication work with an in-depth review of our 2016 project with LCCU. Then, several rounds of interviews and data analysis on check cashing patterns found that many members use shortcuts to decide how much to deposit into their savings account—for example, what they have left by the time they receive their next check, or their smallest check if they have multiple sources of employment. CCL decided to try to further increase shortcuts to savings among check-cashers by redesigning a check cashing slip to include smart defaults, pain of paying, and opportunity costs. CCL's goal was to increase the number of people who desposited at least a percentage of their paycheck into their account, rather than cashing the full amount.

To extend our research and possibly amplify the effect, we made modifications to the check cashing slip. First, we decided to change the default amount to save—back in 2016, we theorized that the 50% default we chose at the time may have been discouragingly out of reach for many would-be savers.

We also simplified the forms and plan to test them at credit unions that already use a deposit slip. By embedding our intervention into an existing process, rather than introducing a new step into a process, we hope to make our redesigned check cashing slips easier and more natural for credit unions to continue to use even after our experiment ends.


CHECK CASH & SAVINGS SLIP
CHECK AMOUNT
NAME
DATE
ACCOUNT NO.
SAVE: 5% 10% 15%
OTHER: %
TO BE FILLED OUT BY FSR
CASH BACK
DEPOSIT $


CHECK CASH & SAVINGS SLIP
CHECK AMOUNT
NAME
DATE
ACCOUNT NO.
SAVE 5%
TO BE FILLED OUT BY FSR
CASH BACK
DEPOSIT $

EXPERIMENT

To test how the intervention works in new enviroments with new demographics, we selected credit unions carefully for inclusion. We decided to include a wide selection of Inclusiv's cooperitivas in Puerto Rico, where a large portion of members do not have direct deposit set up and come in person on payday to cash their checks. We also selected credit unions in the south and northwest of the contiguous United States to capture geographical differences.

As in our 2016 research, we plan to roll out the slips in select branches in our participating credit unions. When members come to cash checks in person, they will see and fill out out one of several versions of the slips. We plan to track how often members of each condition decide to deposit a portion of their paycheck into savings, and how large those deposits tend to be.

RESULTS

We are currently onboarding credit unions for inclusion in the project. We plan to roll the experiment out in 2021.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Tech	**2020**	**Field Study**	**In Design**

Prompting Savings with Financial Health Scoring

BACKGROUND

In a recent national survey of Americans at all income levels, three out of four households reported having experienced financial insecurity of some kind, and a staggering 85% believed that financial insecurity can happen to people, regardless of income. People are profoundly aware of their need for financial resiliency, and yet remain vulnerable to financial shocks. While many people think this is due to low financial literacy, the growing consensus is to move toward providing relevant information, in a meaningful format, at a moment that encourages action.

Common Cents Lab collaborated with MX, a financial software provider, on a new feature in their comprehensive financial health product, FinStrong. FinStrong analyzes a user's financial data to give feedback on how a user is doing and identify actions the user can take to improve their financial wellbeing. The new feature, a carousel, identifies and prioritizes a clear, actionable next step from within a user's financial sub-goals, giving the action prominence and removing the need for a user to deliberate about what to do next, and coupling that next step with praiseworthy aspects of their current financial health to highlight progress already made.

HYPOTHESIS AND KEY INSIGHTS

Past research suggests there are several behavioral biases that might discourage users from taking an optimal next step, or even any next step, toward financial health when presented with a comprehensive list of possibilities, including:

» **Choice overload:** that we can have a difficult time making a decision when faced with too many options. Researcher Sheena Iyengar and her colleagues investigated this phenomenon in the financial domain through retirement account participation. Using data from nearly 800,000 employees, Iyengar's results confirmed that participation in 401(k) plans was higher in plans offering a handful of funds, as compared to plans offering ten or more options. When placed in an environment with many options, a user may decide to make no choice at all.

- » **Competing goals:** that we tend to lessen our intention toward outcomes when focusing on multiple goals, especially in goals involving limited resources like money. Researchers Soman and Zhao found in experiments with savings that having multiple saving goals led to decision difficulty and choice deferral, whereas having a single goal, or what Soman and Zhao call goal singularity, led to an implementation mindset and action orientation.

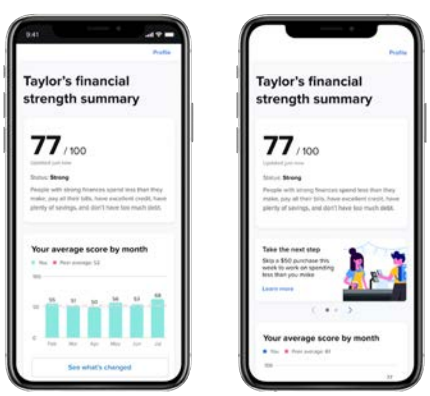
With the inclusion of the carousel, Common Cents Lab and MX are seeking to remove those behavioral barriers by prioritizing and prominently highlighting the best next step from the comprehensive list of options below. Users still have access to their full FinStrong summary, but with the additional benefit of the carousel decluttering and prioritizing an actionable next step for them. The team believes the inclusion of the carousel will increase a user's willingness to click into their prioritized next step to learn more and, ultimately, take action.

EXPERIMENT

To test the value of the carousel to FinStrong users, CCL and MX designed an experiment to compare it against the current layout. As users enter FinStrong, they will be randomly assigned to one of two conditions, which they will continue to see throughout the experiment every time they use FinStrong:

- » **Control:** the current version of FinStrong, or
- » **Treatment:** a version that includes the carousel.

Because FinStrong prioritizes emergency savings as the first step toward financial health, this experiment will measure savings behaviors prompted by carousel next steps against the savings behaviors of FinStrong users without the carousel to simplify their decision. The team will also measure FinStrong platform data to demonstrate users' willingness to click into next step prompts, whether through the carousel or the comprehensive list.



RESULTS

This experiment is scheduled to launch in Q1 2021 and will be in the field until 1,400 unique users have participated.

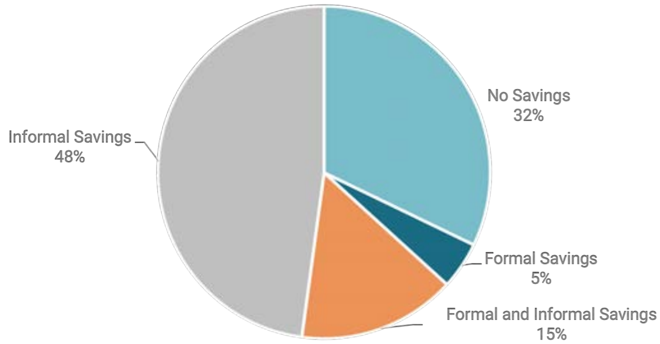
Partner Type:	Partner Cohort:	Project Type:	Project Status:
Tech	**2020**	**Field Study**	**In Design**

Designing a Savings Program for Taxi Drivers

BACKGROUND

Saving through formal financial mechanism is a challenge for many Mexicans. According to the latest reports, while the share of people with a financial account rose from 44.1% in 2015 to 47.1% in 2018, the share of people saving in a financial institution decreased from 14.5% in 2014 to 9.8% in 2017. Moreover, the latest financial inclusion survey in Mexico shows that at least 63% of Mexicans use some form of informal mechanism to save (homemade lock boxes, piggybanks, Tandas, or other social mechanisms).

People Saving in Mexico (2018)



Source: BBVA Research and ENIF 2018.

Saving through formal mechanisms is particularly difficult for low-income households, who face limited options of formal saving products, harsher requirements and cultural barriers. Working closely with New Ventures Group, we partnered with NatGas, a company that converts cars from petrol fuel to natural gas and works mostly with taxi drivers. NatGas' mission is to improve the overall wellbeing of taxi drivers in Mexico. By using natural gas, drivers save approximately USD$ 170-200 per month. While initially drivers pay back the installation costs by increasing the gas liter price they pay (i.e., if a driver pays $15 pesos per gas liter, $10 pesos go towards paying for gas and $5 pesos go towards paying back the installation costs), after repayment is complete taxi drivers have an opportunity to build up savings for emergencies and other financial goals.

In an attempt to help their clients build more savings, NatGas is considering launching a savings program, where clients can choose a goal and save towards it, using the gas top-up mechanism installed in their cars. The program would require a one-time behavior (sign-up for the program) and savings would be done automatically every time taxi drivers fill their gas tank (i.e. if they pay 15 pesos per gas liter: 10 pesos towards paying for gas and 5 pesos towards their savings account).

However, while NatGas navigates regulations for the program approval, we decided to test this concept with a different product that was recently launched: "Apartadito Impúlsate". This product uses the same top-up mechanism, and lets users prepay for purchasing car tires or cellphones interest-free. When a user reaches the amount necessary to purchase the chosen product or products (their goal), they can decide to go through with their purchase, to withdraw their money in full or to buy a cheaper alternative and receive a reimbursement.

In this sense, we are exploring if NatGas clients would be interested in enrolling in "Apartadito" with a saving objective and, for those who enroll, we are exploring how we can motivate them to choose a higher savings goal.

HYPOTHESIS AND KEY INSIGHTS

In early 2020, we helped NatGas design a user survey that was sent to ~300 of their clients to explore their current savings behaviors. The most important insights we found were:

- While 80% of participants save money on a daily or weekly basis, most of them don't recognize themselves as "savers", associating "saving" with higher incomes. For them, their behavior is described as "putting money aside" or "separating for financial goals". Past research by Benjamin and collaborators has shown how certain aspects of identity can influence people's decisions.
- Their most important savings goals are car emergencies (their source of income), health emergencies and family education.
- From those who save money, half of them save through formal institutions and half using informal mechanisms. In both cases, they value highly trusting the saving mechanism and having access to their funds.
- Taxi drivers rely on a daily mental accounting; they split their earnings, expenses and saving goals into daily amounts. This aligns with previous research by Camerer and collaborators, which found that taxi drivers tend to segregate their earnings at a daily level and that they stop driving when they reach a daily earning goal.

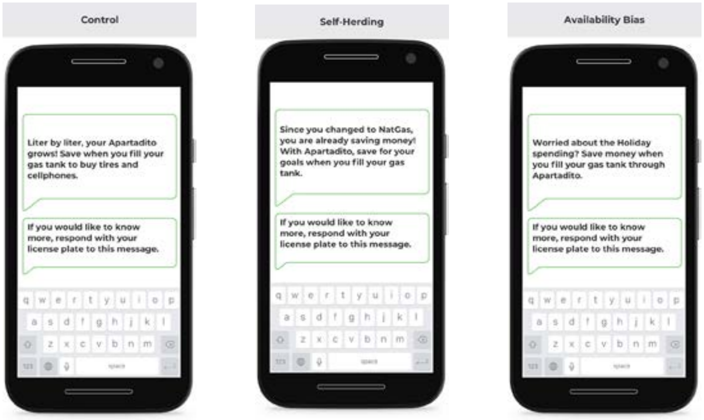
Taking into account barriers to transition from informal to formal savings, we decided to focus on leveraging taxi drivers' current savings behavior and identity as a way to overcome the belief that savings is a "high-income" behavior. We hypothesize that by highlighting the opportunity to save with

"Apartadito" and by reframing their current behaviors (using natural gas to save money, putting money aside on a daily basis for goals) NatGas clients will be more motivated to enroll in this program. Moreover, we will test if including anchors in the enrollment process encourages them to choose a more ambitious goal.

EXPERIMENT

We are currently designing two studies aiming to change our two key behaviors:

1. Study 1 will focus on reframing their current behavior using text messages. The sample includes ~13,000 taxi drivers who will receive either a control text message or a behaviorally informed text message prompting them to enroll in "Tu Apartadito". We will measure their intention to enroll by responding to the SMS and their actual enrollment.
2. Study 2 will aim to motivate clients to choose a higher savings goal. We are exploring whether we can use anchors or decoys during the enrollment process, or if we can provide them with a financial incentive. Since clients can always choose to withdraw their money and are not obligated to purchase a set of tires, we are confident that this intervention will not hurt their financial health in any way.



RESULTS

We expect to launch both experiments by Q1 2021 and start analyzing towards the end of the quarter. These results will be a starting point for NatGas to inform the design and implementation of the future savings product for their clients.

This project is in collaboration with New Ventures Group.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Tech	**2017**	**Field Study**	**Completed**

Prompting in Onboarding to Increase Emergency Savings

BACKGROUND

Setting aside money for unanticipated expenses is a key component of financial health; it allows households to meet unexpected expenses without relying on expensive credit or fees.

