Behavioural Science: Nimble Evaluations

Increasing uptake of Britam and M-TIBA'S health micro-insurance product

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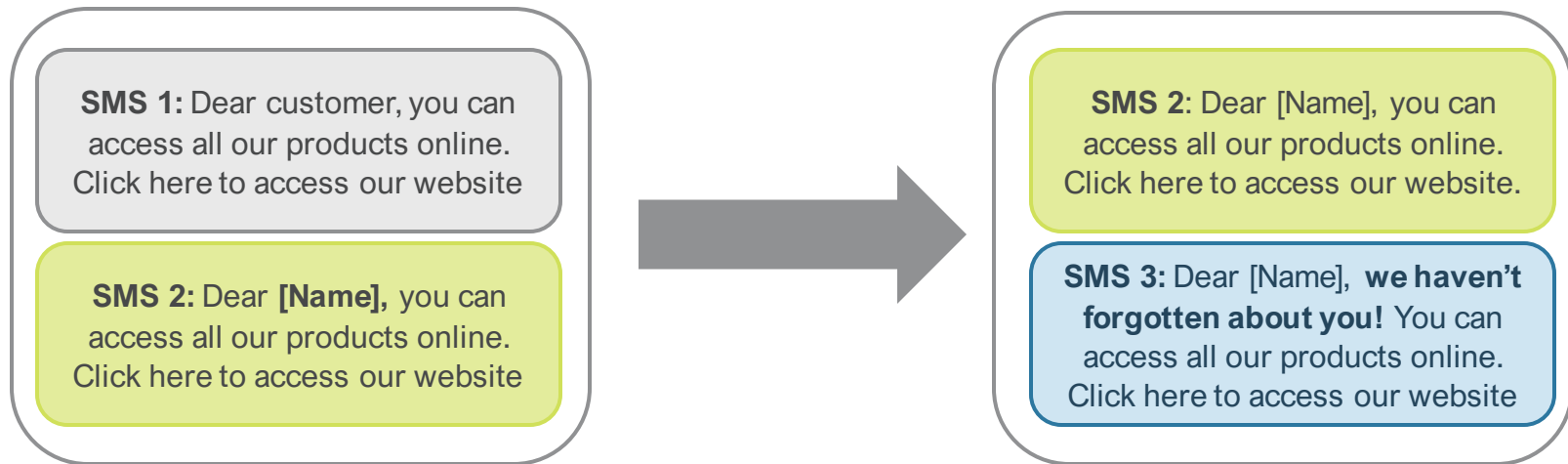fsdafrica

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What are nimble evaluations?

Nimble evaluations are a means of **testing multiple hypotheses for behavior change over time** to move towards the most effective behavioural intervention.

They focus on **framing and context questions** for small and incremental changes and follow a "round robin" approach for arriving at the most effective intervention design. In the process, we can infer insights about our consumers and target audiences that can be applied to all communications and product design.

Using SMS interventions as an example, the below diagram explains the process of conducting a nimble evaluation:

SMS 1: Dear customer, you can access all our products online. Click here to access our website

SMS 2: Dear **[Name],** you can access all our products online. Click here to access our website

SMS 2: Dear [Name], you can access all our products online. Click here to access our website.

SMS 3: Dear [Name], **we haven't forgotten about you!** You can access all our products online. Click here to access our website

Here, **SMS 1 is the baseline** and **SMS 2 tests** whether **personalization** increases uptake.

The version with the highest click rate (responses) then becomes the new base SMS for the next stage.

Assuming the **personalized SMS** received the most responses, it is used as the baseline and compared against a new SMS (**SMS 3**). SMS 3 is essentially **a duplicate of SMS 2, with one small tweak made to it** (to test whether **affect** influences uptake). Both SMSs are sent out again and the one with the highest click-through rate is chosen.

Partners and product

Britam

Britam is a pan-African diversified financial services group, offering insurance, pension and investment products.

