Bringing Digital Finance Tools to More Women

ideas42

Behaviorally informed text message campaigns in Pakistan

Even with financial inclusion expanding around the globe, women tend to access and use formal financial services—which can help people build financial health and resiliency—at much lower rates than men for a variety of reasons. ideas42 partnered with Women's World Banking and JazzCash to help more women in Pakistan access and use a digital wallet by asking customers to refer their friends and family, particularly women. We found that sending behaviorally informed and "gender-centric" text messages encouraging people to refer others can increase referrals, particularly by women, by up to 34%.

Summary

In Pakistan, as of 2014 only 13% of the population over the age of 15 had a bank account, an important tool for building savings. And women in Pakistan have had limited access to formal financial services and are less financially independent compared to men. Yet by 2017, 76% of people had access to mobile phones and sim cards, making digital financial services a potentially large opportunity for expanding financial inclusion. Research on the impact of mobile money has shown that it can help lift households out of poverty. Furthermore, female-headed households using mobile money both accumulate more savings and have a higher rate of switching to a business occupation.[1] As such, digital financial services can be an effective means to empower women with more financial autonomy and an entry to formal financial products.

Highlights

▶ Historically, women in Pakistan have had less access to bank accounts and financial services— both important pieces of financial independence.

▶ Women are more likely to join new digital platforms through referrals.

▶ Monetary incentives increase the likelihood a referral will be made.

JazzCash, one of the largest digital finance and telecommunication multinational companies in Pakistan, offers digital wallets that allow users to perform a variety of financial transactions (such as sending money to friends and family and paying bills) right from their phones. For customers, digital finance can be cheaper, more accessible, and more convenient than traditional banking services, and it can help more people who have been underserved by the financial industry access products that can help them save money. Yet while use of this technology has grown exponentially across the country, only about 10-15% of JazzCash's total digital finance users were women. For this reason, we partnered with JazzCash to find innovative ways to bring helpful digital financial services to more women in an effort to support their financial health.

Text messages to address behavioral barriers ···

We began by learning more about how people hear about mobile wallets and what may stop women from accessing them. There are two main ways a person would hear about JazzCash's services that help them manage their money: through agents and through direct referrals from friends or family sent through the platform. While most people open accounts through agents, JazzCash historical data suggested that women are more likely to respond to a referral channel.

That's why we designed text messages to encourage current customers to refer their friends and family members to use helpful digital financial services. While we wanted anyone to be able to use digital tools to manage their money, we particularly were interested in helping women to adopt them given that most referrals were historically sent to men. We identified behavioral barriers that could prevent people from sending referrals, especially to women. Among the issues cited were a lack of salience around referral messages and incorrect mental models about whether women joined platforms through referrals. With this in mind, we designed six different messages that address these barriers and used A/B testing to measure refined versions of our behaviorally targeted messages.

ROUND 1:

First, we tested the following messages to identify which were the most effective:

1. A simple message urging users to invite women to join the platform

2. A message that highlights monetary incentives the partner offers (tested both in the afternoon and evening to determine any timing effect)

3. A message using reciprocity framing to highlight what JazzCash has done for them and urging users to share that benefit with other women by referring them to the platform[2]

4. A social norm message reinforcing that women accept referrals and have joined the platform[3]

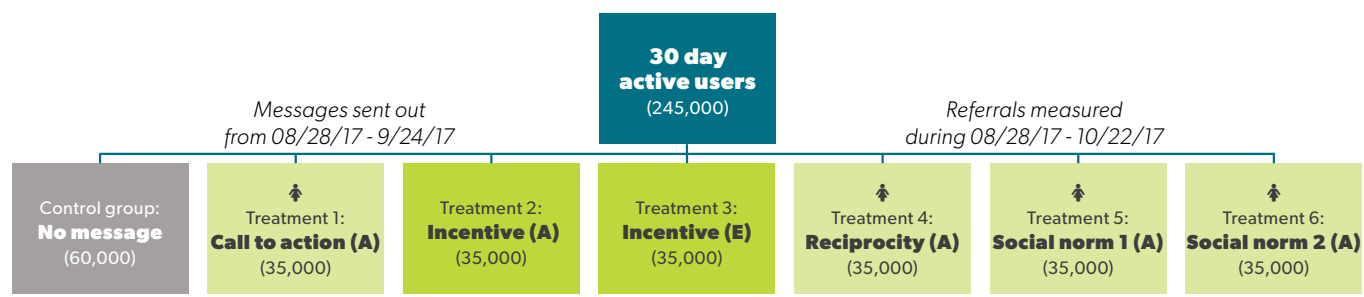5. A social norm message normalizing sending referrals to women[4]

