#JustSaveIt - Encouraging Usage of Agent-Based Bank Accounts to Improve Financial Inclusion

Project report

S-DNKI project team: Eni Widiyanti / Djauhari Sitorus / Mohammad Irwan Setyawan

PLJ project team: Maesy Angelina / Rico Setiawan / Lia Purnamasari

BIT project team: Ruth Persian / Henghwee Koh / Rifki Akbari / James Watson

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PULSE LAB JAKARTA

THE BEHAVIOURAL INSIGHTS TEAM

In Partnership With

SNKI SECRETARIAT OF THE NATIONAL COUNCIL FOR FINANCIAL INCLUSION

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Executive Summary

The Behavioural Insights Team (BIT), UN Pulse Lab Jakarta (PLJ) and the Secretariat of the Indonesian National Council for Financial Inclusion (S-DNKI), formed a partnership in 2018 to apply human-centred design and behavioural insights to develop and trial innovative approaches to improve financial inclusion. This report summarises the findings of our project, the #TabunginAja campaign.

Policy objective

For true financial inclusion to occur, financial services such as bank accounts need to be useful and accessible to people who own them. While 56% of Indonesian adults owned a bank account in 2018, 30% of them had not used it in the previous year. The project therefore aimed to encourage bank account usage - more specifically regular deposits made into agent-based bank accounts. Such accounts rely on agents (trusted community members, who often run a shop or a food stall) to help their neighbours to sign up for accounts, help customers conduct bank transactions such as deposits and withdrawals, and act as general financial services advisory and support. The accounts target the previously unbanked segment of the population - individuals who are usually employed in the informal sector, self-employed or work at home.

To test our ideas in the real world, we partnered with a large Indonesian bank that offers agent-based banking.

Intervention

We designed an 8-week long WhatsApp campaign called #TabunginAja (#JustSaveIt), implemented between March and May 2019. The messages, consisting of pictures with short messages, comics and text, were sent to agents and asked them to encourage their customers to save the change from purchases at the agent's shop or street food stalls. The messages built on a number of insights from the behavioural sciences, such as goal setting and rules of thumbs.

Evaluation approach

Due to concerns for spillover, the intervention had to be implemented at the area level. Our partner bank chose 12 areas to be included in the trial of the intervention, with a maximum of four to receive the intervention (treatment group) and the rest being used for comparison (control group). While we attempted to run a clustered-randomised controlled trial (RCT), we knew that randomisation failure (i.e. an imbalance between the treatment and control group on important characteristics) was likely to occur. In addition, we conducted an in-depth qualitative implementation and process evaluation to evaluate the implementation and perceived impact of the #TabunginAja campaign.

Results

The qualitative evaluation showed that the implementation of the campaign was labour intensive[i] and messages therefore did not always reach all agents. Among the agents who received the messages, the content was positively received - indeed, some agents already actively encouraged customers to save their change or had previously done so. Among the agents interviewed, however, none of the agents to whom the idea was new started the habit of asking customers to save their change as a result of the campaign. This was in part due to structural barriers, such as a lack of liquidity among agents.

The results of the quantitative evaluation showed that customers in the intervention areas were 10-percentage points less likely to make a deposit in May 2019 than those in control areas. We believe, however, that this is due to randomisation failure as it seems highly unlikely that a relatively light-touch intervention would have such a large impact on the outcome of interest.

Recommendations

As we were not able to determine the overall impact of the campaign and its implementation was associated with a cost (manpower necessary to send out the messages), we cannot recommend its roll-out across the agent-based banking system in Indonesia. However, we think that the project and its result display important lessons for agent-based banking and financial inclusion policies in Indonesia:

Innovate to improve financial inclusion

- **Use human-centered design and behavioural insights** to understand financial services from the perspective of those who are supposed to use them and ultimately help to design systems and interventions that take into account the human factor.

- **Test before implementing at scale:** The qualitative evaluation showed that our intervention is unlikely to have had the intended effect. This is an example of why it is important to carefully test before implementing policies and interventions at scale, to avoid wasting (public) resources.

- **Use existing (communication) systems:** Although the campaign is unlikely to have had the impact we were hoping for, we still believe that using an existing and well-established communication channel - in this case WhatsApp - is the most effective way to reach people.

- **Design interventions that close the gap between responsiveness and action - and test whether they successfully do this:** Agents and customers alike responded positively to the overall message of the campaign, but it is likely to have changed the behaviour of only a very small group of agents. It is therefore important to evaluate its impact not only on responsiveness and intention (as evaluations of campaigns often do), but also actual behaviour.

- **Design interventions to encourage habit formation when behaviour change is most likely to take place** as behaviour change interventions are likely to be the most effective when they target people at such break-points.

Enhance the effectiveness of the agent-based banking system

- **Use behavioural insights and human-centered design to identify structural barriers:** Behavioural insights interventions can be powerful, but are likely to be effective only if appropriate systems are in place. Using a behavioural insights and human-centered design approach to identify and address such barriers has the potential to lead to a more effective and fit-for-purpose agent-based banking system.

- **Acknowledge the human factor:** The agent-based banking system is based on the idea that financial inclusion can be supported by placing individuals trusted by the customers at the centre of these services. However, both customers and agents require support. As this is highly resource intensive, it is not currently viable for banks to offer this and wider policy changes, such as allowing third-party agent network managers, might therefore be needed.

- **Use behavioural insights and human-centered design to harness digital communication for agent support:** As in this project, behavioural insights and human-centered design could help to develop and test new ideas for how to harness available communication platforms to support agents.

We thank S-DNKI for partnering with us, and look forward to developing and testing more innovative approaches to ensure every Indonesian can eventually benefit from access to appropriate financial products.

01 / Introduction

The Behavioural Insights Team (BIT), UN Pulse Lab Jakarta (PLJ) and the Secretariat of the Indonesian National Council for Financial Inclusion Council (D-SNKI), formed a partnership in 2018 with the aims of: (i) using human-centred design and behavioural insights to find and test innovative ways to improve financial inclusion in Indonesia; and (ii) transferring skills to S-DNKI staff to apply human-centered design, behavioural insights and impact evaluation approaches through 'learning-by-doing'.

Together, we developed a campaign, #TabunginAja ("Just Save it"), to increase the usage of agent-based bank accounts in Indonesia. To test our ideas in the real world, we partnered with a large Indonesian bank that offers agent-based bank accounts, targeted at the previously unbanked segment of the population - individuals who are usually employed in the informal sector, self-employed or work at home.