Their microinsurance division is focused on protecting low-income people against specific perils, including medical, credit life, personal accident and death cover and insurance for farmers and small businesses.

M-TIBA:

M-TIBA is a health payments platform that links consumers, insurers, healthcare providers and governments across Africa.

It enables users to manage their insurance policy or health payments on their mobile. It helps insurers, donors, and governments to distribute benefits efficiently and transparently.

Product: Britam and M-TIBA have partnered to offer a low-cost, health microinsurance product
Clients: M-TIBA's existing customer base of over 250,000 individuals who are regularly saving for health purposes

| **Premium:** $30-40 per year (Ksh 3200) | **Payment:** Annual | **Coverage:** Up to ~$1000 (Ksh 100,000) | **Distribution:** SMS communication and direct selling |

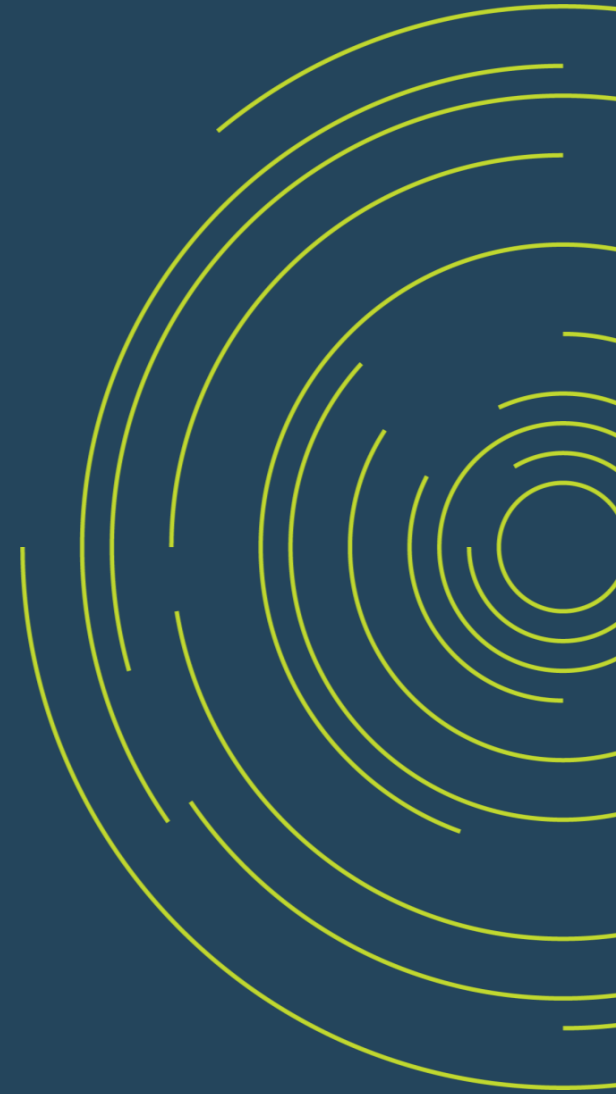# What was the objective of our nimble evaluations?

Problem statement: Limited uptake of a health microinsurance product

Behavioural objective: Increase the number of customers who express interest in the product, as measured by those who request a call back from the sales agent following receipt of the SMS

Methodology

Which behavioural interventions did we use?

	Intervention	Description	Rationale
	Price	Removing the mention of cost from the message	Individuals, particularly low savers, may be reluctant to take out insurance when they see the price, without fully understanding the benefits of insurance
	Time of year	Sending messages at different times depending on client availability	Individuals may be more/ less busy at certain periods throughout the year (i.e., many individuals return home for the holidays)
	Plain language	Using simple language to enhance understanding	Individuals typically struggle to understand insurance jargon and thus may not know what the benefits of the policy are
	Salience	Eliciting emotional responses through words, images, or information	Individuals are likely to resonate strongly to information which they can relate to, and which affects them