Studies find that many Americans are lacking emergency savings; a 2019 study estimated that 53% of US households don't have an emergency savings account. Qapital, a mobile banking app, allows its users to create personalized financial goals and save towards those goals using automated rules. Historically, emergency savings has only been around 4% of the Qapital goals for which users save, coming in behind travel, general savings, and debt, which account for more than half of the goals. During the COVID-19 pandemic in 2020, there was a near five-fold increase of new users with emergency savings goals, but there is still a large room for improvement.

We partnered with Qapital to see if we could encourage more new Qapital users to set up an Emergency Savings goal with a prompt at onboarding.

HYPOTHESIS AND KEY INSIGHTS

There were several ideas from behavioral science that we incorporated into our prompt design.

- Use defaults to signal norms. Research by McKenzie, Liersch and Finkelstein demonstrate that one mechanism in which defaults change behavior is by indicating to users the recommended course of action. We only let users skip setting up the emergency fund goal if they clicked "I already have an emergency fund." The options create a norm that users should have Emergency Savings, whether in the app or elsewhere.
- Make it easy. Rather than asking users to create an emergency savings goal themselves, the prompt would create the goal for them with one click. Like participants in a study by Beshears and others on simplifying the retirement savings action to a single yes/no decision, this one-click option made it very fast and simple to set up the goal and start saving for it; users didn't have to make choices on what to save or how.

We thought that these features in the prompt would encourage a lot more users to save for emergencies.

In addition to testing whether prompting users to create emergency savings goals was effective, we wanted to see the impact of different suggested target amounts.

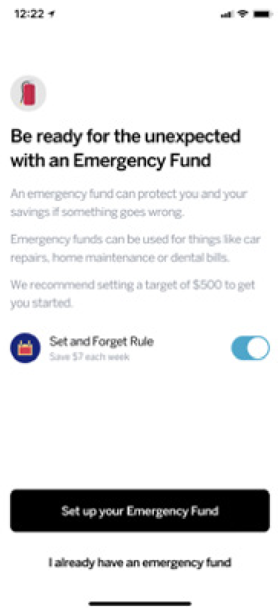
Research on goals by Soman and Cheema suggests that the difficulty of goals impacts our likelihood of taking up the goal as well as our progress on the goal; difficult goals are seen as more important than easy goals, but goals must feel attainable for us to pursue. We hypothesized that users may be more motivated to pursue the emergency goal when prompted for the $100 target than the $500 target, since the $100 might feel more attainable.

EXPERIMENT

We tested if a prompt to create an "emergency fund" goal in the Qapital app would increase the number of users with an emergency savings goal. New Qapital users were randomly assigned to one of three conditions:

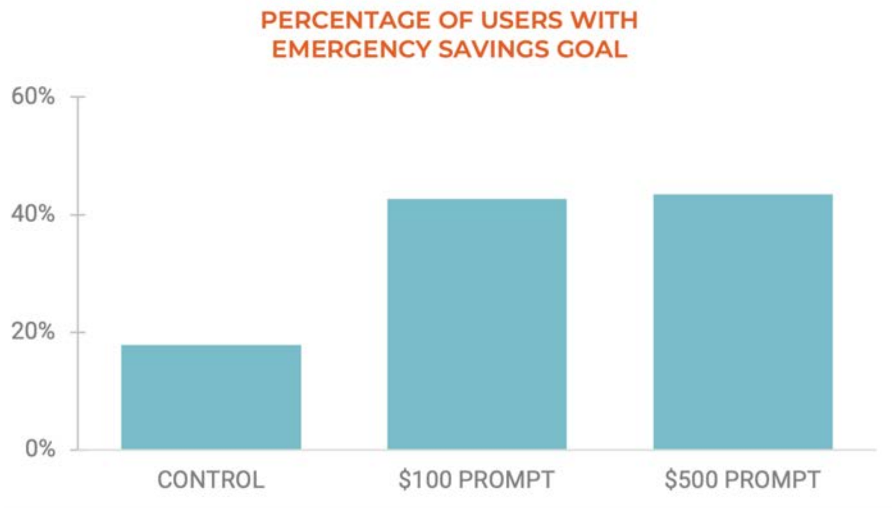
1. **Control condition:** No prompt,
2. **Treatment 1:** A prompt condition with $100 target, and
3. **Treatment 2:** A prompt with a $500 target.

Users in the two prompt conditions would log into a flow with the emergency fund prompt, giving them an option to automatically create an "Emergency Fund" goal with a "Set and Forget Rule" that would transfer a defined amount into the goal each week. Both users in the control group and users that declined the initial offer to set up an emergency fund goal could later set up an emergency savings goal on their own.



RESULTS

Over 6,500 Qapital users were part of the experiment to increase emergency savings goals with approximately 2,200 users per condition. Prompting users to create an emergency fund had a significant impact on the proportion of users that had an emergency savings goal with Qapital: the percentage of users with emergency savings goals in the prompt conditions were more than double the users with emergency savings goals in the control condition! There were no significant differences in the proportion of users with emergency savings goals between the $100 prompt and the $500 prompt conditions. The target amount may not have made a difference in take-up rate because the amount was not very prominent in the prompt or neither amount seemed particularly difficult to the users. In fact, in the control group, users who set emergency savings goals set targets of $3,000, $1,000, and $500. This suggests that the perceived difficulty of the target amounts in our treatment groups was likely not a factor.



In addition to having a higher take-up rate, we also found that users that had been prompted were more likely to actually contribute funds toward their goal. Within the 3-month observation period, only 18% of users with emergency savings goals in the Control group saved toward their goal versus 24% and 26% of the users in the $100 and $500 prompts, respectively. It's possible that the prompt provided a norm that increased the importance of the goal for the user. There were not differences in the median amounts saved between the three groups.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Credit Union	**2016**	**Field Pilot**	**In Design**

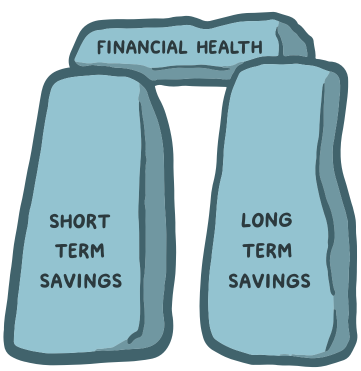
Helping Credit Union Members Meet their Short- and Long-Term Financial Goals

BACKGROUND

Like approximately 25% of non-retired Americans, many Self-Help Credit Union (SHCU) members are not currently saving for retirement. Saving for retirement can be made difficult by the myriad options available, but can be made even more difficult when you can't keep up with regular, unexpected expenses. In fact, even among those who do save for retirement, at least 25% of workers surveyed have taken some form of early withdrawal or loan from their 401(k) plan, tapping into it to meet their short-term needs or emergencies and often incurring additional taxes and early withdrawal fees.

We recognize that both emergency savings and long-term retirement savings are critical pillars of financial health, but many people find it difficult to feel successful at either one, let alone both. The current state of short- and long-term savings in the United States means that many American families are underpreparing for retirement while also struggling to save for commonplace unexpected expenses.

To assist SHCU members in both accruing short-term savings and building retirement funds for their future, we partnered with the credit union to develop a hybrid savings account that allows members to achieve both types of financial goals. Nicknamed a "Now & Later Savings Plan" (and also known as a sidecar account), this savings mechanism smartly and automatically allocates each savings deposit into either short-term or long-term savings, depending on the current balance of the short-term savings account. This savings product is being developed with the goal of members to use the plan to accrue short-term savings to use when needed, and long-term savings for their future, rather than having to make a decision about which to prioritize.



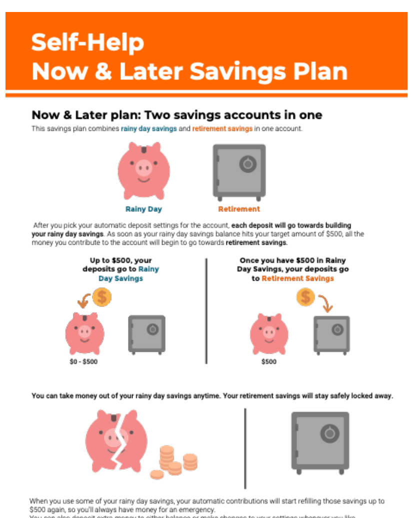
KEY INSIGHTS

There are many reasons why people may not be saving for both short- and long-term financial goals. These reasons may have to do with insufficient income, but may also be due to a lack of properly structured, well-timed offers. Previous research has shown just how difficult these barriers can be to overcome and build savings. For instance, prior research has shown how having a single savings goal can lead to greater savings intentions and actual savings compared to having multiple savings goals. This psychological barrier, combined with the practical constraints of having to save for multiple goals (splitting income between spending, emergency savings, and long-term savings) can make retirement savings particularly difficult to start and build.

Anecdotally, the Common Cents Lab heard feedback from Self-Help members who opted out of a previous retirement savings account offer that they weren't able to sign up for retirement savings at the time because they still didn't have enough in emergency savings.

We sought to address this primary concern of having to choose between emergency- and long-term savings, and gauge interest in a hybrid savings account by offering this savings plan at SHCU branches. We have structured the savings plan to meet both financial goals, while also offering members specific options in setting it up by choosing how much money is transferred into their savings account(s). We will be testing take-up and savings rates of this savings plan at branches in the upcoming year.

Prior to launching the savings account product, we additionally tested what name of the hybrid savings account would be the clearest and most salient. Given that this is a fairly new type of savings mechanism and will be novel to most SHCU members, we ran a survey online across 250 individuals, requesting people to select which names offered would be the clearest and most appealing name of the account. The survey results indicated that "Now & Later Savings Account" was the clearest and most appealing name for the savings account.



EXPERIMENT

With SHCU, we designed the hybrid savings account so that members who open a retirement savings account first select how much money they would like automatically transferred each month into their savings. Money is initially directed into a short-term savings account until the balance hits $500, after which those transfers get directed to their long-term savings account. $500 was chosen as a 'switch point' given research suggesting that nearly half of US households could not easily handle an emergency expense of $400.

The money in the short-term savings is always available for use, should an emergency expense appear, whereas the long-term savings has typical retirement penalties enforced. Importantly, when members dip into the short-term savings, their transfers get re-directed to replenish that account until it hits the $500 balance again. This allows members a liquid, accessible fund that they should feel free to use when an emergency expense arises, while also providing them a means to save towards retirement.

RESULTS

We anticipate launching the pilot for new members at select branches in Q3 of 2021 and hope to run the pilot for about 3 months before scaling to more branches and exploring mechanisms to drive uptake among existing members.

Partner Type: **Tech** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **In Design**

URBAN FT
FINANCIAL TECHNOLOGY

Designing the Optimal Savings Account for the Underbanked

BACKGROUND

In 2019, Urban FT, a FinTech Core provider, launched the Community Access Program, a fully managed card service program for community banks that integrates with Urban FT's digital banking and digital payment services. This program is designed to reach consumers and businesses that are typically underreached by financial institutions.

We know that in 2019, 37% of adults in the US would not have the liquid cash to cover a $400 unexpected expense. Furthermore, COVID-19 made the need for emergency savings incredibly salient.

Together, Urban FT, Mastercard, and the Common Cents Lab embarked on the automated savings initiative—to design an intuitive and effective savings experience for low- to moderate-income (LMI) individuals by leveraging behavioral science research on goals, automated savings mechanisms, and pre-commitment devices. The automated savings initiative plans to pilot this savings experience within the Pioneer Card—a Mastercard® debit card designed for individuals with limited or poor credit history who may not be suited for traditional banking products.

HYPOTHESIS AND KEY INSIGHTS

The Common Cents Lab began the discovery phase by compiling a list of research questions we wanted to answer as part of this initiative. Once we performed a literature review, as well as a review of secondary research, the following research questions emerged as our biggest gaps:

» What funding mechanisms are the most attractive to users?

» How liquid should savings be to best meet users' needs?