This report summarises the findings of our project.

02 / Background

Many Indonesians don't make use of their bank accounts

Indonesia's financial inclusion has improved greatly over the last few years, with the proportion of the population that own a bank account increasing from 20% in 2011 to 56% in 2018.[ii] Owning a bank account, however, is only the first step towards financial inclusion - in order for true financial inclusion to occur, financial services such as bank accounts need to be useful and accessible to people who own them. The fact that 30% of all bank account holders in Indonesia didn't use their bank account in the past year[iii] suggests that this is not the case for many Indonesians.

Our partner bank confirmed that encouraging the opening of new accounts is not a big challenge - it is quick and easy and agents are motivated by financial incentives to find new customers. However, usage of accounts is similar to the national average and customers often do not continue using the account after the first few weeks.

The 'human factor' matters for account usage

An in-depth study on enablers of financial inclusion conducted by PLJ and published in the report "Banking on Fintech: Financial Inclusion for Micro Enterprises in Indonesia"[iv] as well as fieldwork conducted by BIT and S-DNKI in 2019 showed that, for owners of agent-based bank accounts, the direct interaction with the agents plays a crucial role for their usage of the account. Not only do agents handle customers' withdrawals and deposits, they also help with transactions that the customers, in theory, could conduct independently on their personal phones (e.g. transferring money to family and friends, paying electricity bills), carried out on behalf of the customer using the customer's phone. Furthermore, how much a customer uses their bank account depends to a large degree on whether their agent has shown them specific, easy, and useful examples of how to use their account.

Our partner bank had also tried communicating directly with customers using SMS in the past, to explain features and promote campaigns, but qualitative research by the bank suggested that these communication attempts were largely ignored by customers and therefore deemed ineffective.

Agent-based banking

In Indonesia, agent-based banking is used to as a means to provide previously unbanked people with their own bank account. Banks recruit members of the community as agents. The agents then help their neighbours to sign up for accounts, help customers conduct bank transactions such as deposits and withdrawals, and act as general financial services advisory and support. The majority of agents run small stores that sell goods such as food and toiletries to people in the community or have street food stalls, so customers are likely to interact with agents regularly.

Customers value the opportunity to make small, frequent deposits

Bank customers told us that they valued in particular the opportunity to make small, frequent deposits, sometimes on a daily basis, rather than having to wait until they had accumulated significant amounts of money. This is a big advantage over standard bank accounts, that sometimes have minimum deposit amount thresholds and for which the customer has to wait in long queues to deposit money at a bank branch. Furthermore, depositing money with the agent, often a local shop owner, feels less intimidating than entering a large bank.

03 / Intervention

Development of the intervention

We conducted a Thinkgroup[v] to brainstorm potential solutions to encourage usage of agent-based bank accounts, taking into consideration the enablers of and barriers to bank account usage. We then shortlisted and eventually ranked ideas based on a number of criteria including availability of evidence on potential impact from the behavioural literature, implementation feasibility, and cost.

The final intervention was an 8-week WhatsApp campaign to the bank agents, asking them to encourage their customers to save the change from purchases at the agent's shop or street food stalls. It acknowledged the enablers and barriers to account usage by:

- **Placing the agent at the center.** By targeting agents, rather than customers, it acknowledged the fact that agents are central to whether or not customers use their bank account.

- **Proposing a specific action.** While agents that we interviewed were open to the idea of encouraging customers to use their account more, many agents did not plan how they would do so. Based on the implementation intentions literature, making a clear

and specific plan makes it more likely that an intention will turn into action[vi] (e.g., 'I will encourage customers to deposit the change any time it is less than IDR 5.000' is likely to be more effective than 'I will ask customers to use their bank account more often').

- **Proposing an easily implementable action.** Agents are already equipped to put customers' change in their bank accounts. Most agents are also store- or stall-owners and depositing the change is actually often more convenient for agents than looking for coins. Furthermore, customers who did not usually approach their agent for banking services would interact with the agent anyway when making purchases at the agents' shops. Integrating a banking service into an existing interaction takes away the friction[vii] of having to make a separate banking transaction. This is in line with the not very surprising, but often overlooked principle that 'if you want people to do something, make it easy'.[viii]

To ensure the intervention would be low-cost and scalable, we made use of an already existing communication channel. We initially considered sending messages through the bank's mobile app for agents. However, our fieldwork showed that usage of this app is low and many agents only use it to keep track of their income (in the form of points) generated through their agent activity. WhatsApp, on the other hand, is used regularly both by the bank's headquarters as well as the regional supervisors to communicate with agents, with many agents being part of dedicated WhatsApp groups. While coverage is far from perfect - the partner bank holds phone numbers for only around a third of their agents - we believe that WhatsApp was the more appropriate and natural communication medium.

Prototyping the messages

The design and content of the messages were iterated several times before we arrived at the final versions. Prototyping, led by PLJ, took place in two of the potential intervention areas, Bekasi Kota (West Java, close to Jakarta) and Binjai (North Sumatra). The process involved presenting different versions of the interventions to agents, observing their interactions with them and asking for their feedback. The findings highlight the importance of prototyping an intervention before rolling it out:

1. **Digital messages were not only the most cost-effective, but also the most impactful.** Although we considered reinforcing the messages with physical posters so that customers could see the messages for themselves, this idea was dropped because we found that very few agents put up posters distributed by the partner bank in their shops. Many undistributed promotional posters also lie dormant in bank branch offices.

2. **Out of five message formats that we prototyped on WhatsApp, agents paid attention to the three formats that were short and/or visual.** We tested e-posters, 6-panel comics, WhatsApp texts, 6-panel chatboxes, and short videos. 6-panel chatboxes were perceived as too long and videos required too much data and were therefore dropped. Texts were often only consulted if the agents did not understand the comics or e-posters immediately and were therefore found to be better suited for providing additional information

3. **Agents preferred messages that emphasised goals in the near rather than distant future.** For example, agents were unenthusiastic about a message encouraging savings for Lebaran, as they felt that this was too distant from everyday life and to far into the future. Agents preferred messages that emphasised immediate actions and incentives.

Intervention messages

The final campaign consisted of a series of eight messages with the slogan #TabunginAja (English: "Just Save It"). Messages were sent in three formats: single-picture e-posters, short

comic strips and regular WhatsApp text. Every week, we sent a set of one graphic (e-poster or comic) and accompanying WhatsApp text.

