

BEHAVIORAL SCIENCE FOR **INCLUSIVE AND IMPACTFUL DIGITAL PAYMENTS**

Introduction

When delivered digitally, government-to-person (G2P) payments—which may include government wages, pensions, social benefits and tax refunds—enable governments to distribute payments in a safe, rapid and transparent way while also minimizing costs. Digital G2P payments, when linked to transaction accounts, have the potential to promote financial inclusion among those who are new to digital financial services.¹ Digital G2P payments to transaction accounts are a gateway to access other financial products (e.g. savings and credit) and services (e.g., payments). Having a transaction account also provides access to digital services such as telemedicine, e-commerce or distance learning.² This is especially relevant during the COVID-19 pandemic, when authorities are trying to provide critical services to G2P payment recipients through digital platforms. However, **if the digitization of G2P payments does not account for barriers that may hinder equitable access and use of digital financial services, program designers and implementers risk further excluding key target groups that have been disproportionately excluded from access to financial services in the past, such as women, elderly persons, marginalized cultural groups and those experiencing poverty.**³

To ensure digital G2P payments are conducive to inclusion and empowerment, programs should support all target groups as they go through the steps of registering for and continuously using available digital products and services beyond cashing out. Behavioral barriers—such as distrust of certain digital services and hassle factors, or inconveniences and/or obstacles that impede the desired behavior—play an important role in whether digital financial services are taken up and used as intended. **Research from behavioral science, the study of human behavior, offers valuable insights about how human beings make decisions and take actions when faced with new opportunities and processes.** By better understanding the user experience in accessing and using digital payments and services and identifying potential elements of the context that may influence behaviors along their journey, program designers can better plan for those elements and design solutions that mitigate challenges for payment recipients, increase usage and maximize benefits. However, it is important to note that some barriers—such

¹ Klapper, L., & Singer, D. (2017). The opportunities and challenges of digitizing government-to-person payments. *The World Bank Research Observer*, 32(2), 211-226.

² <https://blogs.worldbank.org/voices/responding-crisis-digital-payments-social-protection-short-term-measures-long-term-benefits>

³ Datta, S., & Desai, M. (2018). Transforming Financial Inclusion: Using Behavioral Science From Financial Access to Financial Health. ideas42. https://www.ideas42.org/wp-content/uploads/2019/04/142-1020_ABPaper_FINAL-DIGITAL.pdf

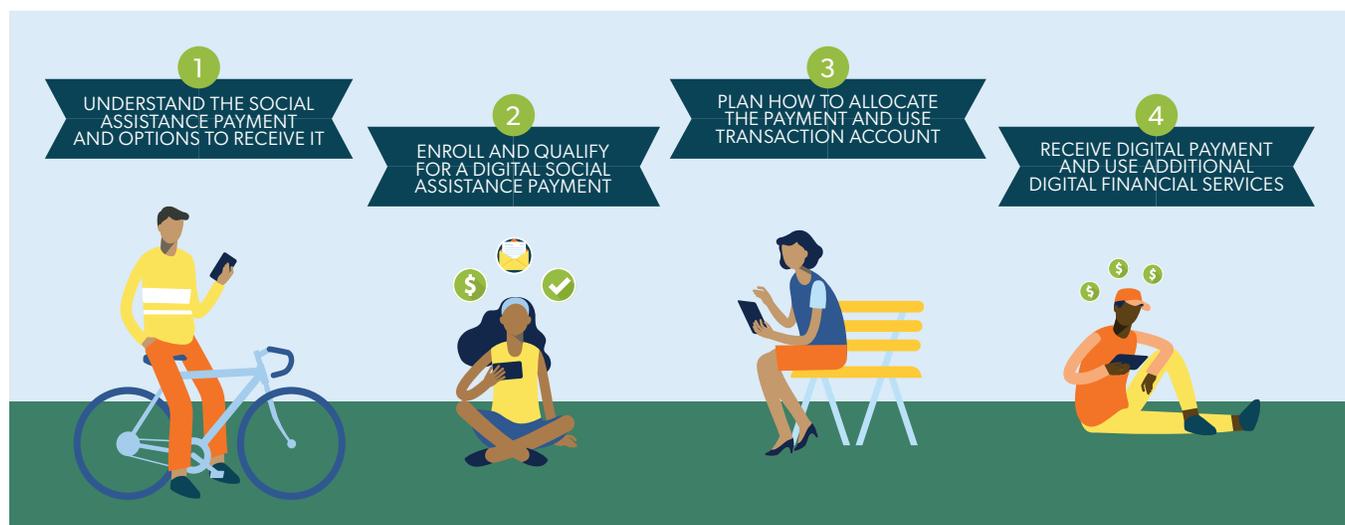
as distrust of digital services—may stem from legitimate concerns around data privacy and cybersecurity which require an underlying element of process-based interventions which are beyond the scope of this guidance note.