Messages were all sent in the partner's main language of communication, Urdu. In addition to addressing behavioral barriers, we also included women-centric language in some of the treatment messages. Women-centric treatment messages used words like "women," "sister," and "mother." In round one the control group received no message. Not sending a message to the control group allowed us to identify the best performing behavioral language.

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[2] Reciprocity treatment exact message: "Hope that JazzCash account has made your life easier. Benefit women around you with this service as well! Dial*XXX*# and invite"

[3] Social norm 1 exact message: "Till now 300,000 women have open their JazzCash account via invites! Invite women around you to JazzCash mobile account now by dialing **XXX*#!

[4] Social norm 2 exact message: "Till now 300,000 people have invited women on JazzCash! Invite women around you to JazzCash mobile account now by dialing **XXX*# "

ROUND 1 TESTING

30 day active users (245,000)

Messages sent out from 08/28/17 - 9/24/17

Referrals measured during 08/28/17 - 10/22/17

| Control group: No message (60,000) | Treatment 1: Call to action (A) (35,000) | Treatment 2: Incentive (A) (35,000) | Treatment 3: Incentive (E) (35,000) | Treatment 4: Reciprocity (A) (35,000) | Treatment 5: Social norm 1 (A) (35,000) | Treatment 6: Social norm 2 (A) (35,000) |

(A) = Afternoon, (E) = Evening   *Boxes with a 👤 represent treatments in which women-centric language was used*
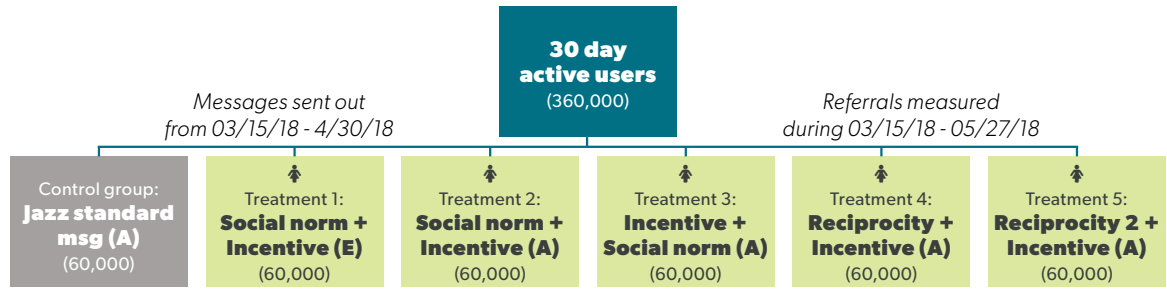
ROUND 2:

Next, we tested five differentiated text messages against JazzCash's standard marketing message.[5] The frequency of text messages sent in this round matched the partner's standard marketing frequency (two per month, vs. eight per month sent in round one). In this round, we tested a combination of the best performing messages from round one, this time also testing for **type of content**,[6] **ordering of content**,[7] **timing of messages**,[8] and **differently phrased women-centric messages**.

Reminding people about incentives had the highest impact in round one, so we tested iterations of incentive reminder messages to see if we could amplify the effect. We did this in three ways:

1. Combined incentives with other effective messaging strategies from round one (social norms, reciprocity)

2. Varied the ordering of incentive reminders within the message

3. Varied the timing of when message combinations were delivered

ROUND 2 TESTING

30 day active users (360,000)

Messages sent out from 03/15/18 - 4/30/18

Referrals measured during 03/15/18 - 05/27/18

| Control group: Jazz standard msg (A) (60,000) | Treatment 1: Social norm + Incentive (E) (60,000) | Treatment 2: Social norm + Incentive (A) (60,000) | Treatment 3: Incentive + Social norm (A) (60,000) | Treatment 4: Reciprocity + Incentive (A) (60,000) | Treatment 5: Reciprocity 2 + Incentive (A) (60,000) |

(A) = Afternoon, (E) = Evening   *Boxes with a 👤 represent treatments in which women-centric language was used*

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[5] Partner's standard message highlights monetary incentive only.