Below, we highlight a few key behavioural principles that informed how we designed the messages. The full schedule of messages, including pictures and translations, can be found in the Annex.

Figure 1: Comic showing an agent opening a bank account for a customer and depositing their change (see Annex for translation)

- **Concrete example with specific steps.ix**
  We theorised that agents would feel more equipped to encourage customers to save their change once they had seen an example of how they could do so. The comics therefore showed exchanges between a neighbour and an agent-shopkeeper or street food stall owner. In one, the agent offers to set up an account for the neighbour to deposit their change in (see Figure 1), while in another, the agent offers to deposit the customer's change into her bank account.

- **Rule-of-thumb or heuristics.** These are shortcuts that help people make decisions more quickly.x One poster suggested agents could ask customers to save the change whenever it is less than 5.000 IDR. This threshold was suggested by agents and customers as appropriate during our fieldwork.

- **Goal-setting and anchoring.** Anchors are pieces of information that we use as a reference point when making a decision or judgement. Even when this information is completely irrelevant, people are influenced by it and high-number anchors can lead to high-number judgements or decisions.xi We used this idea in a poster that suggested agents could aim to ask five customers a day to deposit their change. This is more bank customers than the average agent would meet in a day, therefore setting a high anchor for how much an agent should be trying.

04 / Evaluation design and implementation

Before recommending the roll-out of the intervention, the project partners decided to evaluate its impact on the outcome of interest as rigorously as possible.

Context

The process of designing our evaluation took three stages:

1. **We initially wanted to run an individually-randomised controlled trial.** When feasible, randomised controlled trials (RCTs), with individuals in the treatment group receiving the intervention and those in a control group experiencing 'business as usual' (no change to normal), are the most rigorous impact evaluation approach possible. However, we could not randomise at the customer level if we were delivering the intervention through the agents, and randomising at the agent level would have brought with it an unacceptably high risk of spillovers: agents in the treatment group would have likely shared messages with agents in the control group or agents in the control group (i.e. the group that did not receive the message) would have found out about the campaign from the supervisors who

operate at the area-level and would have thus had contact with agents in both the treatment and control group. Treatment allocation therefore had to take place at the level of the area.

2. **We then explored the feasibility of running a difference-in-difference (DiD) evaluation instead.** Due to the bank's data and privacy regulations, we were only able to include 12 areas in our sample, with a maximum of four in the treatment group. This made it difficult to ensure balance in observable characteristics across the treatment and control group, which is one of the key requirements for an RCT to give an unbiased estimate of the impact of the intervention. The alternative, a DiD design, would have allowed us to compare outcomes in areas that saw similar deposit trends. However, analysis of historic data showed that the key condition for a valid DiD evaluation - parallel trends across treatment and control group in the outcome variable(s) of interest - was not fulfilled.

3. **We therefore decided to run a cluster-randomised controlled trial, allocating four areas to the Treatment group and eight to the Control group and a qualitative implementation and process evaluation (IPE).** The randomly-selected areas were balanced on 2018 6-month and 12-month historic averages of our outcome variable of interest - the likelihood of a customer making a deposit in a given month. However, we knew that - due to large month-on-month variation in deposit rates - this balance could have been pure chance and might not have held during the implementation period. There was thus the risk that this quantitative evaluation would not give convincing evidence on the impact of the intervention. While a qualitative IPE - consisting of semi-structured interviews with beneficiaries of the intervention (i.e. agents and customers) and other stakeholders (agent supervisors) - cannot provide this either, it can assess

(i) implementation fidelity; (ii) responsiveness, and; (iii) perceived impact.

Sample

Areas

Our partner bank chose the 12 areas to be included in the trial of the intervention. To increase external validity - that is, the extent to which we can generalise from any findings - the areas spanned different regions in Indonesia where the bank had customers: East Java, West Java, Central Java, and Sumatra. The four areas in the treatment group were Jakarta Pusat (Central Jakarta), Sidoarjo, Boylali, and Bukittinggi.

Customers

The sample for the quantitative analysis consisted of all 18,392 customers who:

1. Were registered to one of the 12 areas;
2. Owned an agent-based bank account with our partner bank that was not older than six months (183 days) at the launch of the trial (25 March 2019) *or* created an account during the trial period. We restricted the sample to new customers, as we hypothesised that new customers would be more likely to form a savings habit and agents would be more willing to try something new with new customers - i.e. that the intervention would be more likely to have a larger effect for this group of customers.

For the IPE, led by PLJ, we interviewed both new (i.e. those that had opened an account not more than six months ago) and old customers.

Agents

The customers in our sample were served by 2,019 agents. 546 of the agents were in the Treatment areas and 220 had their WhatsApp numbers registered with the bank. The number of agents in the trial, and who received WhatsApp messages, varied widely by area - from 23 agents to 288.

A total of eight customers, 18 agents and ten bank supervisory staff across the four intervention regions (see table below) were interviewed for the IPE. These interviews took place in June and July 2019, about a month after the end of the campaign.

Table 1: Qualitative evaluation sample

Area Interviewee	Jakarta Pusat	Sidoarjo	Boyolali	Bukittinggi
Agent supervisors[xii]	2	3	2	3
Agents	3	5	5	5
Customers	2	2	2	2

Implementation

The campaign was delivered between 25 March and 27 May 2019. Each set of messages was sent through two channels: (i) a staff member at the partner bank headquarters sent the campaign messages directly to agents' numbers, (ii) agent-trainers at the area level disseminated the messages through WhatsApp groups, which consisted of approximately two per cent of all agents that the bank held a WhatsApp number for.

The message-sending process was manual and comprised of two steps: in the first week, we sent a message asking agents to save the central office's number so that we could use WhatsApp's Broadcast feature to send the campaign messages. For agents who did not save the central office's number, each week a staff member would go through an Excel spreadsheet of agents' numbers and forward the messages to each individual.

05 / Findings

In this section, we present our findings from the qualitative and quantitative evaluation. We first describe how the campaign messages

were sent to agents, then how agents and customers received and perceived the intervention and finally what we find with respect to perceived and actual impact of the intervention on the behavioural outcomes of interest, namely 1) agents asking their customers to deposit their change; 2) customers actually making more frequent deposits.