To address these gaps, CCL designed and conducted a survey on Mturk through Positly. The survey also sought to do some exploration into barriers to saving, past savings successes, and motivations to save. For more details on the survey design, population, and detailed findings, see page 171. High-level insights include:

Funding mechanisms

- Respondents found round-ups to be the most interesting automated funding mechanism.
- Paycheck splitting was seen as the most effective way to save regardless of employment status.
- LMI participants were more interested in round-up savings and less interested in paycheck splitting than non-LMI participants.
- Participants ranked "I did not have money left after paying for bills and necessities" as the biggest barrier to saving. This is consistent with a Commonwealth survey finding that 31% of low-wage employees saved only what was leftover at the end of the month.
- While overall interest in pre-commitment devices was low, participants did show a good amount of interest in using them to save for an emergency fund, specifically. This is consistent with research by Nava Ashraf, Dean Karlan, and Wesley Yin, in which only 28.4% of clients of a Philippine bank who were offered a pre-commitment savings product accepted the offer and opened the account.

These survey findings demonstrated the importance of designing a savings product that provided multiple automated funding mechanisms—those like round-ups, which decrease the pain of paying, and those like paycheck splitting, which are typically more effective because they allow people to save money before they are tempted to spend it. The findings also made clear that if pre-commitment devices were included in the savings product, they ought to be flexible—users should be able to turn them on for some savings goals, and leave them off for others.

These survey findings demonstrated the importance of designing a savings product that provided multiple automated funding mechanisms—

The Common Cents Lab also worked with Urban FT to identify the following cognitive biases that are likely barriers to saving for Pioneer cardholders:

- **Choice overload:** According to research by Alexander Chernev, Ulf Bockenhold, and Joseph Goodman, we tend to have difficulty making choices when faced with many options, particularly when decisions are complex and existing preferences are uncertain.
- **Competing goals**: Multiple goals typically evoke trade-offs among competing goals, as demonstrated by Dilip Soman and Min Zhao.

» **Status quo bias:** William Samuelson and Richard Zeckhauser have demonstrated that when faced with a decision, people have a tendency to do nothing, or maintain their current or previous decision.

» **Friction costs:** People can be deterred from taking action by seemingly small barriers, as shown by Keith Hawton et. al.

EXPERIMENT

We proposed three possible experiments that could be launched along with the savings pilot in summer of 2021, and are working with Urban FT to refine these possibilities and determine which experiment is technically feasible. Two of these experiment options build on our survey finding that respondents are most interested in round-ups as a saving mechanism, but understand that round-ups are not incredibly effective at helping them save meaningful amounts of money. The three proposed experiments are:

» When provided with a default automated funding mechanism for their first savings goal, for which funding mechanisms do people stick with the default, versus for which ones do they switch away?

» When offered the choice between a simple round-up funding mechanism and progressive round-up funding mechanism, which do users prefer?

» When offered the choice between a simple round-up funding mechanisms, and either a progressive round-up funding mechanism or a super-charged round-up funding mechanism, which do users prefer?

RESULTS

We anticipate sharing out the results in the 2021 Annual Report.

Partner Type: **Credit Union** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **In-Field**

Overcoming Income Accounting to Convert Credit Card Rewards to Savings

BACKGROUND

A nationwide survey polled more than 1,000 people age 18 and older with varying credit scores and number of cards and found that credit card rewards were perceived as the third largest benefit of credit cards (36% of respondents), right after having a cushion for emergencies (42%) and not having to carry around cash (38%). Credit card companies spent an average of $167 per rewards account in the year 2018. Meanwhile, 39% of adults in the US would not have the liquid cash to cover a $400 unexpected expense.

The opportunity seems simple—convince people to save their credit card rewards for when an unexpected expense comes up. However, research on "mental accounting" shows that people categorize and spend money differently depending on where it came from, and where it's going. More specifically, people tend to match the seriousness of the source of a windfall with the use to which it is put. This poses challenges for getting people to save their credit card rewards, as rewards are often viewed as "found money" and consequently are spent on more frivolous, rather than serious purchases.

To explore ways to overcome these challenges, the Common Cents Lab partnered with Virginia Credit Union (VACU) to run an experiment within the redemption portal of their Cash Rewards Mastercard®.

HYPOTHESIS AND KEY INSIGHTS

We hoped that by making it both easier and more salient for consumers to redeem credit card rewards as savings, it could help people reframe the mental account with which they typically associate rewards. This, in turn, would make them more likely to use their rewards to build up savings, rather than spending them mindlessly. To try to increase the amount of cashback rewards cardholders redeemed into their savings account, we leveraged a few different behavioral science principles:

» **Leverage defaults:** Humans have a strong tendency to go with the default or pre-set option, since it is easy to do so. Making an option the default makes it more likely to be adopted.

» **Provide an anchor:** People tend to rely heavily on the first piece of information they are given about a topic.

» **Decrease friction costs:** The small, seemingly irrelevant details that make tasks more challenging and effortful can impact whether or not people perform a behavior.

EXPERIMENT

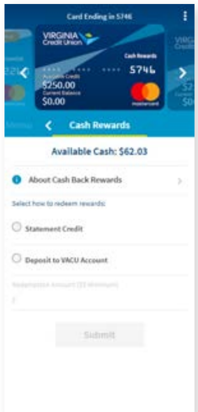
We redesigned the savings portal, leveraging the principles above to:

1. **Make saving the default:** We created an additional radio button for “Deposit to VACU savings,” which is pre-selected when a user lands on this page. This aims to both increase the saliency of this redemption option, as well as decrease the number of clicks needed to redeem.
2. **Anchor on full amount:** When “Deposit to VACU savings” is selected, the full amount of available rewards is auto-populated into the redemption amount. When another redemption option is selected, no amount is auto-populated, requiring users to make an active choice regarding how much they want to redeem. Research by John Beshears, James Choi, David Laibson, and Brigitte Madrian suggests that requiring an active choice slows the decision process and ultimately helps people make decisions that are more aligned with their true preferences.
3. **Leverage friction costs:** We pulled this lever both ways, decreasing the friction to redeem to savings and increasing the friction to redeem through other methods. Because savings is the default selection option and the redemption amount is pre-populated, users could hit “Submit” and redeem their full rewards balance to savings in a single click. On the other hand, redeeming to a checking account or as a statement credit required selecting a different radio button, as well as entering a redemption amount before the “Submit” button became active.

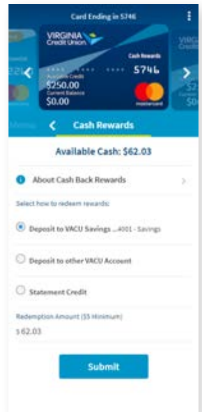
Individuals in a control group continued to see the portal as it was before the redesign, while individuals in the experimental study group saw the redesigned portal. We hypothesized that in the study group:

1. More VACU Cash Rewards Mastercard® cardholders would redeem their earned cash rewards into their VACU savings account.
2. VACU Cash Rewards Mastercard® cardholders would redeem a higher proportion of their earned cash rewards into their VACU savings account.

Control



Experimental



RESULTS

This experiment was launched in October 2020 and is still in the field. It will run for approximately three months, or until a total of 2,000 participants (1,000 each in the control and experimental study groups) is reached. Results will be included in the 2021 Annual Report.

Partner Type: **Credit Union** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **Discontinued**

WSECU

Encouraging Savings from Debt Consolidations and Loan Modifications

BACKGROUND

Many LMI households want to save but have difficulty finding slack in their budgets to dedicate to savings. Data from the US Bureau of Labor Statistics indicate that households with incomes in the lowest 20% spend an average of 72% of their income on housing, food and transportation versus 57% of income for households with the highest 20% of incomes. It would be so much easier to save if free money just appeared – money that isn't already spoken for within an established budget.

In fact, debt consolidations and loan modifications may create enough of a financial windfall for some households to be able to start saving. In an experiment that we ran with Digital Federal Credit Union (DCU), we found that 16% of people who were refinancing a loan wanted to save a portion of their payment difference. We partnered with Washington State Employees Credit Union (WSECU) to see if we could validate our DCU learning. WSECU call center staffers regularly modify loans or consolidate debts for members; the reductions in payments that members get from modifications or consolidations could be a potential source of short-term savings, as it may be that funds are not yet earmarked for other expenses. In an experiment with WSECU, call center staffers asked if members wanted to save a portion of their payment reductions when consolidating debt or modifying a loan.

HYPOTHESIS AND KEY INSIGHTS

In our work for the DCU refinance to savings project, we identified a number of barriers:

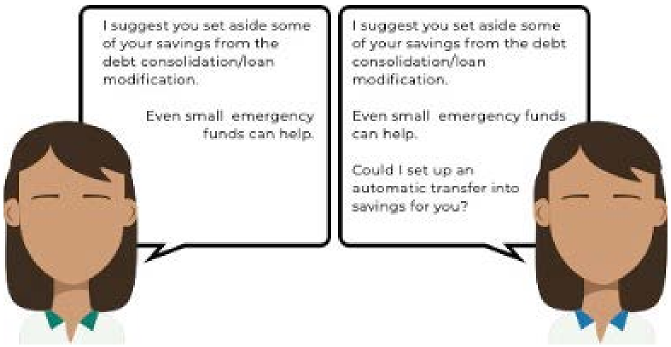
» **Loss Aversion:** One of the real challenges to saving is the loss aversion that people feel when spending money is directed toward savings. If they don't yet have the opportunity reclassify payment reductions to another mental account, we can more easily help them allocate toward emergency savings.

» **Lack of attention to emergency savings:** The call center employees can create a norm for members to save for emergencies when they suggest that the member use some of the payment reduction for savings; the norm alone could increase the number of members who save.

» **Friction:** While employees highlight the importance of savings by giving the member more information, we know that information is unlikely to motivate action. In fact, in our work with DCU we found that the friction of setting up an automatic savings transfer, even after a member has expressed a desire to set up that transfer, can deter the best of intentions. It's therefore important to minimize the actions that members need to take to save.

EXPERIMENT

WSECU call center employees were assigned to deliver one of two scripts: 1) a suggestion with information prompt and 2) a suggestion and offer to set up automatic transfer. When WSECU members initiated a loan modification or debt consolidation with the call center, they would hear one of the two scripts depending upon the condition to which their call center employee was assigned. The call center employee recorded how much reduction in payments was expected, if the member agreed to save for emergencies and whether they allowed the call center employee to set up automatic savings transfers.



RESULTS

After rolling out the experiment, we saw that the sample size was lower than the 700 members we had anticipated over a 3 -month period, with just 107 members in 4 months. Upon further investigation to understand the reduced sample size, we found that the employees were inconsistent in recommending the savings, and some expressed difficulty in fluidly incorporating the script into their process flow.

Of the 107 loans where one of the scripts was used and the data were tracked, we found that 31% of members were willing to set up savings with two thirds of those members allowing the call center employee to set up automatic savings, and the median amount saved was $100. A greater proportion of members who received the prompt without the offer to set up automatic transfer said that they would save than members in the group with the offer (38% versus 25%). This result was not statistically significant and was likely driven by call center employee differences, since we see significant variation between employees. Therefore, we caution against making conclusions about effectiveness of this intervention without further testing. Ultimately, we stopped the experiment until we're able to uncover an easier way to incorporate it into the workflow of call center employees. Any future experiments should also randomize borrowers to different conditions with each call center employee changing the script they use based on the randomization to avoid employee-induced effects.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
NA	**NA**	**Lab Study**	**In Design**

Learning from the Lab: Understanding the Connection Between Perception of Financial Shocks and Short-term Savings Balances

BACKGROUND

Suggestions for short-term savings are everywhere you look for financial advice or tips and tricks. Financial advisors and experts recommend anywhere from having $1,000 in emergency savings to 10% of your income to up to eight months' worth of living expenses to cover unexpected financial shocks. In spite of the ubiquity of suggestions to have short-term savings and these specific goals recommended, the vast majority of Americans are still not saving adequately to meet short-term needs or inevitable financial shocks.

Recent research focusing on the bottom 30% of earners in the United States shows that having approximately $2,500—or around one month of income—in short-term savings is sufficient for buffering against financial hardship outcomes, such as being unable to pay rent or cover groceries. This amount is far less than the oft-quoted savings rules of thumb from financial advisors. However, this research also finds that these same households have a median of $82 in short-term savings.

While there are many cash flow reasons that American households are not saving for sudden emergencies, including income insufficiency, there may also be psychological factors at work, such as a misperception of the frequency and average cost of these emergencies. For instance, if people believe that financial shocks will be very costly and frequent, the ostrich effect may lead them to not even begin saving at all since people may not feel they will ever be able to save enough in time.

To investigate this, we are working with University of Colorado at Boulder to understand the connection between people's perceptions of financial shocks and their savings behavior in an interactive online study.