[6] In round 1 we found that incentive messages had the highest impact followed by social norm and reciprocity messages. In round 2 we combined incentive messages with social norm and reciprocity messages to test for their additive effect. For eg. social norm plus incentive message "Till now 300,000 women have opened their (partner name) account via invites! Dial *XXX*# now and send invites as well, receive Rs.20 on every new account opened"

[7] Differentiation in ordering entailed inserting incentive message before or after the behavioral message.

[8] We found some, though not conclusive, evidence from Round 1 to suggest that timing mattered, especially for women. Therefore, we tested an exact same message in the afternoon and evening to determine if timing matters.

Results

We conducted multiple rounds of a randomized controlled experiment to A/B test different behavioral messages targeted to increase referrals to women. In round one, all treatments resulted in a significant increase in referrals,[9,10,11] when compared to the control group which received no message (Figure 1). Highlighting monetary incentives was most effective at increasing the number of users sending referrals. It is interesting to note that prompting clients with social norms and reciprocity messages are also similarly effective as reminding customers about monetary incentives—the difference between these effects is not significant (Figure 1). This implies that a potential future experiment could aim to determine if social norming, reciprocity, and priming are sufficient at helping more women access these services even without the associated financial incentives. At the time of the partnership, we did not test this.

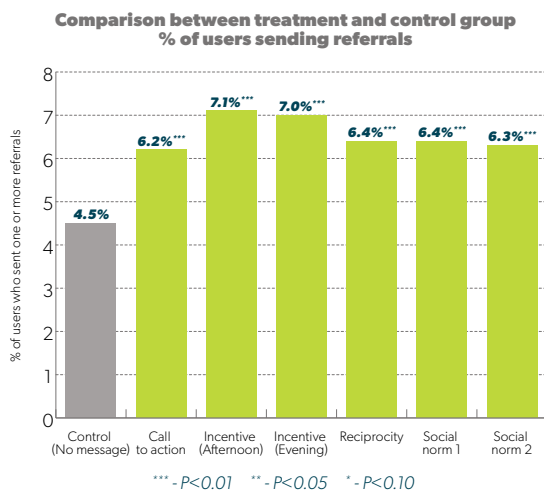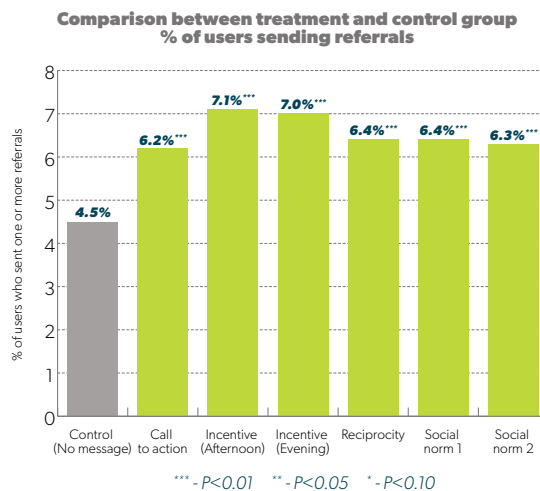**FIGURE 1:** IMPACT ON ENGAGING USERS TO SEND REFERRALS (ROUND 1)

Comparison between treatment and control group
% of users sending referrals

*** - P<0.01   ** - P<0.05   * - P<0.10

FIGURE 2: IMPACT ON ENGAGING USERS TO SEND REFERRALS (ROUND 2)

Comparison between treatment and control group
% of users sending referrals

*** - P<0.01   ** - P<0.05   * - P<0.10

In round two, we found that all treatments increased total referrals relative to the standard incentive message. Social norm plus incentive (evening) and incentive plus social norm (afternoon) messages had a significantly higher level of customer engagement, relative to JazzCash's standard incentive message (Figure 2).