Finding 1: Implementation was labour intensive and did not always take place as intended

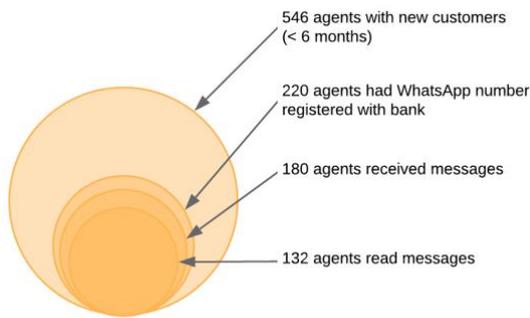**Direct WhatsApp messages were sent as intended, but not consistently to everyone.**

WhatsApp messages delivered by our partner bank's headquarters were sent directly to agents and to each area's dedicated WhatsApp groups as intended. The sending process was manual and one staff member was assigned to the implementation of the campaign. However, as the process was very labour intensive, not all agents received all the messages because the staff could not always finish the list before the end of the week. On average, close to 1,000 agents were sent the messages in any given week. This included agents who did not have any customers that had opened an account within the previous six months (i.e. none of their customers would have been included in our sample). Out of the 546 agents with new customers, 180 agents received the messages and 132 read them within a few days (Figure 2).

Figure 3.a and b show that agents with more customers were prioritised when not all agents were sent messages - a sensible choice in a context where resources are scarce.[xiii] The agents in charge of 1,007 customers (out of 3,842) did not receive any message, mostly because the partner bank did not hold their WhatsApp numbers.

Dissemination through WhatsApp groups did not work in practice.

Although messages through the WhatsApp groups were supposed to be disseminated through a cascading flow of smaller divisions (e.g. from the area WhatsApp group

Figure 2: Agents with customers in the sample that received and read messages (in an average week)

546 agents with new customers (< 6 months)

220 agents had WhatsApp number registered with bank

180 agents received messages

132 agents read messages

comprising of headquarter staff and agent-managers, to more local WhatsApp groups comprising of agent-supervisors and agents), in practice most messages stopped at the area-level group. There were only two areas in which area-level staff sent the messages on to agents' personal numbers. Our interviews with bank staff pointed towards several possible reasons behind this disengagement, including (i) a lack of standardised protocol across areas for WhatsApp communications; and (ii) area-level representatives focusing more on new agent and customer acquisition instead of supporting existing agent relationships.
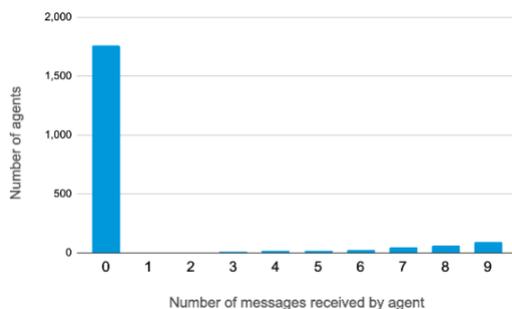
Finding 2: Agents and customers understand the messages and view them positively

Agents remembered the general message, but few specifics

During the interviews conducted as part of the IPE, agents could explain what behaviours were expected of them from the campaign

(that is, to encourage customers to save the change), although they could not recall the differences between individual campaign messages. The comic giving a concrete example of, and specific steps for, how to ask customers to save their change was the most remembered and well-liked (see Figure 4). The agents stated that this was because it had the brightest colours and provided specific instructions. An alternative explanation from

Figure 4: The most remembered and liked message

the behavioural science literature is that this was the last message in the series and was therefore better remembered due to the recency effect.[xiv]

Figure 3: Agents with more customers tended to be sent more messages

3.a Number of agents that received a certain number of messages

3.b Number of customers whose agent received a certain number of messages
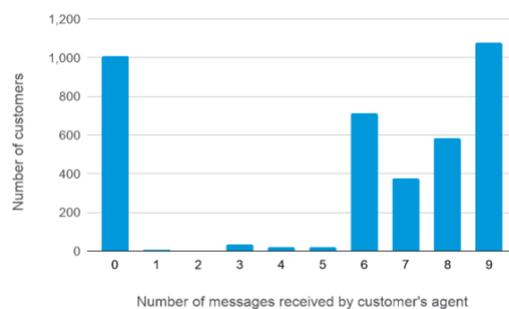
Agents and customers viewed the message positively

All agents interviewed thought that asking customers to save their shopping change was a good idea, no matter whether agents had previously tried it, were currently practicing it, or had never considered it before. Agents who had stopped asking their customers to save their change prior to the campaign thought that the messages were useful reminders to re-activate that practice, while agents who were still asking their customers to save their change expressed that the campaign messages motivated them to maintain that practice. Even agents who had never considered the practice before said that saving small change is a good practice to promote a saving habit for customers. This support largely stemmed from a social motivation for agents - they thought that it was a good way for customers to build a savings habit.

Some customers, on the other hand, thought that it was a good idea because setting aside small amounts regularly meant that they could accumulate money for future expenses with little effort. In the words of one customer who had started this habit already before the campaign, "I saved my small change after buying rice or soap, usually IDR 1,000 or IDR

2,000, because my agent asked me to. I was really surprised when I checked my balance, because I have more than I thought! I used the money to top up my phone credit."

Finding 3: The campaign had no (large) impact on agent behaviour

Support for the message did not necessarily translate into action

Of all the agents we interviewed, the only agents who asked their customers to save their shopping change were those who had already done so in the past, before the campaign started. This included both agents who would have asked customers to save their change with or without the campaign, and agents who had stopped doing so but started again because of the campaign.

The intention of our quantitative evaluation was to support such qualitative findings. As mentioned above, we had picked the four Treatment areas at random, trying to ensure balance to the largest extent possible. However, we knew that because customer activity is highly variable across both geographical areas and time, and because we had few clusters to randomise, there was a significant risk of randomisation failure (i.e. the