HYPOTHESIS AND KEY INSIGHTS

In this study, we are examining whether people's perceptions of financial shocks in an online interactive study will be associated with their savings behavior in the study. We are interested in exploring the following key questions:

1. Do people accurately perceive the frequency and average costs of financial shocks in the online interactive game? And is this perception correlated with savings behavior?
2. Does being told the frequency and average costs of financial shocks affect behavior? In other words, will providing additional information ahead of time change how people save for emergencies?
3. Is real-life savings behavior correlated with perceptions of real-life financial shocks, leading people who overestimate the frequency and cost of financial shocks to under-save? While potentially counter-intuitive, it may be the case that individuals feel they will never be able to save "enough," so they don't bother saving at all—why deny yourself immediate gratification (not using money now in order to save) if your savings won't actually be sufficient when the emergency comes?

EXPERIMENT

We designed an online interactive study and survey where participants play a financial 'game' meant to resemble real life. In the game, participants earn income ("points") through a job, pay bills, can save for the future in the game, can "spend" their points to save for their real-life pay bonus, and may encounter financial shocks of various sizes. As participants earn points through the jobs, they can decide whether to save for the future in the game (and thus avoid financial hardship when financial shocks hit) or decide to allocate the points to their final payout, which converts to a real-world bonus paid to them for their participation. While participants may be inclined to put more points into their final payout, this puts them at risk of not being able to afford financial shocks and going into bankruptcy in the game – preventing them from earning more points.

This game is meant to simulate real life, where we are constantly having to choose between short-term savings (saving for the future in the game) versus using money now for enjoyment or consumption (putting points into your final payout in the game).

The key test in this experiment is testing whether telling individuals about the frequency and size of financial shocks in the game affects behavior; does more information about emergencies change savings rates in the game? To test this, participants will be randomized to one of three groups:

» **Treatment 1:** Participants will be given a written description using percentages and a histogram illustrating the frequency of financial shocks. The written description will include language such as, "For example, 50% of unexpected expenses cost less than 50 points and only 5% of unexpected expenses cost more than 500 points."

» **Treatment 2:** Participants will be given a written description using probabilities and a table illustrating the frequency of financial shocks. The written description will include language such as, "Unexpected expenses are much more likely to bankrupt you when you have very little in your savings account. For example, 25 out of 100 unexpected expenses will bankrupt you when you have 0 points in your savings account. By comparison, only 7 out of 100 unexpected expenses will bankrupt you when you have 150 points saved."

» **Control:** Participants will receive no information about the frequency and sizes of financial shocks.

After randomization, participants will play the game and have the opportunity to earn points. Following the game, participants will complete a survey that asks them about their perceptions of the financial shocks in the game (the frequency and size of shocks), and about their real-life finances, including savings and real-life financial shock experiences.

We will examine whether being told about the likelihood of financial shocks—and the way in which participants were told—affects how they save in the game, and determine connections between their savings behavior in the game and their savings behavior in real life.

RESULTS

This study is currently in design and will be launched online in the Spring of 2021.

This project is in collaboration with the University of Colorado at Boulder.

Partner Type: **NA** | Partner Cohort: **NA** | Project Type: **Lab Study** | Project Status: **Complete**

Learning from the Lab: Applying the Messenger Effect to Short-term Savings Behavior

BACKGROUND

It has been well documented over the years that Americans are chronically under-saving for unexpected expenses. Finding ways to encourage short-term savings will be critical in helping people address inevitable financial rainy days. While many nudges, tips, and tricks are being developed, it will be critical to understand how to best deliver them and the most effective messenger of these ideas and offers.

Research suggests that who delivers a message, tip, or trick can change how that message is received. For example, people are more likely to respond favorably to a message that is delivered by experts or people they know and trust. In an online study, we investigated whether we could leverage this "messenger effect" and encourage people to increase their short-term savings balances.

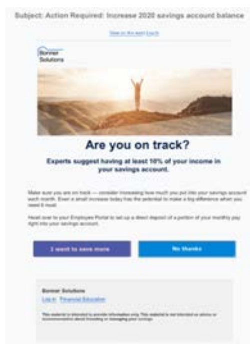
HYPOTHESIS AND KEY INSIGHTS

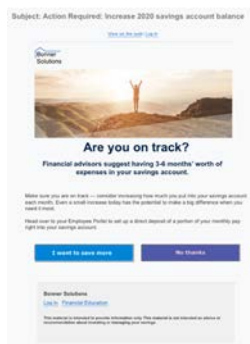
In this study, we examined the effect of different messengers and different messages on hypothetical short-term savings. The messengers included hypothetical employers and different types of experts. The messages included two commonly-recommended short-term savings goals—one based on a percentage of income and another based on a multiple of expenses. We predicted that participants would be more likely to increase their hypothetical short-term savings when recommendations came from experts and employers compared to a control (in which no messenger was specified). We further predicted that people would be more likely to increase their savings when they saw a recommendation of a percentage of income, since it seems more achievable, relative to a multiple of expenses.

EXPERIMENT

We ran an online study across approximately 3,000 people in which participants were told to imagine a hypothetical job from which they earn $65,000 per year, have benefits, and are currently saving 5% of their income into a savings account. They were then shown a hypothetical email that that contained a savings account goal. Participants were randomized to an email group in which the messenger was an employer, 'an expert,' financial advisors, or made-up financial group; there was additionally a control group in which no messenger was specified. Participants also received recommendations to have 10% of their income as a savings goal, three to six months' worth of expenses as a savings goal, or no specific goal (control). Participants could then click on one of two buttons in the email, which allowed them to choose "I want to save more," or "No thanks."

Following clicking on the email, participants were then asked if they would like to change how much they are saving, and if so, by how much.





RESULTS

We found that there was no effect of messenger or of the specific savings recommendation on participants' decision to change their savings: approximately 55% of participants said they would change their savings amount, independent of who the email came from or what the recommendation was.

We did find a difference in the call to action (the button) in the email that participants selected according to messenger: the control, employer, and made-up financial group messenger emails all led to increased rates of participants selecting to "save more" than declining the offer. Additionally, we found a difference in button selection according to the recommendation type: both the control and 10% recommendations led to more people selecting the "save more" button than the "No thanks button;" however, there was no difference among the group that saw the expenses-based recommendation.

Finally, we looked at how much people would save among those that stated they would change their savings rate. Of those who said they would change after seeing the email, approximately 30% of participants said they would save 3% (down from the 5% in the hypothetical set-up of the study); the remaining approximately 70% primarily selected 8-15%. This 3% was the most commonly selected amount and existed independently of the email type.

This suggests that people tend to have a strong mental bias toward saving 3%; interestingly, this bias persists even when people are anchored at a higher percentage of 5%. These results also reflect that specific messengers may have an effect on savings behaviors, but that recommenders should be cautious about whether they lead others to start saving less or more.

Partner Type: **NA** | Partner Cohort: **NA** | Project Type: **Lab Study** | Project Status: **Complete**

Learning from the Lab: Exploring Experiences and Attitudes about Savings Goals and Methods

BACKGROUND

Previous research into automatic savings has shown it to be an effective tool for saving. When partnering with Chime to have clients automatically save 10% of their direct deposits, those that used the feature saved an average of $200 per month. This is similar to widespread automatic savings systems such as 401k savings accounts or income tax withdrawals that result in substantial tax refunds later in the year. Our previous research with Narmi illustrated a growing demand in some form of automated savings within personal banking. We found that 59% of respondents reported interest in signing up to use an automatic funding mechanism. Learning more about people's attitudes and willingness to use different funding mechanisms would help define a direction for an intervention that leads to more effective savings behavior.

Simplifying the effort it takes to add money to one's savings account is only half the battle. Keeping money in an account until it is ready to be used is an issue not yet solved by banks and FinTechs. While retirement accounts have penalties and restrictions for early withdrawals, there are not similar restrictions for non-retirement savings. The use of pre-commitment devices to prevent the unnecessary withdrawal of savings has been successful for some brick-and-mortar banks, as demonstrated in research by Ashraf, Karlan, and Yin. How willing are people to commit to using similar features in digital banking? Do these attitudes differ depending on the type of goal they are saving for? With these questions in mind, we designed a survey to begin to explore attitudes towards different automatic funding mechanisms and precommitment devices.

HYPOTHESIS AND KEY INSIGHTS

This survey was conducted as part of our work with Urban FT (see page156). We wanted to explore respondents' attitudes towards four funding mechanisms:

» **Round-up:** Every time you make a purchase on your card, your purchase is rounded up to the nearest dollar, and the change is transferred from your checking account to your savings account.

» **Automatic transfers:** You can choose a set amount to transfer from checking to savings on a regular basis, such as weekly or on a certain day each month. Your bank will make these transfers automatically for you without any further action on your part.

» **Paycheck splitting:** Choose a percentage of your paychecks to automatically transfer to savings, and your bank will transfer it on your behalf the moment your direct deposit hits your account.

» **Account sweep:** You choose a minimum amount you want to keep in your checking account. On a regular cadence that you designate, your bank will transfer anything above that amount over to a savings account on your behalf.

We also wanted to understand whether respondents were interested in pre-commitment devices – would they recognize their susceptibility to temptation, and be willing to tie their own hands to better meet their savings goals? We explored attitudes towards three pre-commitment devices:

» **Accountability buddy:** You choose an accountability buddy who is notified whenever you withdraw money from your savings account.

» **Target amount:** Your savings account does not allow you to withdraw the money until you reach a target amount that you set for yourself.

» **Target date:** Your savings account does not allow you to withdraw the money until you reach a target date that you set for yourself.

We outlined three testable hypotheses about participants' perceptions of funding mechanisms and pre-commitment devices:

1. Participants will select round-up savings as the most interesting funding mechanism.
2. Participants will rate paycheck splitting as the mechanism that will help them save the most, but only if they are employed.
3. Participants will be more likely to enroll in the pre-commitment savings account feature they are shown for more serious goals (i.e., buy a house, childcare, education, emergency fund, new car, retirement), and less likely to enroll for less serious goals (entertainment / hobbies, vacation).
4. Participants will be most likely to enroll in the pre-commitment savings account feature they are shown when saving for an emergency fund.

EXPERIMENT

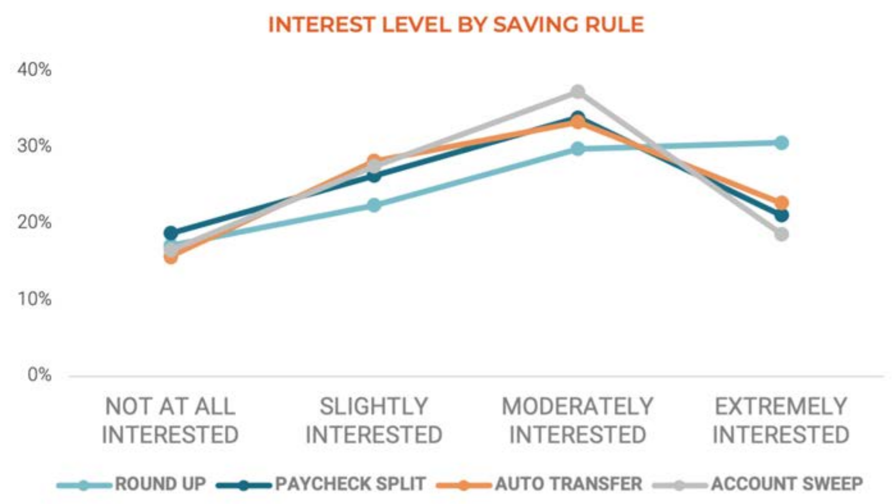
The experiment was implemented as a Qualtrics survey delivered through the Positly platform to 1,247 online participants.

We began by asking participants about their own savings motivations and barriers, then randomly presented them with one of the four funding mechanisms outlined above (i.e., round-up, automatic transfers, paycheck splitting, or account sweep) and asked about their interest in the mechanism, how much they think they could save with it, and how long they think a friend might stay enrolled. Then we presented each participant with all four of the funding mechanisms to compare against each other and asked which one they would be interested in using, which would be the easiest to save with, which would help them save the most money, and which they would recommend to others. We then randomized respondents to read about one of three savings pre-commitment devices (i.e., target date, target amount, accountability buddy) and asked how likely they would be to enroll in the feature, as well as what goals they would most likely use the feature for. Finally, we collected demographics.