Experiment Design

Experiment	Research question	SMS	Treatments
Experiment 1	Is price a driving factor in exploring insurance cover?	1	SMS that includes price
		2	SMS that does not mention price
Experiment 2	Were low response rates due to the SMS copy, the sample or the time of the year?	1	Winning SMS from Experiment 1 (with price)
		2	SMS that was used before the experiment began
Experiment 3	Do customers understand the meaning of in-patient benefits?	1	SMS with plain-language alternative to "in-patient care"
		2	Winning SMS from Experiment 2 (previous SMS used)
Experiment 4	Which benefits are most salient for customers?	1	Winning SMS from Experiment 3 (previous SMS used)
		2	SMS indicating maternity cover (women only)
		3	SMS indicating funeral cover (men and women)

Experiment analysis used

Linking back to the behavioural objective, the aim was to **increase the number of customers who express interest in the product**.

The indicator measured was the **number of people who responded and requested a call back after receiving an SMS**

Types of analysis:

- **Basic data analysis** to assess which SMS was more successful in getting people to express interest in the product, by assessing the percentage of people who responded to the SMS.

- **Regression analysis** to see whether there were differences in the savings rates for different groups. Running the regressions can tell us whether these types of differences had an actual impact on the behaviour of the customers. We ran the following regressions:

  1. Do the individuals in the two treatment groups (SMS 1 vs. SMS 2) have different savings rates?

  2. Is there a difference in the savings rates between those who responded to the SMSs and those who did not respond?

  3. Per treatment:

     a) Is there a difference in the savings rates between those who responded and those who did not for Treatment Group 1 (SMS 1)?

     b) Is there a difference in the savings rates between those who responded and those who did not for Treatment Group 2 (SMS 2)?

Timing: Each experiment was run over a **period of five days**, in December 2020 – January 2021

Data protection: this project catered for data privacy as per the General Data Protection Regulation (GDPR) and Kenya's Data Protection Act (2019). No personal/ confidential information was shared and all data related to the outcomes of the behavioral interventions was anonymized.

Overview of samples

	Experiment 1				Experiment 2			
	SMS 1	**SMS 2**	**Blank**	**Full**	**SMS 1**	**SMS 2**	**Blank**	**Full**
Total sample	**1279**	**1258**	**5**	**2542**	**1247**	**1248**	**2**	**2497**
Total men Old Young	372 266	313 316	n/a	1271	313 306	312 311	n/a	1242
Total women Old Young	286 348	268 357	n/a	1258	313 315	352 273	n/a	1253

	Experiment 3				Experiment 4			
	SMS 1	**SMS 2**	**Blank**	**Full**	**SMS 1**	**SMS 2**	**SMS 3**	**Full**
Total sample	6238	6259	-	**12497**	**1248**	**625**	**1315**	**3188**
Total men Old Young	3106	3142	-	6248	315 309	n/a n/a	378 310	1312
Total women Old Young	3132	3117	-	6249	310 314	310 315	310 317	1876

Note: Individuals aged 35 and older were classified as 'old', while individuals aged 34 and younger were classified as 'young'