Figure 5: Percentage of customers that make at least one deposit in May 2019 (Treatment areas highlighted in blue, Control areas in grey)
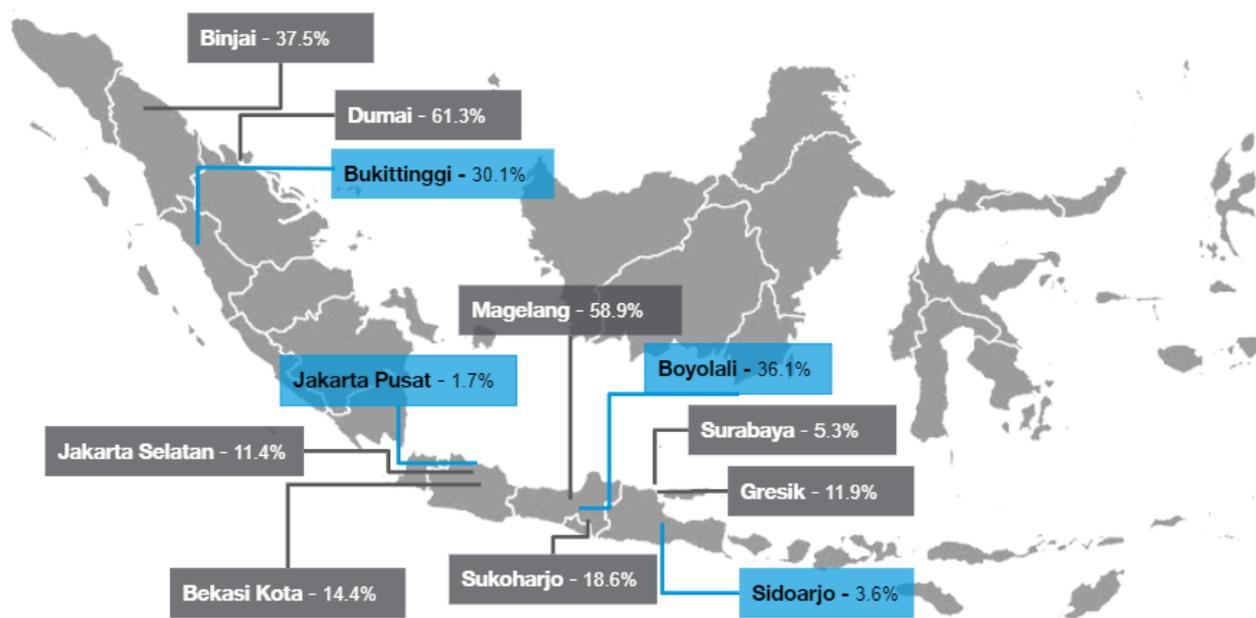
failure to balance observable and unobservable characteristics across Treatment and Control group). Indeed, we observed a 10-percentage point, statistically significant difference between Treatment and Control areas in the likelihood of a customer making at least one deposit in May: 35.5% of customers in the Control areas did so, but only 24.9% of customers in the Treatment areas. We think it is highly unlikely that our relatively light-touch intervention had such a large negative impact, especially given the neutral to slightly positive *perceived* impact that the interviews had revealed and argue that the difference between Treatment and Control areas is due to other, non-observable factors.

This result also conceals great variation *within* the two groups - the likelihood of a deposit being made in May varies from 1.7% in Jakarta Pusat to 61.3% in Dumai (see Figure 4 below). Such variations can partly be explained by structural factors: the population of Jakarta Pusat (Central Jakarta), even when working in the informal sector, is likely to have the choice between a number of different financial services from different providers. However, the considerable month-on-month variation in deposit rates suggests that local activities, for example by the area-level representatives, play a large role (and presumably a larger one than a campaign like ours).

Agents and customers are unwilling to break habits

This is an unsurprising finding, as we already know from the behavioural literature that habits are difficult to break once they have been set. Savings behaviours (like many other financial behaviours) are a prime example of people defaulting into 'what they have always done'.

On the customers' side, our interviews showed that customers often are already used to saving in a specific way - for many customers, only depositing their savings once they have reached a relatively large amount, such as 100.000 IDR. As the customers' neighbours, agents know of and respond to these habits by not asking these customers to save their small

change, partly out of a concern for being perceived as too 'pushy' otherwise.

Structural barriers on both the agents' and customers' side need to be solved

Agents may be willing but unable to act on the campaign because of structural issues involving the way the agent-based banking system is currently set up. Interviews with agents and agents' replies to the WhatsApp campaign messages revealed that agents sometimes felt that they were not able to effectively promote the campaign because they lacked sufficient support to do so. Support that agents needed could manifest in various forms, including: (i) communication with middle-managers to understand the purpose and importance of the campaign; (ii) help topping up their bank balances so that they had enough to actually conduct the transactions that the campaign was requesting from them, and; (iii) general other help with resolving problems agents were facing with their work that took precedence over acting on campaign messages. However, it is important to note that such a model implies high operational costs for banks. Indeed, our partner bank had just recently moved from a resource-intensive model relying on large numbers of bank staff to support agents to one that relied on a third-party provider to manage relationships with agents. This was in part why they were interested in partnering with us to see whether and how more low-cost messaging could replace some of the labour-intensive support to agents.

06 / Recommendations

As we were not able to determine the overall impact of the campaign and its implementation was associated with a cost (manpower necessary to send out the messages), we cannot recommend its roll-out across the agent-based banking system in Indonesia. However, we think that the project and its result showed important lessons for agent-

based banking and financial inclusion policies in Indonesia:

Innovate to improve financial inclusion

- **Use human-centered design and behavioural insights to improve financial inclusion:** Financial inclusion - as with so many other policy challenges - has human behaviour at its heart. Even when services are available, this doesn't mean that previously financially excluded segments of the population will use them or use them in the way intended. The approaches used for this project can be used to understand financial services from the perspective of those who are supposed to use them and ultimately help to design systems and interventions that take into account the human factor.

- **Test before implementing at scale:** The interviews with agents and customers revealed that it is unlikely that the campaign led to a shift in behaviour large enough to justify a relatively expensive intervention. We believe that this finding does not mean that we have failed - most new ideas probably don't work. But it showed why it is important to carefully test before implementing policies and interventions at scale, to avoid wasting (public) resources.

- **Use existing (communication) systems:** Although the campaign is unlikely to have had the impact we were hoping for, we still believe that using an existing and well-established communication channel - in this case WhatsApp - is the most effective way to reach people. Agents received and remembered the messages, which we think is unlikely to have happened had we used the app which agents did not use actively. We also believe that the use of decentralised systems - such as relying on the area-level bank staff to send messages on - is generally a good idea, especially in the case of labour-intensive implementation. However, as

the evaluation showed, it is important to make sure that these systems work as intended and that clear protocols are in place for how messages are to be passed on.

- **Design interventions that close the gap between responsiveness and action - and test whether they successfully do this:** While agents and customers alike responded positively to the overall message of the campaign, it is likely to have changed the behaviour of only a very small group of agents. This might partly have been due to structural barriers (see below), but partly also because of the intention-action gap - the difference between what people say they would like to do and what they actually do. Any behavioural intervention needs to overcome this gap and it is therefore important to evaluate its impact not only on responsiveness (as evaluations of campaigns often do), but also actual behaviour.