This brief guidance note primarily focuses on social assistance G2P payments and includes some selected tips for policymakers and practitioners to consider when designing and implementing digital social assistance programs that aim to increase financial inclusion and economic empowerment among marginalized groups. The tips are derived from previous work done by ideas42 and its partners on using insights from behavioral science to increase financial inclusion and optimize social assistance programs. There are several insights from the research on behavioral science to consider and the applicability and potential impact of each insight will, of course, depend on the context of each program. For more detailed overviews of the research that this note draws from, please see the documents listed below.

- ▶ Behavioral Insights to Better Design Social Protection Cash Transfers in Emergencies: [Infographic](#) and [Checklist](#)
- ▶ Transforming Financial Inclusion Using Behavioral Science: From Financial Access to Financial Health
- ▶ Behavioral Design for Digital Financial Services: How to increase engagement with products and services that build financial health: [Playbook](#) and [Checklist](#)

User's journey to accessing digital payments and using digital financial services

Although the specific steps recipients have to take to access digital payments and use digital financial services may differ by program, they are likely to include: understanding the option of a digital payment, enrolling for the digital payment, planning to use the payment and account services, and following through on plans for using the payment and services. These steps are outlined in the graphic below. Planning for how the social assistance payment will be used will depend on the beneficiaries' preferences and prevailing ecosystem to support digital payments and digital financial services (e.g. degree of electronic payment acceptance among merchants or service providers they frequent).



It is possible to anticipate several behavioral barriers, or roadblocks that influence stakeholder decisions and actions, which may stand in the way of access and utilization of digital payments and services. Behavioral science offers a lens for better understanding the potential behavioral barriers and provides tools for designing or redesigning programs to address those barriers. Some possible behavioral barriers with potential solutions, based on research from behavioral science, are outlined below:

POTENTIAL BEHAVIORAL BARRIERS

found along the journey to accessing digital payments and continuous use of digital financial services, with potential solutions based on research from behavioral science



1 UNDERSTAND THE SOCIAL ASSISTANCE PROGRAM

and the options for how to receive it (if there are options)

To achieve optimal outcomes from digital payments and minimize program exclusion, potential recipients must learn about and understand the purpose of the social assistance payment. At this stage, recipients will most likely adapt their behavior as a result of becoming aware of the program. They may also begin to plan how they will access and use the social assistance payment. Clear and simple information about the payment can help them prepare.

1. Recipients who are new to the social assistance program may wonder whether the program is for them, what steps they will have to take to access the payment and how it can be used. It is therefore important to provide clear messages about the purpose of the payment (i.e. rent subsidy, support for food and supplies, cash to cover health care fees). Messages should also be specific about who the payment is meant for and what steps recipients will have to take to access the payment. Recipients can then begin planning both how they will access the payment and also what they might do with it.

Relevant Literature:

- ▶ Turning a Shove into a Nudge? A “Labelled Cash Transfer” for Education [\[Link\]](#)
- ▶ The power of suggestion: Inertia in 401 (k) participation and savings behavior [\[Link\]](#)
- ▶ ‘Labeling’ can improve cash transfer programs: Evidence from Kenya [\[Link\]](#)
- ▶ Can There Ever Be Too Many Options? A Meta-Analytic Review of Choice Overload [\[Link\]](#)
- ▶ Transforming Financial Inclusion Using Behavioral Science: From Financial Access to Financial Health [\[Link\]](#)
- ▶ The Future of G2P Payments: Expanding Customer Choice [\[PDF\]](#)

- ▶ Share clear messaging about the purpose of the payment, who it is for and how it will be delivered.
- ▶ Naming the program according to its purpose—for example, “school fees social assistance program”—has proven to increase the likelihood that recipients will spend the payment toward that purpose.