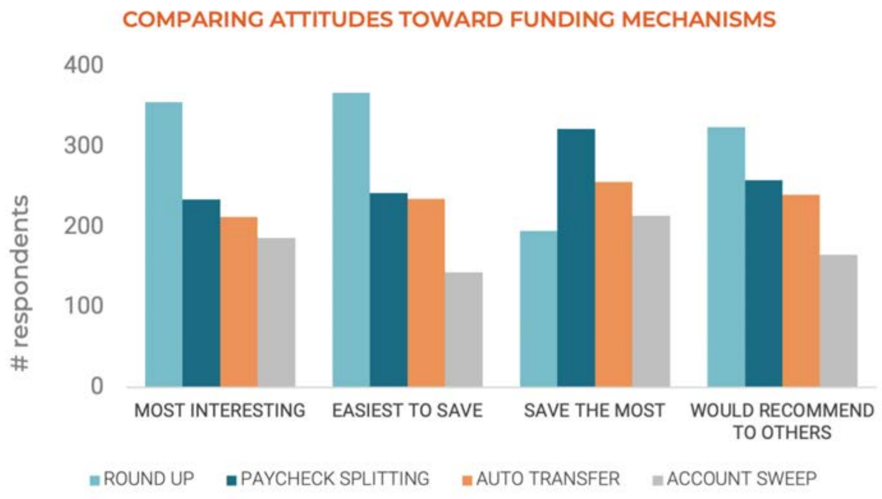
RESULTS

The results were based on 987 responses. There were 260 additional respondents who were excluded from the dataset because of suspicious free text responses.

When respondents were asked to rate their interest in their assigned funding mechanism, we saw a steady increase in interest across all mechanisms. However, interest in round-up savings peaks at “Extremely interested” whereas the other three mechanisms see a significant drop-off between “Moderately interested” and “Extremely interested”. There is no statistically significant difference between the proportions of respondents that chose “Extremely interested” for their assigned mechanism ($p = 0.3253$).

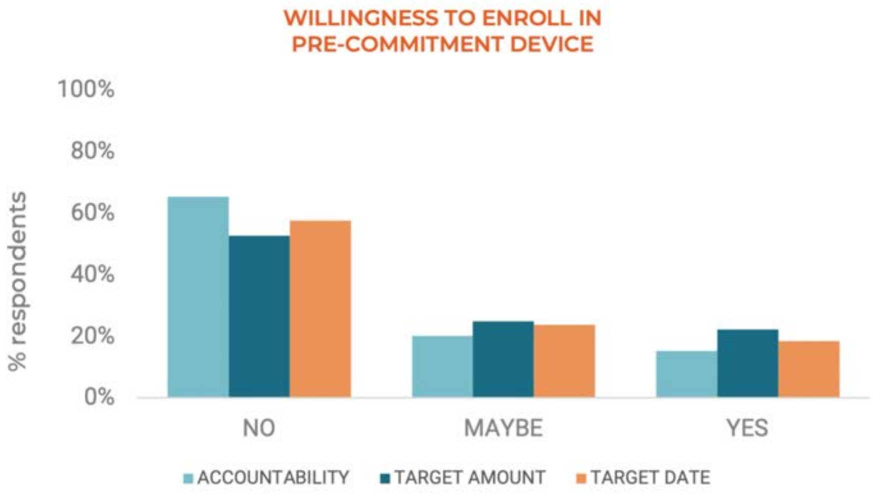


We found that the round-up funding mechanism was the most interesting to participants ($p < 0.00001$). Additionally, participants found it to be the mechanism that would be the easiest to save with and the most recommendable. However, it was ranked least helpful in saving the most money. Paycheck splitting was viewed to be the most effective at saving the most money. This attitude did not depend on employment status.



We found that a majority of users would not consider using a pre-commitment device. When asked about how their willingness to use a pre-commitment device differed based on the goal they were saving for, respondents were most willing to enroll for more serious goals (e.g., emergency, retirement, car, housing).

Overall, accountability buddy was the least popular pre-commitment device. A review of free text responses showed concern regarding privacy when it came to the accountability buddy feature. Regarding target amount and target date, respondents were most concerned about being unable to access money in an emergency. Considering a key component of emergency savings is liquidity, this makes sense. Paradoxically, people reported being most willing to use a pre-commitment device for emergency savings.



This study demonstrated how people view the essential features of funding mechanisms as well as their willingness to use pre-commitment devices to limit unnecessary use of their saved money. The key lessons we learned in the study are:

» Respondents found round-ups to be the most interesting funding mechanism, yet were aware of its shortcomings in helping them save effectively.

» Aligning automatic savings with income (e.g., paycheck splitting) was believed to be most effective for saving by respondents.

» People were hesitant to limit their access to saved money with a pre-commitment device. Counterintuitively, participants reported that they would be most willing to lock away savings for an emergency fund, even though the unpredictable nature of an emergency could make this problematic.

Partner Type: **NA** | Partner Cohort: **NA** | Project Type: **Lab Study** | Project Status: **Complete**

Learning from the Lab: Using Social Norms to Change Saving and Spending Behaviors

BACKGROUND

Many industries compare one person's behavior to their peers to encourage or discourage specific behaviors. For instance, showing people that they use more energy than their neighbors can lead to a significant decrease in energy usage in subsequent months. In the financial domain, many institutions have used these 'social norms' as a means to increase retirement savings: telling individuals what others like them are saving can increase the individuals' savings rates to be closer to their peers'. However, sometimes peer comparisons in retirement savings can also backfire, as shown in research by Beshears et al. While there is academic research and evidence from the field that using social norms can change behavior, and that increased similarity between people and their peers increases the effect of the social norms, there is still a gap in our understanding of what specific social comparisons influence behavior.

To investigate this, we ran an online study with different social norm aspects regarding spending and saving habits and asked people about their anticipated use of specific tips to help decrease fast-food spending and increase their savings. Here, we examined whether comparing people on location, age, or income (people who live in the same zip code, are the same age, and earn the same amount of money, respectively) and behavior (save a little or a lot more; spend a little or a lot less) affects how people predict they would change their saving and spending behaviors.

Sometimes peer comparisons in retirement savings can also backfire.

HYPOTHESIS AND KEY INSIGHTS

In this study, we tested whether different aspects of comparisons to peers will influence the number of saving and spending habits people predict they would use. For example, will people be more willing to try new habits if they are told that they are more similar in age and income compared to similar in location? Will people be more willing to try new habits if their peers spend a lot less than they do, compared to a little less than they do? Here, we explored the following key questions:

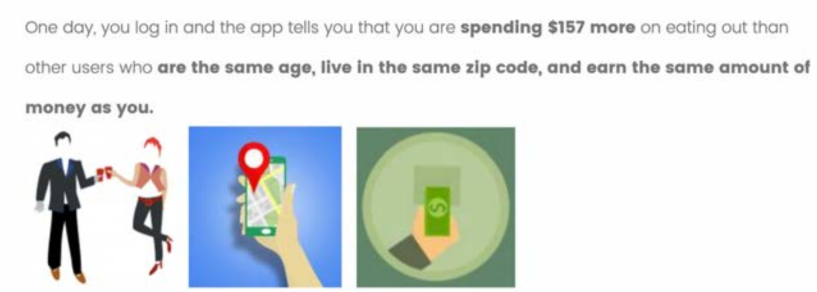
1. Do any specific social comparisons affect predicted saving and spending behavior more than others?
2. Does increased similarity (more comparisons) increase the number of saving and spending behaviors compared to decreased similarity (fewer comparisons)?
3. Are people more willing to take up behaviors if their peers save a lot more/spend a lot less compared to if their peers save a little more/spend a little less?

EXPERIMENT

We ran an online study across approximately 3,500 people in which participants were told to imagine that they had recently downloaded a new mobile phone app that was designed to help them manage their money, and gives tips on how to spend less/save more. The study also told them that the app is very popular across the US and already has over one million users.

Participants were then randomized to one of 14 conditions that compared their financial behavior to their peers or to a control condition that didn't have any social comparison. The treatment conditions varied by social comparison (all of the seven permutations of age, income, and location), distance from desired behavior ($27/$257 from specific save/spend behavior), and frame (spend or save).

Participants were then given a number of different tips to save money or reduce spending, and asked to select all of the ones they would try in the following week, and predict how successful they would be at increasing their savings or decreasing their spending.



RESULTS

We examined whether the type and number of social comparison aspects affected the number of tips people predicted they would use and their anticipated success at increasing their savings or decreasing their spending.

In the saving frame, we found no effect of the type or number of social comparisons or of the distance in comparison (your peers were very different or only a little different from you) on the number of tips people predicted they would try. We did find a significant effect of the number of social comparisons and the distance on predicted success in saving more: people who were given a social comparison predicted they would be more successful than those who were not given any comparison (in the control group).

In the spending frame, we found no effect of the type or number of social comparisons on the number of tips people predicted they would try. However, there was an effect of the distance in comparison (your peers were very different or only a little different from you): people who were told that their peers only spent a little less than them selected fewer savings tips than both the control and the group who were told their peers spend a lot less than they do. We did not find any effect on predicted success of curbing spending behaviors.

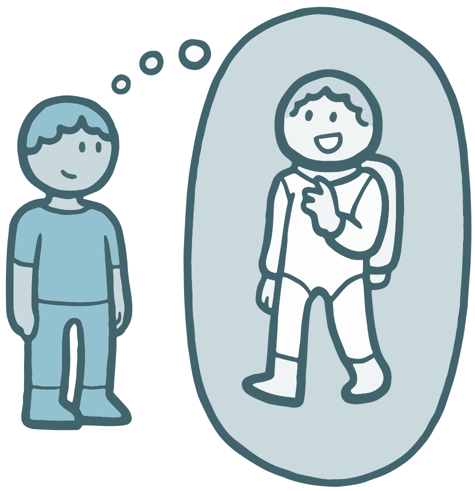
Because this was an online research study involving hypothetical behaviors, we hope to implement social norms references in our field research to establish whether different comparisons and distances affect real-world spending and saving behavior.

5

INCREASING LONG-TERM SAVINGS

While short-term savings may be key to helping us meet survival and safety needs, long-term savings is critical in helping us move ahead in life and reach our full potentials. Long-term savings is often essential to move to the next stage in life: be that higher-level education, home ownership, or retiring from the workforce. But saving for the long-term has its own unique challenges.

One of the greatest challenges to long-term savings is Present Bias, our tendency to focus on present needs and wants to the exclusion of future needs. Human brains evolved in a world where the primary objective was simply survival, and focusing on the present makes the most sense in that world. But humans have conquered many of the elements immediately threatening them meaning that they have a future that they can look forward to. Unfortunately, our brain is still wired to focus more on the present than the future.



One indication of how difficult it is for us to connect to the future is that many of us think of our future selves as completely different people than ourselves now. When we plan for that future self, it's as though we are planning for a stranger. It makes sense that research has shown that increasing our feelings of connection to our future selves increases our willingness to take actions to benefit our future selves. We are currently trying to extend that research with our study of cartoon avatars of our future selves that might be used to encourage saving for the future. Read the full case study on page [# AND INTERNAL LINK Cartoon Avatar case study].

> Unfortunately, our brain is still wired to focus more on the present than on the future.

Even when we are able and willing to save for the future, it can be confusing to know how much we should save. In an experiment with Ascensus, we try to solve for that complexity by encouraging users to use their projection calculator by creating a norm that users should check that they are on-track with savings. Read the full case study on page 184.

In addition to directing people to existing resources, we also investigated how to communicate savings information in a way that people could make informed choices about saving for the long-term. Many people achieve long-term savings with investments that increase exponentially over time thanks to compound interest. However, we have a difficult time picturing exponential growth and tend to underestimate the benefits of exponential growth, which is known as Exponential Growth Bias. To better understand the impact of this, we are studying how the way retirement projections are presented impact people's willingness to save for retirement. Read the case study on page 194. Similarly, we're also studying the psychological barriers to investing for LMI households so that they can take advantage of compound interest. You can read that case study on page 198.

While building retirement savings is a perennial challenge, the year 2020 brought a new challenge: getting people to not raid their retirement accounts. With many Americans impacted by job losses during the COVID-19 pandemic, the CARES ACT eliminated the 10% early withdrawal penalty for hardship withdrawals up to $100,000 from retirement accounts. It's estimated that over 2 million Americans pulled money from their retirement plans in 2020; the average withdrawal was about $20,000 at one major plan provider, which is three times more than the average withdrawal in prior years. While hardship withdrawals are often used as a last resort, the hole that they leave in retirement funding can be substantial and can be difficult to refill. To blunt the severity of these withdrawals, we are working with record keeper Alight to provide people with a key moment of reflection that we anticipate will lead people to be more thoughtful about their withdrawal and potentially reduce how much people take out of their retirement accounts. Read the full case study on page 182.