- **Design interventions to encourage habit formation when behaviour change is the most likely to take place:** a number of studies[xv] show that people are more likely to change habits (i) at the beginning of a new time period (e.g. a year) or (ii) in connection with a significant event in their lives (such as graduation from university or the birth of a child). This implies that behaviour change interventions are likely to be the most effective when they target people at such break-points. This idea was behind our focus on new customers in the quantitative analysis, but could equally be used when designing interventions - for example, encouraging people to set up and start saving in a bank account when their first child has just been born. Alternatively, and maybe more importantly, an idea like #TabunginAja could be included in the onboarding training for new agents.

Enhance the effectiveness of the agent-based banking system

- **Use behavioural insights and human-centered design to identify structural barriers:** Behavioural insights interventions can be powerful, but are likely to be effective only if appropriate systems are in place. The qualitative evaluation showed that one significant structural barrier - agents not having access to enough cash and/ or credit in their accounts to perform requested transactions - might have prevented some of them from putting into practice the actions encouraged by #TabunginAja. Using a behavioural insights and human-centered design approach to identify and address such barriers has the potential to lead to a more effective and fit-for-purpose agent-based banking system.

- **Acknowledge the human factor:** The agent-based banking system has at its heart the idea that financial inclusion can be supported by placing trusted community members at the centreof the service. Both previous research by PLJ as well as the evaluation conducted in connection with the #TabunginAja campaign confirms that the human factor, and more specifically the agent-customer relationship, plays a crucial role in encouraging account usage. The agents, in turn, rely on support from staff at the banks they serve. Agents' responses to the WhatsApp messages expressed their frustration at a lack of support, which might reduce responsiveness to any campaigns. However, as intensive support to agents is highly resource intensive, it is currently not viable for banks. Wider policy changes, such as allowing third-party agent network managers,[xvi] would be needed to make such a model viable for banks.

- **Use behavioural insights and human-centered design to harness digital communication for agents support:** Individual support is highly-resource intensive and therefore unlikely to be viable without significant changes to financial inclusion policy and digital communication will therefore play a significant role in agent-bank communication for the foreseeable future. As in this project, behavioural insights and human-centered design could help to develop and test new ideas for how to harness available communication platforms to support agents.

07 / Conclusion

Over the past few years, Indonesia has made significant progress towards the goal of financial inclusion for all. However, true financial inclusion is only achieved if people do not only have access to services, but actually use them. In Indonesia, 30% of all bank-account holders didn't use their account in the past year, and this number is likely to be even higher among those living on low incomes and working in the informal sector.

We developed a WhatsApp campaign aimed at encouraging account usage and savings habits in the context of the agent-based banking system. Our campaign and the underlying message was well received by agents and customers alike, but is unlikely to have had significant impact on the target behaviours - agents encouraging customers to save the change from purchases at the agent's shop or street food stalls and customers actually doing so. We think that this is partly due to structural barriers and partly because human habits are inherently difficult to shift. However, the qualitative evaluation showed that the idea of encouraging customers to save their change generally showed promise and could potentially be included in training materials for agents. The project also shows why careful testing before implementation at scale is so important: many good ideas don't work as intended and it is just as important to know what doesn't work as it is to know what does, to avoid spending money and effort on ineffective programmes.

We thank the S-DNKI for partnering with us, and look forward to developing and testing more innovative approaches to ensure every Indonesian can eventually benefit from access to appropriate financial instruments.

08 / The S-DNKI project team

Eni Widiyanti, Deputy Director of Banking, Coordinating Ministry for Economic Affairs

"I believe that we will need a human-centered design approach for different segments in financial inclusion programs in Indonesia."

Eni leads two priority Government programs: a micro credit program for small businesses (KUR) and the overall financial inclusion programme. While Eni did not have any direct experience with behavioural insights or impact evaluations prior to the program, she had previously learned about behavioural insights during a training program on financial inclusion in Australia.

On the program, Eni learned about the process of designing policies through an evidence-based approach. In particular, how to design and test feasible and impactful interventions that create value for stakeholders. Eni mentioned that the project provides S-DNKI with the confidence to conduct impact evaluation through simple interventions that can be rigorously evaluated in a relatively short period of time. Eni believes that this timing aspect is necessary for behavioural insights to be used as an input in

policymaking where decisions often have to be made quickly.

Eni is keen to implement tailored behavioural insights to enhance financial inclusion across segments in society, in particular marginalised communities. For example, she believes that focusing on female inclusion will have a significant impact on accelerating financial inclusion in Indonesia. Given her hands-on expertise and extensive network across different stakeholders in Indonesia, Eni will continue to focus on economic empowerment within the Coordinating Ministry for Economic Affairs with potentially greater responsibility in the future.

Djauhari Sitorus, Head of Project Management Office, the Secretariat of DNKI

"As the Head of [S-DNKI's] Project Management Office, I strongly encourage incorporating innovation in inclusive finance programs, including through a behavioural insights approach. I encourage the team [BIT and PLJ] to collaborate closely with S-DNKI partners to further explore this human-centric design through new projects."

Djauhari previously worked at the World Bank where he conducted several impact evaluations related to policies and programs in the financial sector. While he was familiar with behavioural insights prior to the program through colleagues at the World Bank, Djauhari had never been involved directly in projects with a behavioural design.

He believes that there are many opportunities to implement behavioural insights in financial

inclusion programs. These include financial literacy and utilisation of formal financial products including digital financial services. In addition, in 2020, S-DNKI will focus on priority groups, such as women and people with disabilities. As these groups face different behavioural and structural barriers which Djauhari believes this will require tailored behavioural approaches.

Furthermore, Djauhari is also frequently invited to speak at various forums. He now feels he can share ideas from behavioural insights that he learnt through the project with regulators, government institutions, and industry to spread interest in the approach across the financial inclusion sector.

projects. The module was also equipped with several tools such as a savings commitment option and a calendar savings tracking tool.

Irwan believes that there are an enormous number of challenges in financial inclusion programs that relate to behaviour and that behavioural insights can be useful to increase the take up and usage of the financial products and services. He cites encouraging unbanked individuals to open accounts and beneficiaries of the government's cash transfer program to re-activate dormant accounts as opportunities for implementing behaviourally informed policies and hopes to partner with organisations in the financial sector to implement behavioural insights projects in the future.