2. If payment delivery options exist, recipients will need to understand the options for how to receive the payment. The benefits and the process for taking up a digital payment option must be salient for them to quickly weigh the benefits and costs of signing up for digital payments of the benefit. Options can enable recipients to choose the method, providers and account type that would be most convenient to them. However, when presented without tools/strategies to support the decision-making process, numerous options can overwhelm recipients and lead to no decision or a decision that isn’t aligned with their preferences. In addition, recipients who are new to digital financial services may not immediately account for the long-term benefits of having an account when comparing it to the cost of signing up and learning how to use it.

- ▶ Trim unnecessary information about the options in order to keep the details simple; Use the same attributes to describe all options so users can quickly evaluate trade-offs.
- ▶ If possible, set the digital delivery mechanism as the default with the option to opt out instead of asking recipients to take the extra step to opt in. However, the program should assess whether financial access points to cash out digital payments are conveniently available to the beneficiary when deciding to make digital payments the default.
- ▶ Make the benefits of receiving the social assistance payment digitally salient by highlighting the additional benefits of access to digital financial services.

3. Some potential recipients may not have the necessary devices or digital literacy to access the program. Facilitating access to devices and providing simplified instructions will be necessary to minimize exclusion.

- ▶ To reduce exclusion of marginalized groups, provide the mobile phone or device necessary for the digital payment along with training and instructions for how to use the device.
- ▶ To help tailor instructions or trainings to the target group, user-test them with a small sample of recipients.
- ▶ If devices and training will be included, state those benefits upfront.

4. Recipients who are new to digital financial services may be reasonably distrustful of their intangible nature and the lack of human touch points. Each step in the process, whether it is registration, receiving the social assistance payment, checking balances or processing a transaction represents an opportunity either to reinforce or break feelings of trust and confidence.

- ▶ Provide signals that build trust in the platforms such as a badge from a reputable institution certifying its safety, testimonials from satisfied customers, receipts of successful transactions and a customer service number.

- ▶ Provide explanations when sensitive information, such as the recipient's address or ID number, is requested digitally.
- ▶ If transactions include periods of time while recipients have to wait for a transaction confirmation or a response about the registration, provide brief details about the back-end operational process to reinforce trust and buy in to the process.

5. (Perceived) norms about which groups are more likely to use digital financial services may impact recipient and service provider behaviors, which can then influence which households and household members sign up for digital payments. In addition, the look and feel of digital platforms and marketing materials send subtle signals about who it is designed for, which may not resonate with every recipient's identity and even alienate some.

- ▶ Use gender or target group centric social proof, or evidence of what others are doing, in communication materials to make hidden norms of the use of digital payments and services among marginalized groups visible. This could include sharing stories or convincing statistics about take up of digital payments and services among target groups.
- ▶ Contextualize the look and feel of products and materials through the use of local languages, eliminating jargon and graphics that target populations can relate to. User-test materials with a small sample of the target population to help tailor materials.



2 ENROLLMENT for a digital social assistance payment

Simplifying the assessment or targeting and enrollment processes for programs can ensure that the social assistance payment gets to the households who need it most or most urgently.⁴ To increase the potential for long-term financial inclusion, programs should make it possible for recipients to opt into digital payments with as minimal steps as possible. The most vulnerable populations are likely already facing the strain on their attention as they juggle multiple needs and emergencies, thus unnecessary administrative hassles could potentially lead to the exclusion of those most in need of the payment and the benefits of financial inclusion.

1. Factors such as time and mobility constraints, displacement, instability or lack of resources may make it difficult for marginalized groups to quickly provide background documents and take multiple steps for enrollment.