Read on to learn more about each of these studies and more.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
Record Keeper	**2020**	**Field Study**	**In Design**

alight

Inciting Loss Aversion to Decrease Retirement Account Withdrawals

BACKGROUND

While recent analysis paints a slightly better picture than previously thought, retirement account leakage continues to be a widespread issue across the American retirement landscape, estimated at more than $90B annually. Although there is a range of expert opinions on precisely what withdrawals constitute leakage, especially considering the CARES Act and the realities of the pandemic, simply put, *leakage* is an umbrella term for withdrawals from retirement accounts for non-retirement purposes. These withdrawals undermine the long-term growth that most Americans rely on from retirement savings. The long-term growth helps to build balances that will provide financial stability in retirement.

But while we generally want to prevent leakage from retirement savings, sometimes critical financial obstacles, like medical bills or an imminent eviction, make a person's retirement savings the best of a short list of bad options for remedying a crisis. For these obstacles, some retirement accounts allow for Hardship Withdrawals for a defined set of qualifying hardships. In many of these cases, savers reasonably need access to the funds to be put to crucial purposes, but dollars withdrawn from long-term savings won't continue to accrue interest, making these withdrawals very costly in the long run.

Knowing that every unnecessary dollar withdrawn early from retirement savings represents an outsized loss over many lost years of accrual, we partnered with Alight Solutions to design an intervention to motivate retirement savers seeking a Hardship Withdrawal to withdraw only what they need.

HYPOTHESIS AND KEY INSIGHTS

People regularly face several psychological barriers when making financial decisions with long-term impacts. Of these, we specifically wanted to address:

» **Hyperbolic discounting:** we tend to choose smaller-more immediate rewards over larger-delayed rewards. A saver facing a hardship is even more likely to prioritize the present over the future when making decisions about retirement balances.

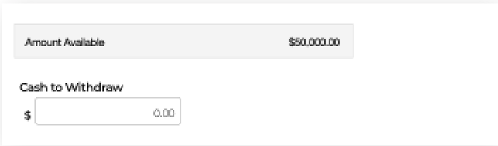
Anchoring: we tend to be influenced by reference points, even arbitrary ones, when making decisions. In this context, a saver facing a hardship may be unintentionally anchored to their total available balance even when their hardship could be resolved with a smaller withdrawal.

To help savers overcome these barriers, we embedded an intervention in the Hardship Withdrawal application flow at the precise point at which users enter how much they would like to withdraw. Importantly, our goal is not to prevent users from making withdrawals—in most cases, these users are facing real hardships that retirement funds can responsibly help resolve—but our goal is to prompt users to make their decision having taken a moment to engage their deliberative thinking to consider the real future cost of every dollar withdrawn today.

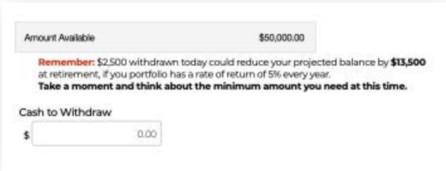
EXPERIMENT

Our experiment randomly assigns users into one of two conditions: those receiving the treated application flow and those receiving the existing application flow as our control. In the treated application flow, users see additional language crafted to make the future losses represented by additional dollars withdrawn more salient—that is, to incite loss aversion, our tendency to see losses as more painful than the pleasure we derive from gains, so that users will discount those future dollars less. Additionally, the language encourages users to pause and engage in deliberative thinking about the withdrawal amount to challenge the potential anchor of their total amount available and establish their own competing anchor from estimating the minimum required to face the hardship.

Control



Treatment (Draft)



RESULTS

This experiment will be finalized and launched in the first half of 2021.

Partner Type: **Record Keeper** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **In-Field**

Encouraging Savers to Look at their Retirement Projections

BACKGROUND

Americans are underprepared for retirement; the 2019 Survey of Consumer Finance indicates the median value of retirement accounts is just $65,000. One factor contributing to inadequate savings is that many Americans don't know how much they need in retirement. Retirement planning tools like projection calculators can help people know whether they are on-track to save for retirement and how much they need to save now, but people often don't use these tools in their retirement planning. In a Bankrate survey, only 11% of respondents used an online retirement calculator. Calculators can help people understand how contributions to retirement accounts now can impact the financial situation in the future and may provide motivation for increasing their contributions to retirement.

We partnered with Ascensus, a retirement record keeping and service provider. Their own research suggests that users who engage with their retirement calculator have higher retirement savings than users who don't. However, we don't know if that's just because people who would already save more are more likely to use the calculator, or if using the retirement calculator does indeed drive greater savings. So we partnered with Ascensus to see if we could encourage people to use their calculator and then measure whether that increases retirement fund contributions.

HYPOTHESIS AND KEY INSIGHTS

It's not always easy to get users to start using the retirement projection calculator, but Ascensus has made it easily accessible directly off the home screen after the user has logged in. Originally, a banner on the home screen asked users to use the calculator, but the screen already told users how much their balance was projected to be at retirement as well as the estimated monthly income from their retirement savings. Giving users the numbers doesn't give them a lot of incentive to use the retirement calculator.

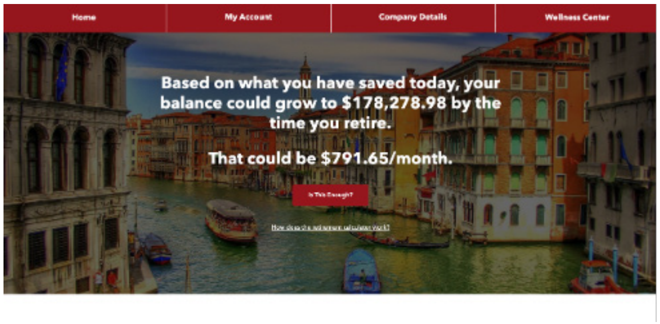
We may be able to create norms around how people interact with their account by implying that regular check-ins are part of the retirement planning process. We hypothesized that the curiosity promoted by removing the figures on the home screens would further increase motivation to use the calculator.

EXPERIMENT

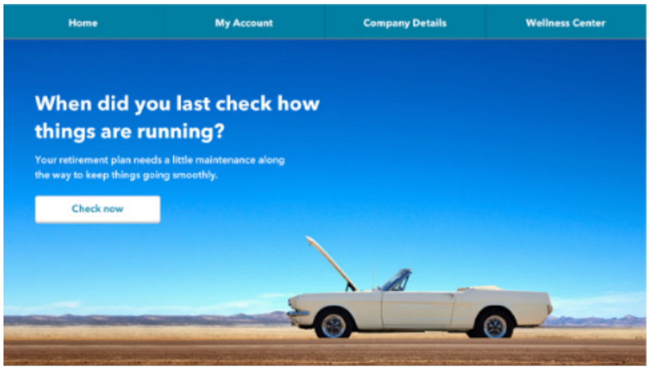
To test this hypothesis, when users log into their retirement account webpage, they are randomly assigned to see one of two the banner layouts. Half of the users will see the original version (the control) and the other half will see a redesigned banner (the treatment).

The redesigned banner incorporated ideas of ongoing maintenance of users' retirement accounts to suggest that users should regularly check their retirement projections. We also removed the retirement projection figures from the banner itself so users would need to go to the projection calculator to get the projected numbers. We are measuring which banner layout leads to more people using the retirement projection calculator and a greater increase of retirement contributions.

Control banner



Test banner with ongoing maintenance theme



RESULTS

The experiment is currently in the field. We anticipate running this study for about one month to have at least 200,000 users exposed to the banners. Therefore, results are expected in the first quarter of 2021.

Partner Type: **Tech** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **In-Field**

Using Savings Defaults and Visuals to Increase the Amount and Frequency of College Savings Deposits

BACKGROUND

Research shows that child savings accounts (CSAs) can increase families' financial preparation for post-secondary education and ultimately students' post-secondary enrollment. CSAs are grounded in a theory of assets that posits that when individuals and families own assets they are likely to experience psychological, social, economic, and educational gains. However, with student debt burdens reaching record highs, it is clear that families often have to take on large amounts of debt to pursue higher education.

Past behavioral studies on retirement savings accounts demonstrate that defaults matter when people decide to contribute to a savings account. For example, in their groundbreaking work on the Save More Tomorrow program, Thaler and Benartzi (2004) find that defaulting employees to increase their retirement contributions in the future when they receive pay raises increased retirement savings substantially. We wanted to investigate if changing savings defaults could increase the amount families save for their children as well. To that end, we partnered with CollegeBacker, an online college savings platform that allows individuals to set up college savings accounts for their children and then invite other "backers" to donate to those savings accounts.

KEY INSIGHTS

Since the launch of their online platform, CollegeBacker has expressed an interest in improving the size and rate of recurring contributions among their savers. In extensive discussions with CollegeBacker leadership, we discovered three key insights:

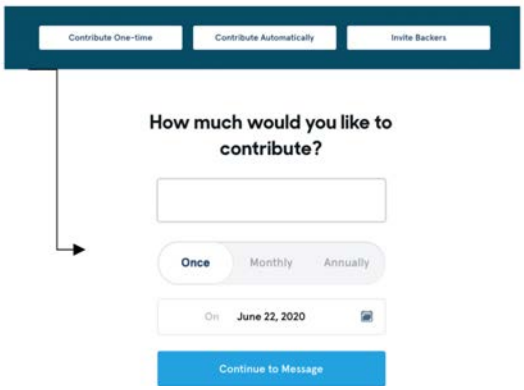
1. **One-time vs. recurring contributions:** The CollegeBacker team noted that certain segments of their user base tend to contribute irregularly, and that this can impede the ability for account holders to meet their long-term savings goals.

2. **Anchoring:** The CollegeBacker team noted that some users tend to contribute at the amount CollegeBacker anchored them to ($25) and rarely contributed more. This too may impede the ability for account holders to meet their long-term savings goals.
3. **Present Bias:** When it comes to saving for college, present bias may also be a factor. CollegeBacker users are generally investing over the long-term (18 years for a newborn), and some users may benefit from a more visual presentation of the extent to which their present contributions may grow over nearly two decades. By reframing and visualizing the value of their present contributions, we may be able to help users better recognize the benefits of their deposits.

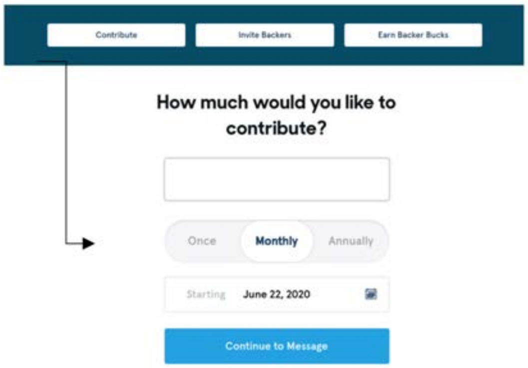
EXPERIMENT

Given these insights and the priorities of CollegeBacker, we decided to start with an experiment that changes the user interface of the contributors' online portal. For the treatment group in this experiment, we changed the default contribution selection from a one-time contribution (as in the control group) to a recurring contribution.

Control: Standard Design



Treatment: Monthly Deposit Default



RESULTS

This experiment launched in December 2020. We will continue the data collection phase until we have 1,000 individuals in both the treatment and control groups. We are currently developing options for a second experiment with CollegeBacker, which may include anchoring contribution amounts, and providing asset growth charts that allow individuals to compare the returns of different contribution options.

This project is in collaboration with the Social Policy Institute at Washington University in St. Louis.

Partner Type: **Tech** | Partner Cohort: **2019** | Project Type: **Field Study** | Project Status: **In-Field**

Changing How People View a CSA Program With Endorsements

BACKGROUND

Many public programs like 529 programs struggle to strike a comfortable balance between their proximity to a sponsoring governmental agency with program independence. Concerns about trust and credibility are at the heart of this discomfort: On one hand, programs feel pressure to create a distinct brand. Some programs may even want to intentionally distance themselves from negative perceptions of government that may spillover to affect program participation. On the other hand, government agencies inherently offer a degree of legitimacy and recognition that an independent program is unlikely to have.