Experiment 1

Is pricing a driving factor in exploring insurance cover?
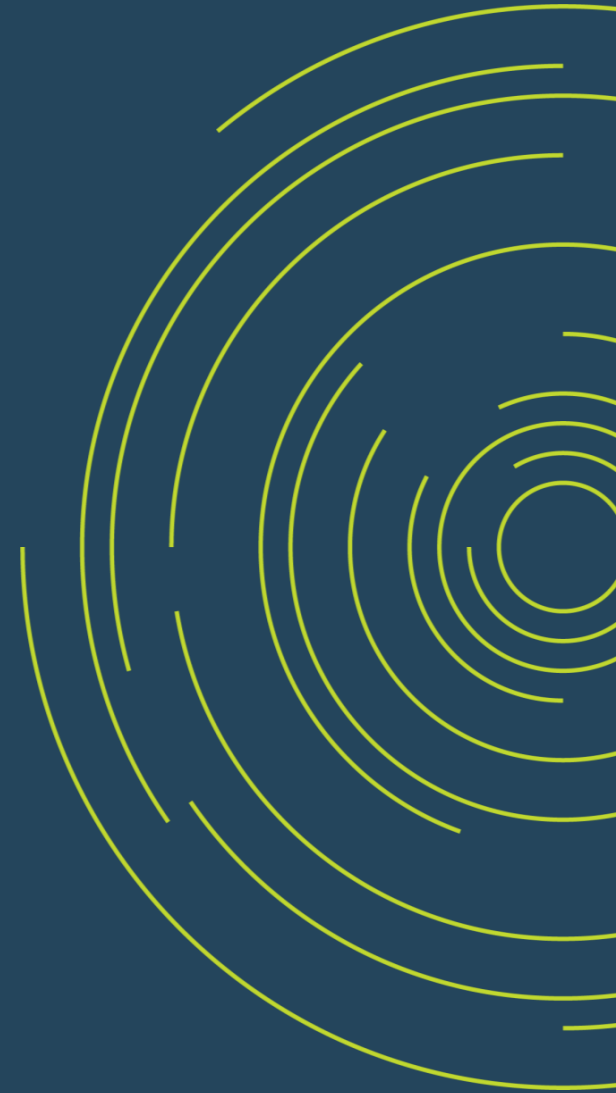
Overview of experiment 1

The objective of this experiment was to test whether price was a driving factor in individuals being open to learn more about a health insurance product in Kenya.

SMS 1:
This SMS mentioned the cost of the insurance policy.

"Dear member, you asked and we listened! Introducing health insurance through Britam. Providing KSh 100,000 in-patient cover in case of hospitalization for only Ksh 3200 per month. SMS "TIBA" to 20253 to register."

SMS 2:
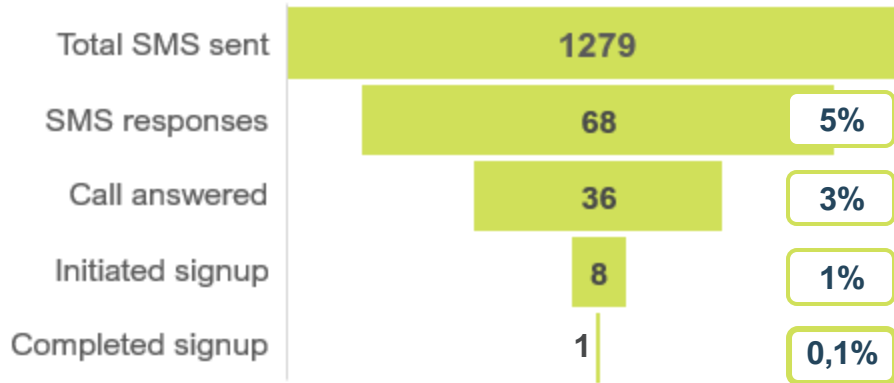**This SMS did not mention the cost of the insurance policy.**

"Dear member, you asked and we listened! Introducing health insurance through Britam. Providing KSh 100,000 in-patient cover in case of hospitalization. SMS "TIBA" to 20253 to register"
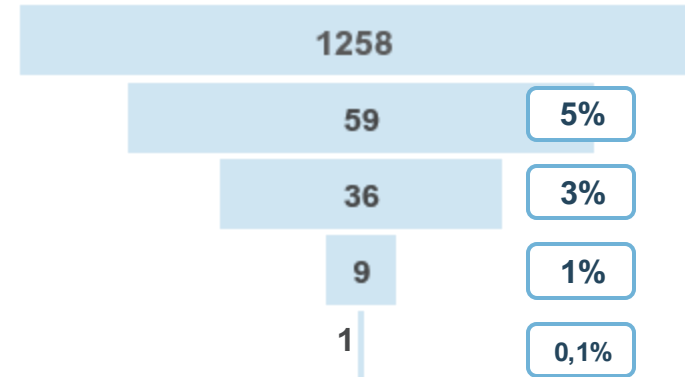
Experiment 1: Results