Relevant Literature:

- ▶ Behavioral Design: A New Approach to Development Policy [\[PDF\]](#)
- ▶ Happiness on Tap: Piped Water Adoption in Urban Morocco [\[Link\]](#)
- ▶ Behavioral Economics and Social Policy: Designing Innovative Solutions for Programs Supported By the Administration for Children and Families [\[PDF\]](#)
- ▶ Beyond good intentions: Prompting people to make plans improves follow-through on important tasks [\[Link\]](#)
- ▶ Scaling Up Social Assistance Payments as Part of the COVID-19 Pandemic Response [\[PDF\]](#)

⁴ For more detailed guidance on assessment and enrollment processes refer to the Sourcebook on the Foundations of Social Protection Delivery Systems [\[PDF\]](#)

- ▶ When individuals face hassles, whether seemingly small or large, they often are more likely to procrastinate and forget to follow through at a later time. Reduce administrative requirements to streamline enrollment and minimize exclusion of potential recipients who may find it difficult to access their background documents and engage in multi-step enrollment processes.
- ▶ Individuals are more likely to follow through on tasks if they have made a concrete plan for when and how they will complete a task. Prompt recipients to plan when and how they will complete necessary enrollment steps, send reminders along the way, make it clear how far along a multi-step process they are and how many steps remain, and provide additional support—such as sessions to complete the steps with an agent—whenever possible.

2. Information needed to assess and enroll potential recipients may already be available through other programs or administrative data.

- ▶ Leverage available recipient information from existing programs and service providers to expedite the enrollment process and minimize burden on recipients.
- ▶ Avoid asking the same information several times in the process—for example, when registering for the social assistance program and then when the payment service providers (PSP) creates the account.
- ▶ When available, allow recipients to use the accounts they have to disburse payments quickly and allow recipients to continue using the PSP that works best for them.



3 **PLAN HOW TO ALLOCATE THE SOCIAL ASSISTANCE PAYMENT** and how to use the transaction account

The fact that the social assistance payment is unlikely to fully cover forgone income makes it crucial that recipients prioritize how to access and use their payment based on the size of the benefit. Planning will depend on whether it is an emergency type or more regular social assistance payment. The decision on whether recipients plan to cash-out all benefits or save funds in the account will also depend on the prevailing financial sector ecosystem—the proximity of cash out points and the degree to which digital payments are accepted or common in their context. For instance, depending on the payment amount, it may be better for the recipient to cash out their payment to reduce transaction costs of future visits to the payment point. Broader access to a transaction account, however, provides an opportunity for recipients to access other financial services and products that

Relevant Literature:

- ▶ Cash and Change: Using Behavioral Insights to Improve Financial Health in Three Cash Transfer Programs [[PDF](#)]
- ▶ Consumption Smoothing and Frequency of Benefit Payments of Cash Transfer Programs [[Link](#)]

can help improve their financial lives. In this context, recipients can decide to plan on using digital financial services to achieve their productive and development goals by saving in their account, making payments or developing a healthy financial history to access credit.

1. Recipients are likely to have numerous demands competing for their attention, which are probably magnified by the added stressors from the effects of the COVID-19 pandemic. Recipients can quickly identify the best way to spend their social assistance payment toward their priorities, when prompted to do so. However, upon receiving the payment, immediate needs might seem more pressing. Hence, simple and clear heuristic, or rules of thumb, for how to allocate their payment can help promote optimal use of funds received. Research from behavioral science has shown that a prompt to plan how recipients can allocate their payment toward their priorities, as close as possible to the payment date, increases the likelihood that recipients will follow through on their plans and avoid temptation spending.

- ▶ Prompt recipients to make a plan for when and how they will take specific actions aligned with their spending and digital financial services use goals right before receiving the payment.
- ▶ Design communication material to prompt recipients to consider the total amount they will receive throughout the entirety of the program based on which they can make a plan for how to use that payment toward a larger, yet attainable, goal.

2. Recipients' mental model of the transaction account might not make it conducive to thinking about building balances. They may view the new accounts more as a pass-through channel for the social assistance payment rather than as vehicles for making payments and building savings. They may also fear unexpected fees or that the cash will disappear if they don't fully cash out immediately.

- ▶ Make services and associated fees salient during the planning prompt.
- ▶ Minimize transaction costs.
- ▶ To build trust and encourage action, share service-specific use cases or norms—for example, convincing statistic about how much people save in the accounts or suggestions about the recommended amount and frequency of saving.

3. Certainty around receiving social assistance payments can provide a basis for planning, so when possible, communicate how much, when, and for how long recipients can expect to receive the social assistance payments.

- ▶ Plan the frequency and value of the payments in order to clearly communicate this expectation to recipients through program description materials and messaging.