We started exploring this question in our previous partnerships with the Keystone Scholars program, a CSA offered by the Pennsylvania Treasury, and with Propel, a fintech company that helps low-income individuals manage their EBT SNAP benefits through their Fresh EBT tool. Our previous work found that advertisements that jointly displayed both the program logo and the Treasury logo together were the most effective at driving interest. We extended this work over the last year by testing whether visual and text endorsements from varying sources could further bolster perceptions of credibility and trustworthiness of the program.

KEY INSIGHTS

To better understand how people perceived the Keystone Scholars branding, we first conducted qualitative work with mothers in Pennsylvania. During those interviews, we presented the mothers with the current Keystone Scholars marketing communications and solicited their reactions.

» The Keystone Scholars program communications that used bolder and more eye-catching branding were less well received. Some mothers had reservations about the program and worried that an offer for a free $100 from an unknown brand might be too good to be true.

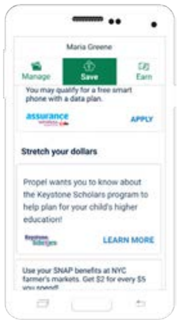
» When the communications showed that the Keystone Scholars program was part of the PA Treasury, it was viewed differently than when it was presented by itself. The people we interviewed often were unsure of what to make of the Keystone Scholars program. Including the connection to Treasury provided a cue for how to think about the program and shaped their initial impression of the program.

EXPERIMENT

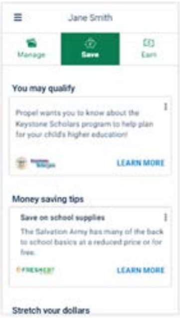
Given the importance of these contextual cues in shaping perceptions of credibility and trustworthiness, we wanted to continue iterating and refining the communications between the PA Treasury and families. Drawing on past research, we thought that including an endorsement from a trusted source or a personal testimonial would be effective in increasing perceived trustworthiness and credibility.

To test our hypothesis, we randomly presented Propel users eligible for the Keystone Scholars program with one of three different advertisements.

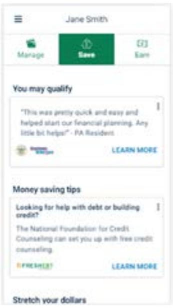
A. An advertisement presented with only the Keystone Scholars logo and a Propel endorsement,



B. An advertisement presented with a combination logo and a Propel endorsement.



C. An advertisement presented with a combination logo with a personal testimonial.



RESULTS

We tracked which of the three advertisements was the most enticing to users by measuring unique clicks on the advertisement. Our analysis found that a significantly higher percentage of users expressed interest in the program when they were shown only the Keystone Scholars logo with a Propel endorsement. There is no significant difference between the other conditions.

The analysis shows that individual's perceptions of how trustworthy or beneficial a program is can be shaped by contextual cues. Ultimately, we hope that increasing perceptions of trustworthiness increase interest so that more families participate in the program as well. Propel will continue displaying the successful advertisement for Keystone Scholars moving forward.

Partner Type: **NA** | Partner Cohort: **NA** | Project Type: **Lab Study** | Project Status: **In Design**

Learning from the Lab: Cartoon Avatars to Promote Retirement Savings

BACKGROUND

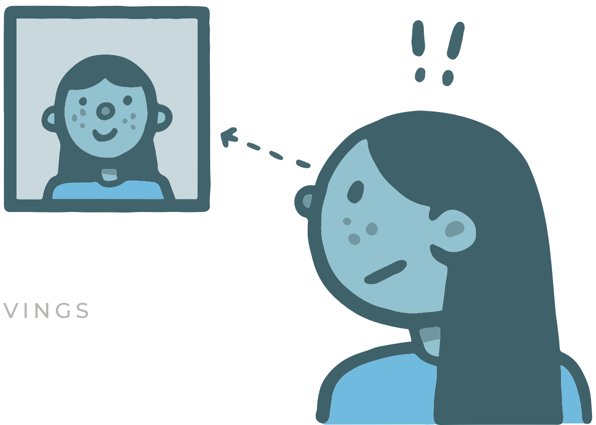
We tend to choose smaller-sooner rewards over larger-delayed ones, a concept known as temporal discounting. Temporal discounting means that we weigh benefits in the present more heavily than benefits in the future, and the further away that future is, the less we value those benefits now. Temporal discounting is one of the reasons why saving for retirement, a benefit realized decades in the future, is so difficult.

Researcher Hal Hershfield theorizes that one driver of temporal discounting is that we tend to think of our future selves as different from our present selves – and the less connected we feel to our future selves, the more we discount benefits in the future. Therefore, if we can increase a feeling of connection to ourselves in the future, we might be more prone to save for the future. Hershfield demonstrated this concept in a study in which participants who interacted with aged, photo-realistic avatars of themselves agreed to contribute more to their retirement income than participants that interacted with avatars of their current selves.

However, creating interactive, photo-realistic avatars in online account pages or apps for retirement plan providers might not be feasible. However, many applications, like Apple, Facebook, and Snapchat, already use cartoon avatars within their interfaces, so we wanted to investigate whether similar cartoon avatars could also be used to increase users' connections to their future selves. If the avatars can be aged to represent the users in the future, the aged avatars might help the users to connect to their future selves and increase money saved for their future.

HYPOTHESIS AND KEY INSIGHTS

People may have difficulty connecting to their future selves because they think of their futures selves as completely different people. People's connection to their future selves



may be linked to how much they feel they will change over time; the less changes anticipated, the higher potential connection to the future. Highlighting ways in which people remain the same across time may help improve connection to their future selves.

It is also possible that as people are making choices for the future, they are not keeping their future selves top of mind, but focusing on how the choices will impact their current selves. A more tangible form of the future self may help people place more focus on the impacts to the future self when making decisions with future implications.

We hypothesize that making one's future self more visible may make people more prone to save for the future.

EXPERIMENT

To investigate if cartoon avatars may be used to increase users' connections to their future selves, we created an avatar generator tool and then asked study participants about their connection to future self and a hypothetical allocation to their future selves. The avatar generator tool allows users to create an avatar from the shoulders up, with different cartoon facial features; we then "aged" the avatar by selecting a gray hair color and adding wrinkles to the face. We ran a pilot study to test out our generator and people's connectedness to the avatar and their future selves. We found that both their connectedness to the avatar and the connectedness to their future selves weren't very high. Therefore, we are designing an updated avatar generator with more personalization options as well as backgrounds that can signal personal interests, like family, sports or the arts, for example. We would also like to test whether aging an avatar of the current self or having the user create an avatar of their current self is more effective at increasing connection and allocation to the future selves. The experiment is expected to launch in the first half of 2021.

Partner Type:	Partner Cohort:	Project Type:	Project Status:
NA	**NA**	**Lab Study**	**In Design**

Learning from the Lab: Redesigning Retirement Savings Calculators to Nudge Users to Increase Contributions

BACKGROUND

Retirement savings projection tools and calculators are everywhere – seemingly every financial service provider and financial institution has their own version. The variation between these many different tools is staggering, both in how they are structured and in how they communicate the results. While there has been a lot of work focused on understanding the factors that motivate contributions to retirement savings, there seems to be a gap in understanding the best way to structure these calculators.

To better understand what the best way is to structure a retirement savings calculator, we conducted a series of studies exploring their different elements and features. We were specifically interested in the usability of these calculators and what design choices would be most likely to encourage users to engage in positive behaviors like increasing contributions to their account.

Experiment 1: Uncertainty and spend in retirement

HYPOTHESIS AND KEY INSIGHTS

The first experiment that we conducted focused on a kind of retirement projection that displays both savings accumulation and decumulation overtime. We were interested in exploring two distinct questions related to this projection"

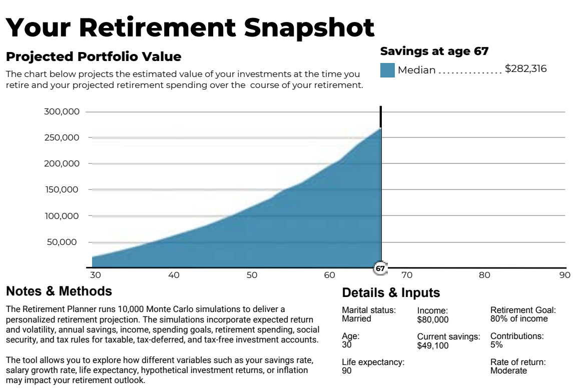
1. Does graphically displaying decumulation change how a user thinks about their retirement savings?
2. Does introducing uncertainty by showing multiple estimates for how savings might grow over time change how users think about their future financial wellbeing?

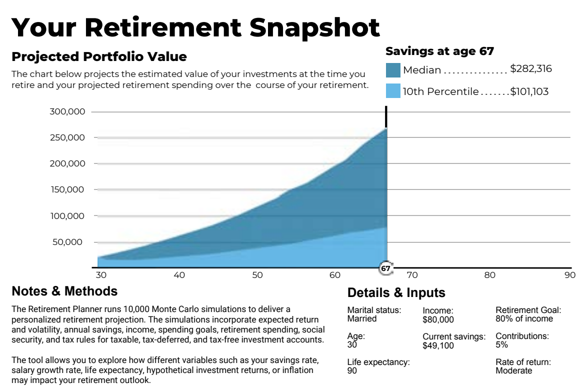
EXPERIMENT

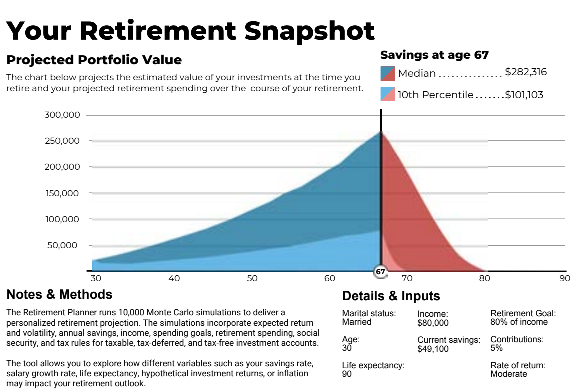
We designed a 2x2 experiment where users were randomly assigned into 1 of 4 conditions:

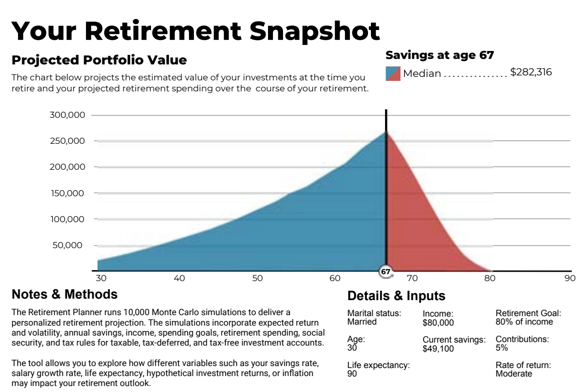
- **Accumulation with median only:** Users saw a graph that did not show decumulation over time and only showed the median estimate.
- **Accumulation with multiple estimates:** Users saw the same graph as in the first condition but with two estimates for future savings amounts.
- **Decumulation with median only:** Users saw a graph that showed both accumulation and decumulation over time with only the median estimates.
- **Decumulation with multiple estimates:** Users saw a graph as in the first decumulation condition but with two estimates for future savings amounts.

Participants reviewed the retirement projections for two different hypothetical cases – one more prepared for retirement and one less prepared. They were then to assess the future financial wellbeing of hypothetical cases, their confidence in their assessment, how accurate and useable the graph they thought was, and what they would recommend the hypothetical person to do.









RESULTS

We found that how the results from a retirement projection are displayed to users significantly changes how they interact with and understand those projections. Rather than consistently moving participants' assessments of financial wellbeing in one direction, showing decumulation had differential effects: participants rated the more prepared case as even higher and the less prepared case as even lower (p= 0.001 and 0.096, respectively). Introducing multiple estimates did not have a discernable effect.

The results of the study suggest that, perhaps unsurprisingly, people anchor on visualizations. We also saw that participants who were shown the full graph that included both accumulation and decumulation were significantly more confident in their assessments as well.

Rather than consistently moving participants' assessments of financial wellbeing in one direction, showing decumulation had differential effects: participants rated the more prepared case as even higher and the less prepared case as even lower.