In addition, we also learned that women respond to gender-centric language by sending more invites to women. In round one, some of the treatment groups (i.e. control, incentive) used gender-neutral language, while others specifically urged users to send referrals to women (e.g. call to action, reciprocity, social norm 1 & 2). Figure 3 shows the impact of our treatment on increasing the number of women who joined the platform. In gender-centric treatment groups, on average 10% of total referrals sent by women resulted in women opening an account, compared to 5% in gender-neutral treatments. We believe that women may be sending out more referrals to other women in gender-centric treatment groups, or sending referrals to women who are more likely to accept.

[9] We are primarily referring to the number of people sending referrals as a representation of overall referral sent, as the % of people in each group that sent referrals varied, but the number per person was relatively stable (1-2 people).

[10] Primary focus is on the efficacy of messages in getting recipients to send all types of referrals (we can't measure the number of men vs. women referred directly)

[11] Next we are looking at efficacy of messages in indirectly affecting number of new female customers

Interestingly, we found that the gender-centric language had no significant impact on the behavior of men. In gender-centric treatment groups, on average 5% of total referrals sent by men resulted in women opening new accounts, compared to 6% in the gender-neutral treatments (Figure 4).

FIGURE 3: CONVERSION RATE OF FEMALE CUSTOMERS INVITED BY FEMALE SENDERS (ROUND 1)
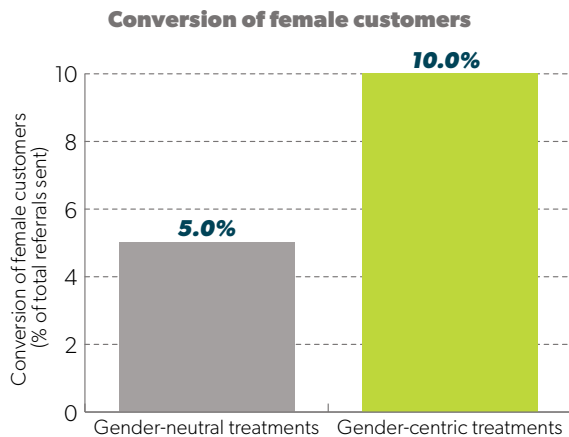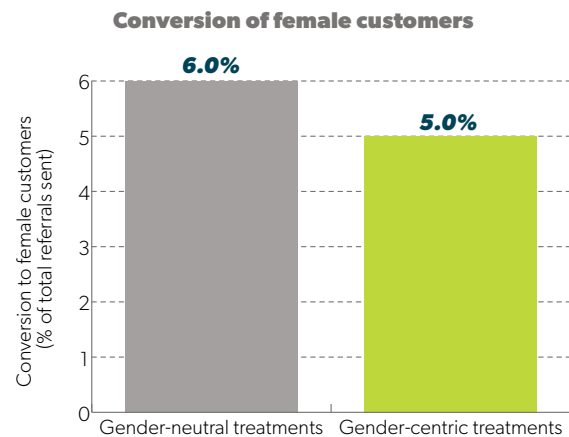
FIGURE 4: CONVERSION RATE OF FEMALE CUSTOMERS INVITED BY MALE SENDERS (ROUND 1)

Overall, if instead of JazzCash's standard incentive message, they sent the best performing treatment message (social norm plus incentive message sent in the evening), to all their clients, 53,000 additional customers would join the platform, gaining access to helpful financial services than can help them manage their money. This represents an increase in new customers by referrals by up to 31%, and these additional customers would include at least 10,000 women joining the platform.

Takeaway

Through this experiment we found actionable and easy-to-scale solutions for our partner to help more people access digital financial services who otherwise might not be able to use banking products. More importantly, it highlights a broader question for future research: can we help expand financial inclusion to more women by using intentional language? Our experiment suggests that the answer is yes. Because women were more responsive to gender-centric messages than men, more research is needed to understand how men and women may respond differently to the language used in informational messages, especially for programs and interventions where the uptake by women is low.

By experimenting with language and using tools from behavioral science, we can identify new paths to financial inclusion for more people around the world—particularly those who have had more trouble accessing helpful financial products and services historically.