Mohammad Irwan Setyawan, Program Manager, the Secretariat of DNKI

In general, more scientific research brings a positive influence to S-DNKI. Good research will also bring a positive impact in policy-making, thus we will be able to know what works and what doesn't. This evidence will enable decision-making to improve."

Irwan previously worked at the Abdul Latif Jameel Poverty Action Lab (J-PAL) Southeast Asia, where he gained experience in impact evaluation using RCTs. However, Irwan had not worked on projects directly involving behavioural insights before the project.

Following the project, Irwan has implemented behavioural insights to S-DNKI's work. For example, he advised on a module that encouraged individuals to save based on behavioural principles that he learned on the

Annex – Interventions

Note: These messages have been redacted to preserve the anonymity of our partner bank.

Message	Translation
Week 0	
	Hello Bank Agent, Let's save this number to get tips on becoming a more successful agent.
Hai Agen, Ini adalah kantor pusat di Jakarta. Kami memiliki tips untuk membantu Anda menjadi agen yang lebih sukses. Untuk mempermudah kami berbagi informasi dengan Anda, ayo simpan nomor ini [08xxxxxxxxxx] ke daftar kontak Anda. Permintaan ini berdasarkan ketentuan Whatsapp. Terima kasih.	Hi Agent, This is central office in Jakarta. We have several tips to help you become a more successful Agent. To make it easier for us to share this information with you, please save this number [08xxxxxxxxxx] to your contact list. This is due to a technical restriction with WhatsApp. Thank you.

Message	Translation
Week 1	
	Don't have coins for change? Ask your customers to #JustSaveIt
Hai Agen, Karena sudah percaya sama kamu, nasabahmu sudah punya rekening bank lho, mending ajak mereka untuk *#TabunginAja* uang kembalian belanjanya, uang kecil nggak masalah. Tunggu apalagi, ayo mulai dari hari ini!	Hi Agent, Because they trust you, your customers already have a bank account. You can ask them to *#JustSave* their change from shopping, it doesn't matter if it's small money. What are you waiting for, let's start today!
Week 2	
	Instead of having difficulties in providing change, it's better to ask your customers to #JustSave their change
Hai Agen, Terima kasih ya sudah jadi Agen yang baik buat masyarakat di sekitarmu. Yuk bantu nasabahmu untuk lebih aktif menabung. Caranya mudah, tinggal ajak mereka untuk *#TabunginAja* uang kembalian belanja.	Hi Agent, Thank you for being a good agent for the people around you. Let's help your customers to save more actively. It is easy, just ask them to *#JustSave* their shopping change.

Message	Translation
Week 3	
	(1) #JustSaveIt Comics (2) - Ma'am, (I want to) buy chips and mineral water. Here are Rp 10,000. - OK! The change is Rp 2000, do you want to have a bank account too? It's easy, Mam! (3) - OK, Mam. I'll help you to open new bank account. If you open a new account and make a deposit for at least Rp 5,000, you will get an additional Rp. 2,000 as a bonus, so your total balance will be Rp 7,000. If your balance is high, you can use it to buy credit or transfer. - Oh yes, I want it, Mam. I don't have a bank account yet. (4) - Next time, if there are other neighbors who shop (here), I will ask them to sign up new bank account, their change can be used as the initial balance for opening an account.
Hai Agen, Mau tips untuk tambah nasabah? Ayo! Jangan kehilangan kesempatan untuk ajak pelangganmu menjadi nasabah baru. Caranya mudah, minta saja uang kembalian belanja mereka untuk di #TabunginAja sebagai setoran awal. Gimana? Banyak nasabah baru, bisa banyak dapat insentif lho. Tunggu apalagi, mulai dari sekarang	Hi Agent, Want tips to get more customers? Come on! Don't miss the opportunity to ask your customers to become a new customer! It's easy, just ask them to #JustSave their change as an initial deposit. What do you think? By having many new customers, you can get a lot of incentives. What are you waiting for, start now!

Message	Translation
Week 4	
	(1) #JustSaveIt Comics (2) - Sir, I want to buy 2 liters of rice. Here's my money, it's Rp 20,000. - OK, 2 liters costs 19,500 (3) - (You'll get) candy as change, yeah. Oh, or do you want to #JustSave your change into your bank account? Later, if you deposit your change from shopping often, when the amount is getting large enough you could use them to buy phone credit, pay the electricity or water bills. - Oh yeah, that's OK. It'd be easier for me to transfer money too. 4) - I have to ask all of my customers to #JustSaveIt. If the balance is large enough, it'd be easier for them to do transactions. So I could get incentives.
Hai Agen, Mau tips biar nasabahmu lebih aktif? Ajak mereka buat *#TabunginAja* uang kembaliannya. Kalo saldonya banyak, nasabah bisa lebih mudah buat transfer, beli pulsa, atau bayar tagihan. Tunggu apalagi!	Hi Agent, Want tips so that your customers are more active? Ask them to *#JustSave* their change. If the balance is getting large enough, it'd be easier for customers to transfer, buy phone credit, or pay the bills. What are you waiting for!

Message	Translation
Week 5	
	The change from shopping is less than 5000? Ask your customers to #JustSaveIt
Hai Agen, Susah dapet uang kembalian? Apalagi kalo kurang dari Rp 5000. Lain kali, mending ajak nasabahmu buat *#TabunginAja* uang kembaliannya. Kalau mereka nolak, tanya aja berapa jumlah yang cocok untuk #TabunginAja. Tunggu apalagi, ayo mulai dari sekarang! Nasabah untung, agen juga untung.	Hi Agent, Is it difficult to provide change? Especially if it is less than Rp 5000. Next time, it's better to ask your customers to * #JustSave* their change. If they refuse, just ask how much change they think is good enough to #JustSaveIt. What are you waiting for, let's start now! The customer gets benefits, the agent also gets benefits.