Interestingly, the relationship between the projection and people's recommendations on behavior was not straightforward. People were much more likely to recommend the less prepared case to increase their contributions, regardless of condition. A simple comparison finds that respondents were significantly more likely to recommend increasing contributions when shown decumulation (p=0.035). However, controlling for other factors and looking at the interaction between the two conditions suggests this relationship is likely significantly influenced by other factors.

Experiment 2: Framing Spending in Retirement and Graphics

HYPOTHESIS AND KEY INSIGHTS

The second experiment that we conducted used decumulation and focused the type of graphic (line chart or bar chart) and the framing of retirement spending. Once again we were interested in how graphics and framing changed users perceptions on retirement readiness and willingness to contribute to their retirement.

EXPERIMENT

We designed a 2x2 experiment where users were randomly assigned into 1 of 4 conditions:

- **Years of retirement covered by savings with bar chart:** Users were told how many years their retirement was expected to cover based on an assumed annual spend and the bar **chart compared the years covered with the years expected in retirement.**
- **Years of retirement covered by savings with line chart:** Users were told how many years their retirement was expected to cover based on an assumed annual spend and the line chart showed when the user would run out of money.
- **Proportion of annual expenses covered by savings with bar chart:** Users were told how much they would be able to spend in retirement based on an assumed length of retirement and the bar chart compared the amount covered with the amount expected to be needed in retirement.
- **Proportion of annual expenses covered by savings with line chart:** Users were told how much they would be able to spend in retirement based on an assumed length of retirement and the line chart showed the decrease in balance over time.

Study participants were asked to assess their own retirement status using a projection calculator as well the status of a theoretical individual's retirement savings.

RESULTS

We found that the graphics (bar chart or line chart) made little difference to perceptions about retirement readiness. But framing played a large part! When the projections were framed in terms of years of retirement covered, users felt much less ready. Participants were not able to stretch out their dollars to make them last longer in the years of retirement framing conditions, so it seemed as though they were more likely to run out of money. Participants in the proportion of annual expenses covered condition were much less concerned about the state of their savings, since they were primed by the framing to think their money could be stretched to last through their retirement. They didn't seem particularly concerned that the money available each year would not be enough to meet their needs or have an enjoyable life.

Partner Type: **NA** | Partner Cohort: **NA** | Project Type: **Lab Study** | Project Status: **In Analysis**

Learning from the Lab: Making Investing Attractive for Low- to Moderate-Income Households

BACKGROUND

Research shows that lower income households are less likely to participate in wealth-generating behaviors such as investing. While income may be part of the explanation for this investment gap, it doesn't paint the entire picture. Given the potential that investments have for long term returns, there is a need to understand the other factors (e.g., emotional, social, psychological) that drive low- to moderate-income households (LMI) to participate in or refrain from investing.

HYPOTHESIS AND KEY INSIGHTS

We conducted online studies to better understand the factors that predict investing behavior among LMI households. In doing so, we examined two hypothesized mechanisms: risk and mental accounting.

Risk: Research by Barauh and Parikh indicates that risk-averse individuals are less likely to invest, and that this outcome varies depending on factors such as gender, age, and financial literacy. However, limited research has been done to understand the nature of this perceived riskiness, and how it varies by income level. LMI households may simply be more sensitive to investment risks because they are more risk-averse than higher-income households. LMI households may not understand the complexity of investing and may see investments as something beyond their financial capabilities. Therefore, we hypothesized that LMI households would perceive investment accounts as riskier than high-income groups would.

Mental accounting: People are more likely to spend money differently depending on where the money is coming from and where it's going. We refer to this phenomenon as "mental accounting". We hypothesized that LMI households have preconceived notions about the terms "investing" and "savings" and would therefore be less likely to invest than higher-income groups.

EXPERIMENT

We ran two online studies to understand how investing behaviors and perceptions of investing differ among various income groups: low (<$30,000), moderate ($30,000 to $48,000), middle ($48,000 to $73,000), and high (>$73,000).

Study 1 explores the relationships between income levels (low, moderate, middle, and high), financial literacy, types of investment accounts owned, perception of investment risks, and individual factors such as risk propensity and demographics.

Study 2 aims to understand the factors that impact intentions to invest. We examined how risk propensity and mental accounting impact investment decisions using a hypothetical scenario where participants read about an account labeled as investing/savings that had either no, low, medium or high risk. Participants then indicated their choice to save/invest in the account, amount willing to save/invest, length of time of leaving money in the account, and likelihood of recommending the account to family.

RESULTS

The results from Study 1 indicate that while majority of participants have financial products such as stocks, bonds, and retirement accounts, fewer LMI individuals tend to have such accounts. For instance, while approximately 45% of middle- and high-income people in our sample reported owning stocks, only 11% of low-income individuals do. We also found a positive association between risk propensity and one's perception of investment risks. In other words, an individual's decision to invest in a risky investment account was partially accounted for by their perception of whether they are generally a risky person or not. We didn't find any associations between risk propensity (averseness) and income levels, even after controlling for all demographics. We also didn't find any associations between income levels and perceptions of investment risks.

These findings suggest that one's choice to invest in either low or high-risk accounts doesn't vary by income. However, investment accounts typically have more varied risk levels. We therefore used Study 2 to examine multiple risk options as well as the mental accounting mechanism.

Study 2 was run before the pandemic. We found that account risk (e.g., chance of losing one's return) had the greatest impact on one's investment/savings decisions. Moreover, even though riskier accounts had larger associated returns, individuals seemed to be most focused on and most influenced by the possibility of losing all or part of their money. Consequently, participants were significantly more likely to opt for accounts that had lower risk and smaller returns, as opposed to accounts with higher risk and larger returns.

Individual risk propensity also played a role – as the risk associated with the account increased, those with a high-risk propensity were significantly more likely to opt for the higher risk accounts than those with a low-risk propensity. Participants put more money in lower risk accounts and left that money for longer amounts of time. Similarly, people were more likely to recommend lower risk accounts to their family and friends. The investment/savings label did not seem to affect any of these outcomes. Moreover, none of these findings varied by income. We hypothesize that the lack of significant differences may be due to methodological concerns (e.g., hypothetical investment account description didn't match people's mental models of investing, people may have been thinking about spending their refund (windfall) in a nonrealistic manner, etc.).

Overall, these findings suggest that risk matters the most; the higher the risk, the lower the desire to put money in the account. Higher risk accounts also lead people to leave less money in the account, and for shorter periods of time, regardless if it's an "investing" or "savings" account. Given that people are particularly sensitive to risk during trying times, financial service providers that aim to drive savings or investment should be mindful of how they describe their products and the associated risk.

After the start of the pandemic, we reran Study 2 with updated methodologies; we are currently analyzing the data to examine the impacts of the pandemic on these trends

GETTING THE WORD OUT

A core part of our mission at the Common Cents Lab is to disseminate our research and to share our behavioral science expertise to allow other practitioners apply our findings to their own work.

Given the unique nature of 2020, a global pandemic meant that our research dissemination looked a little different than in previous years. While we greatly missed holding our annual conferences in San Francisco, CA, and Durham, NC, we are excited that we had the opportunity to learn how to reach different swaths of people and through different channels.

To get the word out in 2020, we:

- Published 19 bylines across 8 different media outlets and two blogs we are involved in. Looking through the pieces listed below, you'll see that they included articles offering expert suggestions and perspectives (with a big focus on the pandemic), and synthesizing our research findings.
- Contributed to 22 media pieces – including one podcast! – in which we lent our behavioral science expertise, advice on timely topics, and discussion of our work. Through these, we were able to reach audiences of 30 different media outlets.
- Spoke at 9 conferences, where we got to interact with other practitioners in the field and chat about how our work and findings fit into the broader discussion of financial health research.

We are looking forward to future virtual and in-person workshops, as well as more casual happy hour meet-ups around the US and abroad, allowing us to open our network wider than ever, and further the field's collective research and understanding of how to improve financial health.

Below you will see where we have been in 2020, and gain an idea of where you might see us in the future!

PRESS AND CONTENT

Bylines	Media Outlet	Date
Lenders Have Reason to Encourage Faster Debt Payoffs	American Banker	January, 2020
Considering an Improved Auto Finance Calculator	Auto Finance Journal	February, 2020
Hoop Dreams	People Science	February, 2020
Why We Make Better Money Decisions During a Crisis	Fast Company	May, 2020
Budgeting Strategies for Government Stimulus Payments	FinTech Futures	May, 2020
Four Ways to Help Workers Build Emergency Savings	HR Daily Advisor	July, 2020
Avoiding the Downside of Instapay: Five Behavioral-Science Based Principles to Make Paycheck-on-Demand Benefit Low-Income Users	NextBillion	July, 2020
Eating Your Company's Feelings	People Science	November, 2020
Rebooting Savings During the COVID-19 Crisis	FinTech Futures	November, 2020

Blog Posts	Channel	Date
The Role of Random in Addressing America's Savings Problem	Center for Advanced Hindsight	January, 2020
Reducing COVID-19 risks: From hand-washing to emergency savings	Center for Advanced Hindsight	March, 2020
Helping Hourly Workers Weather COVID-19	BlackRock's Emergency Savings Initiative	April, 2020

Best Practices: How to Help Employees Navigate the Behavioral Pitfalls	BlackRock's Emergency Savings Initiative	April, 2020
The Difference Between 'Not Spending' and Saving (contributing authorship)	BlackRock's Emergency Savings Initiative	May, 2020
Our Commitment to Structural Change (contributing authorship)	BlackRock's Emergency Savings Initiative	June, 2020
Best Practices: How to DIY a Savings Intervention in Your Organization	BlackRock's Emergency Savings Initiative	August, 2020
Every Penny Counts: A Case Study in Increasing Savings Through Coin Deposits from Digital Credit Union	BlackRock's Emergency Savings Initiative	September, 2020
Strings Attached: Why the Payroll Tax Deferment Could Hurt Savers	BlackRock's Emergency Savings Initiative	September, 2020
Fintech MX Tackles the Financial Literacy Gap by Designing for User Bandwidth	BlackRock's Emergency Savings Initiative	October, 2020
Introducing Common Cents Lab Global	Center for Advanced Hindsight	October, 2020

Contributions	Media Outlet	Date
Rise of the Invisible Bank	American Banker	January, 2020
A Stanford Behavioral Strategist on Three Opportune Moments to Save Money	Quartz	January, 2020
Podcast 232: Kristen Berman, Common Cents Lab	LendAcademy	January, 2020
Building a Savings Cushion in a Time of Emergency	Associated Press (17 additional media pickups)	March, 2020
How to Build an Emergency Cushion in the Middle of an Emergency	New York Times	March, 2020
Common Cents Lab Expands Globally to Improve Financial Health Using Behavioral Science	Intrado Globe News Wire	March, 2020

Exemplify the "People Helping People" Philosophy During Financial Literacy Month	Credit Union National Association	April, 2020
Make this Smart Money Move to Get You Through the Coronavirus Quarantine	CNBC	April, 2020
Relief Checks are a Lifeline for Some, a Cushion for Others	Associated Press (1 additional media pickup)	April, 2020
Pandemic Hurt Your Income? Here Are the Best and Worst Ways to Get Fast Cash	MarketWatch	May, 2020
Your Brother or Sister or Mother is Asking for Money. Now What?	New York Times	June, 2020
Durham Educating Businesses on Reopening Safely	WRAL	June, 2020
Unemployed Americans Wait While Washington Debates	NextAdvisor	August, 2020
Seven Financial Hacks for Your Wallet to Survive the Pandemic	Moguldom	August, 2020
A Behavioral Expert Recommends Three Budgeting Tips During the Coronavirus	CNBC	August, 2020
Stimulus One of Few Options to Help Households and Businesses Survive	Duke Today	October, 2020
With Stimulus Talks Stalled, Many Turn to Local Nonprofits for Help	ABC13	October, 2020
Area Businesses Say They Can't Survive Without New Government Relief Package	WRAL	October, 2020
Behavioral Expert: 3 Mental Roadblocks Preventing You from Making Hard Financial Decisions	CNBC	October, 2020
Don't Rely on a Second Stimulus Check for Money	CNBC	October, 2020
Six Tips for Surviving Without More Stimulus	CNBC	December, 2020
Americans are Feeling Guilty this Christmas About their Finances	MarketWatch	December, 2020

THE END

Whew... you made it!

We hope you learned a little about what works and also what doesn't. We hope this sparked some curiosity and some ideas in your own life and your own work. And most of all, we hope you enjoyed reading this!

Want to learn even more & hear what we're doing next?

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