4 RECEIVE THE DIGITAL PAYMENT and use additional digital financial services

Improving overall financial health of recipients is typically one of the key goals of social assistance programs. Once recipients receive the payment, they must follow through on their plans for how to allocate it and how to use the additional digital financial services. While making concrete plans is useful, additional measures can be taken to support recipients in following through on these plans.

1. Once the account is set up and the payment is done, digital financial services beyond cashing out may become less “top-of-mind” for recipients and engagement may drop.

- ▶ For those populations where there is a well-developed ecosystem to support use cases for digital payments, time outreach campaigns and reminders so that they reach users when they are most likely to need the service and can immediately act on them—for example, by walking users through the process of transferring mobile money at the time that they attempt to cash out in person with an agent.

2. It may be difficult to build long-term savings balances because of “present-bias”—the intention to save may become overpowered at the time of payment because by nature, we are all overly focused on today’s needs and costs at the expense of benefits in the future.

- ▶ Make the recipient’s future selves and their needs more vivid and salient to them in the present. For those contexts where there is adequate infrastructure and capability, in the planning tools, prompt or default recipient to automate the transfer of a portion of their payment to a savings account.

3. Recipients may be anchored to certain ways of doing things especially in cases where certain transactions that were previously only possible in-person are now made possible digitally. They may default to digital for certain functions, such as checking balances, but revert to cash or in-person services for others, like making purchases. They may also be deterred from using new, less familiar digital financial services by small hassle factors. Or perhaps they are subject to status quo bias, the overestimation of the difficulty of switching to a new method of doing something. This can prevent them from switching from cash to digital financial services.

- ▶ Add a human element by personalizing marketing messages so that they are less generic, grab users’ attention and initiate a response.
- ▶ Use available resources from behavioral science such as the [ideas42 digital adaption playbook](#) to review the user process for each digital financial service to make sure they are easy to engage with and involve minimal costs.

Conclusion

The rapid expansion of digital G2P payments has the potential to also create a pathway to long-term financial inclusion and economic empowerment for those who in the past have been disproportionately excluded from financial services only if programs are designed and implemented in a way that accounts for potential behavioral barriers to use of services. Behavioral science offers tools and insights that can help program designers and implementers anticipate and design for potential behavioral barriers. Some of the insights are included in this document but there are many more insights from the literature which may be applicable depending on the context. Each program may include different processes and requirements for recipients, each payment service provider might offer different sets of digital financial services and the functionality of the available devices for the platforms will differ by location. ***The digital nature of the initiative makes it possible for policymakers and designers to carry out low-cost A/B testing to quickly compare behaviorally informed design elements to assess which insights work best for each program in order to allocate resources most effectively.***

This Guidance Note is prepared by ideas42 with inputs from the World Bank Group's G2Px Working Group.

CASE STUDY Using behavioral insights to improve financial health in Kenya

ideas42 collaborated with the World Bank and the government of Kenya to design and pilot scalable interventions to improve financial outcomes for beneficiaries of cash transfers programs.

Improving long-term financial health is one of the key goals of cash transfer programs. However, this requires beneficiaries to save some of their cash transfer to purchase assets, something many want to do but have difficulty accomplishing. While saving can be financially infeasible for some due to daily expenses and unexpected costs, like health emergencies, interviews with recipients revealed that behavioral barriers were also involved. Interviews revealed that many beneficiaries had both the intention and the means to save, but their environments as well as some design features of the cash transfer programs were not optimally designed to help them do so. This includes the lack of any decision-making tools or orientation toward financial goals in the design of the programs, the perception that most people in the community do not save money, and program designs that foster the view that the payment is meant for a single, immediate purpose rather than encouraging people to allocate the money to multiple purposes, including savings.

To address this challenge, ideas42 and the World Bank collaborated with the government to design a “package” of behavioral interventions to be implemented alongside the cash transfer. To maximize impact, the interventions were scheduled as close as possible to the cash transfer date, and were implemented in community meetings. The intervention included a goal setting and planning activity to help beneficiaries identify how much they will save from each transfer to reach their selected goal, a money pouch with separate “saving” and “spending” pockets to help beneficiaries immediately translate their mental accounting from the goal setting and planning activity into physical separation upon receiving the payment and SMS messages to remind them of the actions they intended to take.