Message	Translation
Week 6	
	(1) #JustSaveIt Comics (2) - Hi, Tanti! Eating here too? - Hey, yeah. Oh, Budi, you haven't been saving for a long time. Do you want to #JustSave the remaining cash from buying meatballs? (3) - Oh, yes. I received change (amounting) 1500. I want to save it. - Yes, I can help you to save it. If the amount is getting big enough, you can transfer money and pay the bills. It'd be your loss if you don't save, in fact, you will get interest too if you save in the bank often! (4) - Oh yeah, right, my customer had opened an account with me yesterday. So, now if my customers shop at a food stall, I can also ask them to #JustSave their remaining cash from shopping, even if the amount is small, no problem. If the amount is getting bigger, they could be more active in doing transactions.
Hai Agen, Terima kasih ya sudah jadi Agen yang baik buat masyarakat di sekitarmu. Yuk bantu nasabahmu untuk lebih aktif menabung. Caranya mudah, tinggal ajak mereka untuk #TabunginAja uang kembalian belanja, bank aman dan terpercaya.	Hi Agent, Thank you for being a good agent for the people around you. Let's help your customers to save more actively. It's easy, just ask them to #JustSave their change from shopping, a safe and trusted bank.

Message	Translation
Week 7	
	What if every day for the next week you ask 5 customers to #JustSave their change from shopping?
Hi Agen, Minggu ini, sudahkah kamu mengajak nasabahmu untuk #TabunginAja uang kembalian belanja mereka jika kurang dari 5000? Ayo! Ajak lagi nasabahmu untuk #TabunginAja uang kembalian belanjanya. Kalau saldo mereka sudah banyak, kan jadi mudah lho untuk mereka transfer, beli pulsa, dan bayar listrik atau air. Tunggu apalagi! Nabung di bank aman dan terpercaya.	Hi Agent, This week, have you asked your customers to #JustSave their change from shopping if the amount is less than 5000? Come on! Ask your customers again to #JustSave the change they received from shopping. If their balance amount is getting bigger, it'd be easy for them to transfer money, buy phone credit, and pay the electricity or water bills. What are you waiting for! Save in the bank, safe and reliable.

Message	Translation
Week 8	
	(1) #JustSaveIt Comics (2) - Sir, I want to buy 2 liters of rice. Here's my money, it's Rp 20,000. - OK, 2 liters costs 19,500 (3) - (You'll get) candy as change, yeah. Oh, or do you want to #JustSave your change into your bank account? Later, if you deposit your change from shopping often, when the amount is getting large enough you could use them to buy phone credit, pay the electricity or water bills. - Oh yeah, that's OK. It'd be easier for me to transfer money too. (4) - I have to ask all of my customers to #JustSaveIt. If the balance is large enough, it'd be easier for them to do transactions. So I could get incentives.
Hi Agen, Minggu lalu, sudah berapa banyak nasabah yang diajak untuk #TabunginAja uang kembalian belanjanya? Ayo! Ajak lagi nasabahmu untuk #TabunginAja uang kembaliannya. Kalau nasabahmu aktif transaksi, kamu kan bisa dapet banyak insentif. Tunggu apa lagi, ayo mulai dari hari ini!	Hi Agent, Last week, how many customers have you asked to #JustSave their change from shopping? Come on! Ask your customers to #JustSave their change. If your customers are active in doing transactions, you can get a lot of incentives. What are you waiting for! Let's start today!

Notes

i WhatsApp changed its policy to broadcast messages shortly before the launch of the intervention. Previously, WhatsApp had allowed user to forward messages to 20 groups or people at once, but after the policy changed they limited it into only five groups/people at once.

ii Demirgüc-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess (2018). *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution.* Washington, DC: World Bank Group; Strategi Nasional Keuangan Inklusif, 2019. *Financial Inclusion Insights Indonesia.* Available at: http://finclusion.org/uploads/file/fii-snki-indonesia-2018-2019-final-report.pdf

iii The World Bank (2017). *The Global Findex Database 2017.* Available at: https://globalfindex.worldbank.org/

iv Pulse Lab Jakarta (2018). *Banking on Fintech: Financial Inclusion for Micro Enterprises in Indonesia.* Available at: https://medium.com/pulse-lab-jakarta/pulse-stories-banking-on-fintech-970ac91d8177

v Thinkgroups are a form of brainstorming used by BIT which involves participants anonymously and simultaneously writing down ideas in an online document.

vi See, for example, Nickerson, D. W., & Rogers, T. (2010). Do you have a voting plan? Implementation intentions, voter turnout, and organic plan making. *Psychological Science*, 21(2), p.194 – 199.

vii Frictions are the little inconveniences that we have to go through in order to perform an action - for example, having to make a special trip to the agent's store in order to deposit money. BIT has shown in different contexts that simply removing frictions makes people much more likely to perform a behaviour - examples can be found in The Behavioural Insights Team, 2014. *EAST: Four simple ways to apply behavioural insights.* Available at: https://www.behaviouralinsights.co.uk/wp-content/uploads/2015/07/BIT-Publication-EAST_FA_WEB.pdf

viii Richard Thaler in The Financial Times (2019). *Richard Thaler: 'If you want people to do something, make it easy'.* Available at: https://www.ft.com/content/a317c302-aa2b-11e9-984c-fac8325aaa04

ix At the request of the partner bank, this comic also mentions a IDR 2,000 bonus that will be given to any new customer who also deposits IDR 5,000 on the day the account is opened. This programme was launched nationwide at the same time as the trial, but agents did not receive any communication about it until at least early April 2019.

x Ideas42. (2014). *The Power of Heuristics.* https://www.ideas42.org/wp-content/uploads/2015/05/ideas42_The-Power-of-Heuristics-2014-1.pdf

xi Kahneman, D., Slovic, P., & Tversky, A. (Eds.). (1982). *Judgment under uncertainty: Heuristics and biases.* Cambridge University Press.

xii This group includes both bank staff and contractors who are in charge of agent supervision/ support.

xiii Figure 3 shows data for all customers in the Treatment areas, including those were not part of the sample.

xiv The recency effect occurs when an individual remembers information received more recently better and gives it more weight in forming judgements compared to presentation presented earlier.

xv For example, see Kirkman, E. (2019). *Free riding or discounted riding? How the framing of a bike share offer impacts offer-redemption.* Available at: http://journal-bpa.org/index.php/jbpa/article/view/83

xvi For more background on third-party agent network managers see Kapoor, R. and Kumar, T. V. S. R. (2018). *Third-Party Agent Network Managers: The Missing Element in Indonesia's DFS Sector.* Available at: http://www.helix-institute.com/blog/third-party-agent-network-managers-missing-element-indonesia%E2%80%99s-dfs-sector and The Boston Consulting Group (2018). *CICO Economics in Indonesia.* Available at: https://connect.bcg.com/cicoeconomics/6-cico-economics-in-indonesia_aug-2019-2/