SMS 1 (with the price) was slightly more successful

SMS 1 had a response rate of 5.3%, compared to 4.6% for SMS 2

SMS 1 – including premium price

Total SMS sent	1279	
SMS responses	68	5%
Call answered	36	3%
Initiated signup	8	1%
Completed signup	1	0,1%

SMS 2 – not including premium price

Total SMS sent	1258	
SMS responses	59	5%
Call answered	36	3%
Initiated signup	9	1%
Completed signup	1	0,1%

Breakdown of individuals who responded

SMS 1	Male	Female	
Young	6%	3%	4%
Old	5%	6%	**5%**
	6%	4%	

SMS 2	Male	Female	
Young	4%	3%	3%
Old	5%	6%	6%
	5%	4%	

Key takeaways

- **More men responded to register** than women with both the SMSs.
- **More older individuals responded** to register than younger individuals to both the SMSs.
  - *NB*: *It is important to note that while SMS 1 was slightly more successful than SMS 2, more older individuals were targeted in SMS 1, which might have slightly impacted the overall results.*

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Experiment 1: Summary

There was some variation between the groups, in terms of who responded to which SMS:

- There is a **statistically significant difference in savings rates between individuals in different treatment groups:** recipients of SMS 1 (SMS with cost) have total savings which are 4.5% higher than those who received SMS 2 (SMS with cost not mentioned)

- **People who responded tended to have higher savings than those who did not respond**: Individuals who responded to either SMS have total savings which are 16,8% higher than those who did not respond.
  - This was the case for SMS 1: Recipients of SMS 1 (cost mentioned) have total savings which are 32% higher than those who did not respond. No significant differences found among those who received SMS 2
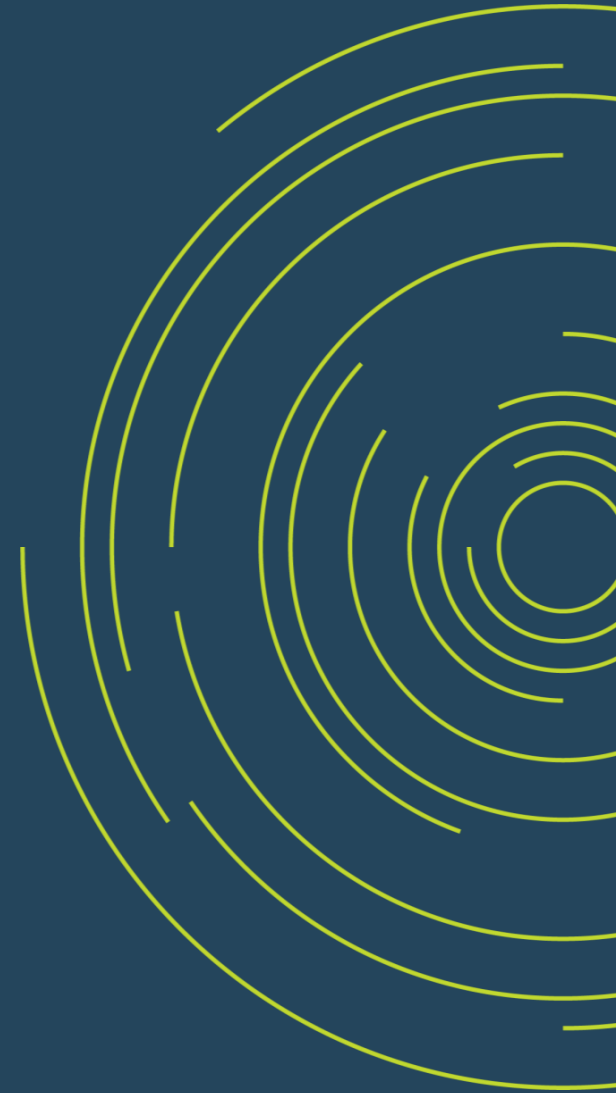
    These results are statistically significant at the 1% level.

What does this tell us?