One month after the intervention, beneficiaries who received the behavioral interventions were 9 percentage points more likely to report having a productive goal and saved 41% more than those who did not receive the intervention. They were also 45% more likely to report completely repaying their debt.

 [Read full paper](#)

CASE STUDY Increasing engagement with mobile banking in Nigeria

In 2014, ideas42 and the Busara Center for Behavioral Economics worked with a major bank and telecommunications company in Nigeria to increase the use of mobile banking accounts, a majority of which were dormant or under-used. SMS campaigns were redesigned using behaviorally informed language to encourage women—who access and use banking products at a lower rate than men in Nigeria—to use their accounts.

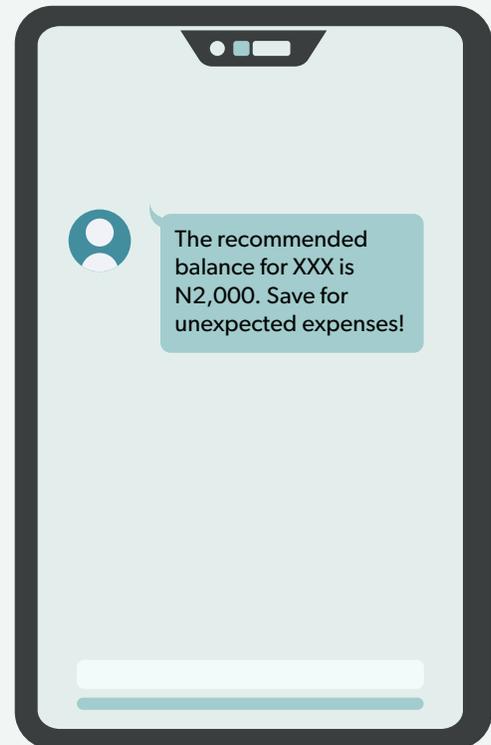
Initial quantitative and qualitative research revealed that customers primarily used their mobile banking accounts as a vehicle for buying call credits, or airtime, as opposed to seeing it as a vehicle for accumulating savings. Customers also did not fully trust the product and did not observe many of their peers using it.

The bank and telecommunications company delivered behaviorally informed SMS campaigns to a total of 75,000 customers over the course of a week. Each sub-group received three messages in total. The designs utilized different forms of “social norms,” or the idea that people’s choices are significantly influenced by the behavior of others. One set of messages utilized “injunctive norms,” or what one ought to do, and provided relatively small but significant recommended savings levels that customers should have in their account. This was done to set a goal and shift the perception of the account away from an airtime buying vehicle to one that can accumulate savings over time. The other set of messages used “descriptive norms,” or what others are doing, and highlighted the widespread usage of the product by customers’ peer groups.

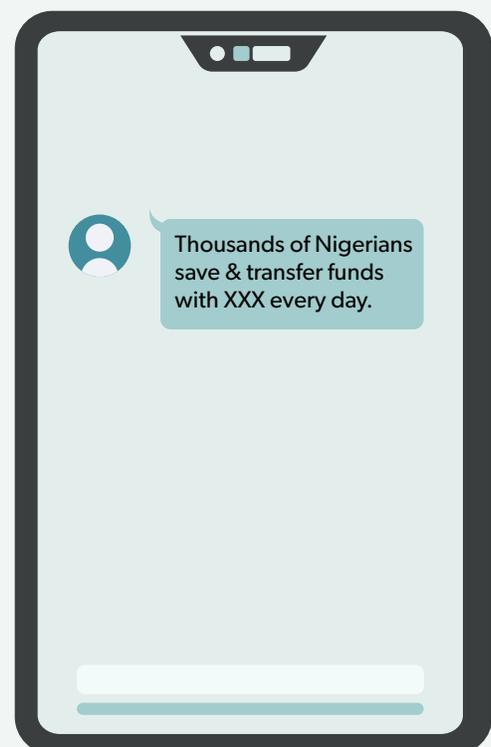
Injunctive norm messages, which had the best outcomes, resulted in increased deposits by women with active accounts with a 0.82 percentage point increase in treatment from a baseline rate of 1.81% in the control (45% increase in treatment compared to the control, $p < 0.05$), as well as by women with inactive accounts (0.08% of inactive women in treatment deposited compared to 0% in control, $p < 0.10$).