While people with higher savings are more likely to respond in general, **people with lower savings are more likely to respond when cost isn't mentioned**. This suggests that people with lower savings might be interested in the insurance product, but the cost is too high when they see it without understanding the benefits.

Experiment 2:

Were response rates low due to SMS copy, the sample or the time of year?

Overview of experiment 2

- **The objective** of this experiment was to test whether the low response rate achieved in experiment 1 is due to the copy/wording or time of the year (holidays, festive season). To test this, we used the successful SMS from the previous experiment, compared with the SMS that was previously sent out M-TIBA customers:

SMS 1:
Successful SMS from experiment 1

"Dear member, you asked and we listened! Introducing health insurance through Britam. Providing Ksh 100,000 in-patient cover in case of hospitalization for only Ksh 3200 per month. SMS "TIBA" to 20253 to register."
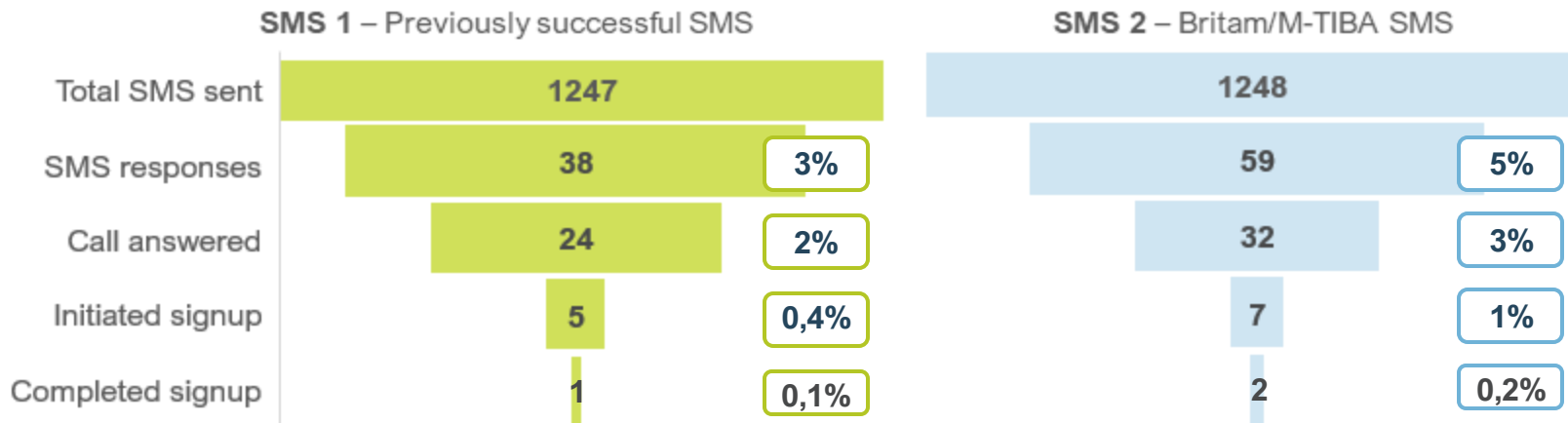
SMS 2:
Britam/M-TIBA previously successful SMS

"NOTICE!! The only Ksh 3200 savings on your TREATMENT allows you to get insurance that covers up to Ksh 100,000 when you are hospitalized. Send the word 'TIBA' to 20253 for more information"

Experiment 2 results

SMS 2 (M-TIBA's previous SMS) was slightly more successful than SMS 1

SMS 1 had a response rate of 3% compared to 5% of individuals who received SMS 2.

	SMS 1 – Previously successful SMS		SMS 2 – Britam/M-TIBA SMS	
Total SMS sent	1247		1248	
SMS responses	38	3%	59	5%
Call answered	24	2%	32	3%
Initiated signup	5	0,4%	7	1%
Completed signup	1	0,1%	2	0,2%

Breakdown of individuals who responded

SMS 1 – excluding price			
	Male	Female	
Young	3%	1%	2%
Old	6%	2%	4%
	4%	2%	

SMS 2 – Britam previous SMS			
	Male	Female	
Young	4%	4%	4%
Old	4%	6%	5%
	4%	5%	

Key takeaways

- **More men responded to SMS 1** than women, while more women responded to SMS 2 than men (despite that fact that slightly more women received SMS 1 and vice versa).
- **Individuals who responded to SMS 2 were wealthier** than those who responded to SMS 1
- **More older individuals responded** to register than younger individuals to both the SMSs.
  - *NB: although 52% of the overall sample was older, which may have slightly impacted the results*

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Experiment 2: Summary

- **Differences in savings between the groups:** Recipients of treatment group 1 (SMS 1 – cost not mentioned) have total savings which are 4.9% lower than those in treatment group 2 (Britam/ M-TIBA previously successful SMS).

- **Difference in savings between people who responded** vs. those who did not: Respondents overall have total savings which are 4,5% lower than those who did not respond.
  - This was the case for SMS 1: Recipients of SMS 1 (cost mentioned) have total savings which are 7.3% higher than those who did not respond.
  - No significant differences found among those who received SMS 2

*These results are statistically significant at the 1% or 5% level.*

What does this tell us?
Mentioning the price might drive away people with lower income or savings when they don't yet know the benefits, whereas excluding the price from the messaging may encourage low-income individuals to explore insurance more.

The findings in this experiment were surprising, in that we would expect those with higher savings to show more interest in the product. While more detailed research would be needed to establish the reasons behind this, one hypothesis is that there was a resurgence in COVID-19 cases in Kenya in the weeks before the experiment, which may have made health risks more prevalent for low-savings individuals at this time.

Experiment 3:

Does the use of a plain language alternative of 'in-patient cover' increase the response rate?
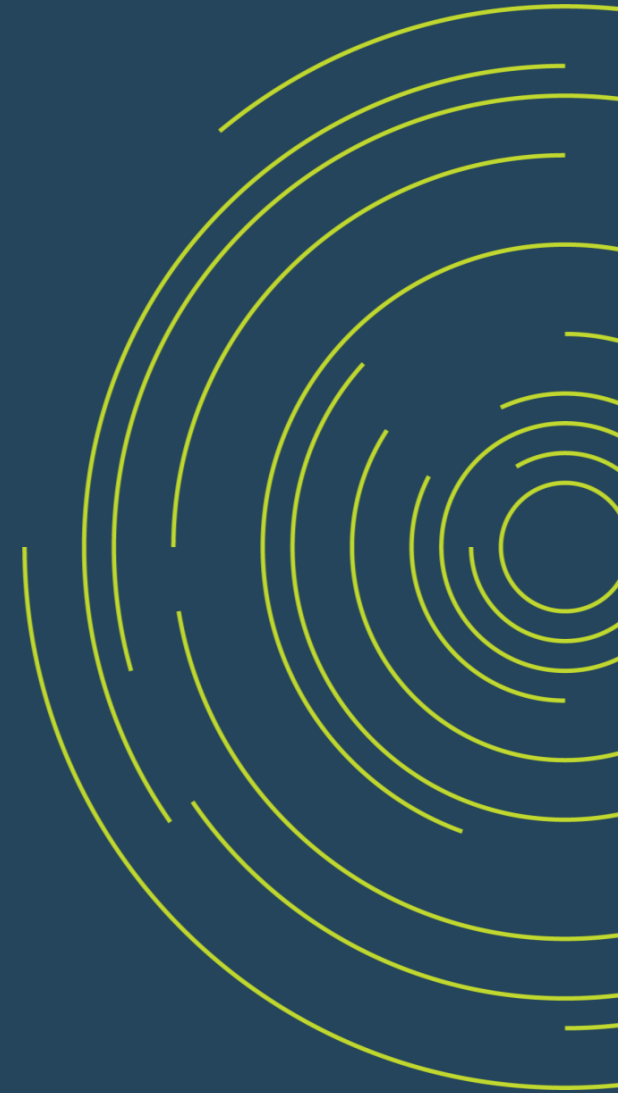
Overview of experiment 3