[Read full paper](#)

INJUNCTIVE NORM EXAMPLE



DESCRIPTIVE NORM EXAMPLE



CASE STUDY

Increasing uptake of a digital wallet among women in Pakistan

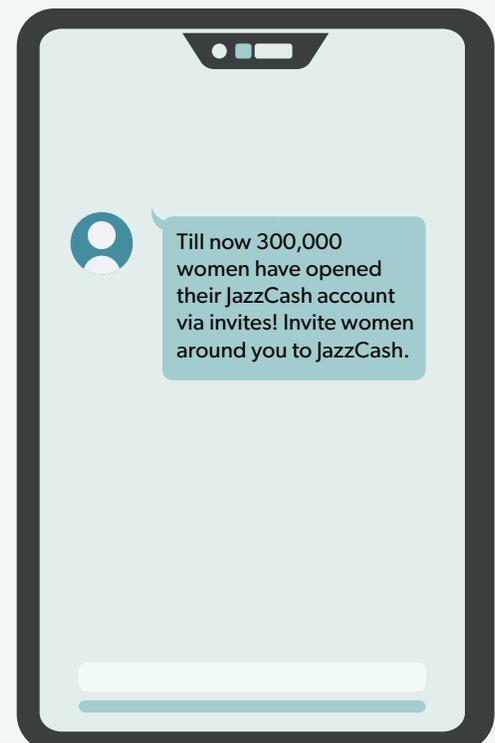
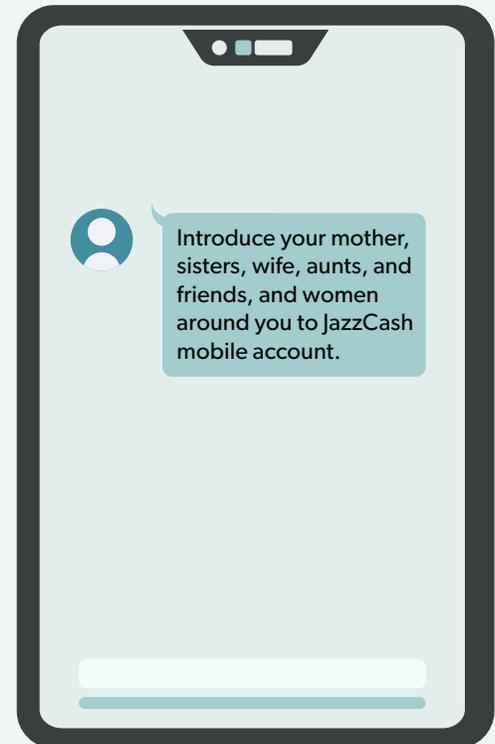
In Pakistan, ideas42 and Women's World Banking partnered with a large telecommunications company that had started offering a digital wallet for mobile financial transactions, which increased their customer base exponentially across the country. Yet, only 10-15% of their customers were women.

To address this challenge, ideas42 tested behaviorally framed SMS messages sent to existing customers in order to encourage them to refer their female friends and family as new customers. Ideas42 found that hesitation to reach out to women, or see them as potential customers of digital financial products, were among the main reasons why women were not typically referred through this channel. Therefore, a set of messages were written in a "gender-centric" manner, priming individuals to think specifically of women within their networks who could be referred. In all cases, people who referred new customers received a small financial incentive, and so SMS messages highlighting this incentive were compared with those that did not highlight the incentive and instead used "behavioral framing."

Overall, ideas42 found that sending SMS messages with social norms framing was an effective tool for increasing customer referrals overall. While messages highlighting financial incentives were the most effective, with up to 7.1% of recipients sending referrals relative to the 4.5% who did not receive messages, those who instead received behaviorally framed messages increased referrals by almost as much (with 6.2-6.4% sending referrals), implying scope for further research into whether the financial incentives are a necessary expense relative to gains that could be had with behavioral framing alone.

Ideas42 also found that the behaviorally framed SMS messages increased new female customer sign-up by up to 64% more than the firm's standard marketing efforts for the referral campaign. Messages with "gender-centric framing" were found to be most effective at attracting new female customers when they were sent to current female customers, rather than men.

EXAMPLES OF GENDER-CENTRIC SOCIAL PROOF MESSAGES



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