- **The objective** of this experiment was to test whether the use of a plain language alternative of 'in-patient cover' is more effective. This tests whether respondents face any issues with understanding insurance terms:

SMS 1:
Plain Language Alternative

"NOTICE !! For only Ksh 3200 a year, you can get insurance that pays for your hospital bill of up to Ksh 100,000 when you get sick and need care. Send the word 'TIBA' to 20253 for more information."
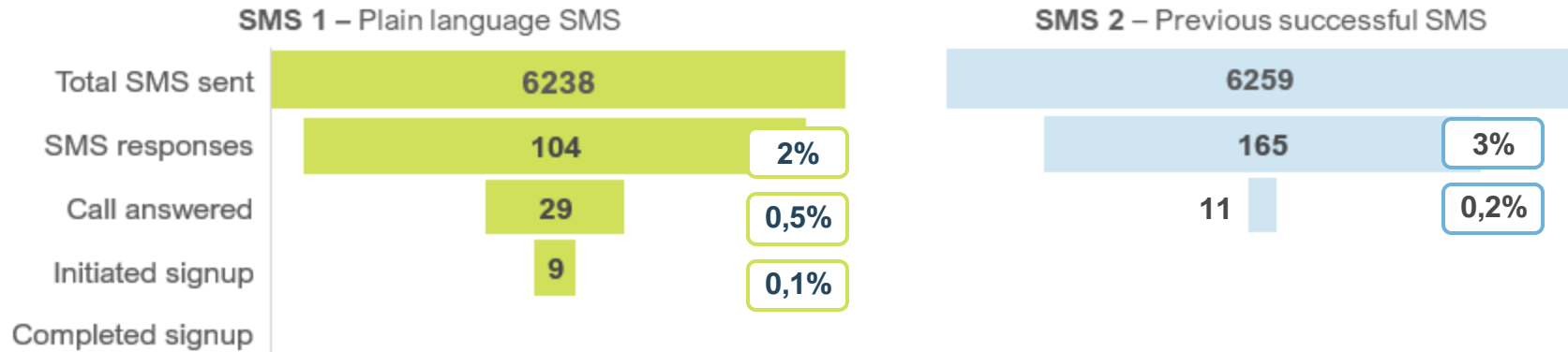
SMS 2:
Previously successful SMS from experiment 2

"NOTICE !! The only Ksh 3200 savings on your TREATMENT allows you to get insurance that covers up to Ksh 100,000 when you are hospitalized. Send the word 'TIBA' to 20253 for more information"

Experiment 3 results

SMS 2 was slightly more successful than SMS 1

SMS 2 had a response rate of 3% compared to 2% for SMS 1. However, SMS 1 had more interest in signups

SMS 1 – Plain language SMS

Total SMS sent	6238	
SMS responses	104	2%
Call answered	29	0,5%
Initiated signup	9	0,1%
Completed signup		

SMS 2 – Previous successful SMS

Total SMS sent	6259	
SMS responses	165	3%
Call answered	11	0,2%

Breakdown of individuals who responded

SMS 1 – plain language SMS

	Male	Female	
Young	1,5%	1%	1,3%
Old	2%	1,7%	2%
	2%	1%	

SMS 2 – Britam previous SMS

	Male	Female	
Young	3%	1,5%	2%
Old	3.5%	3%	3%
	3%	2%	

Key takeaways

- **More males responded overall, for both SMSs**.
  - 58% of the respondents were male
- **Average savings amounts relatively similar** across people who responded. Overall savings of those who responded was higher than the total sample.
- Both SMSs were slightly more successful among older individuals than younger individuals.

Experiment 3: Summary

- **There is a difference in the savings rates between individuals in different treatment groups:** Recipients of treatment group 1 (plain language) have total savings which are 2.4% lower than those in treatment group 2 (past successful Britam SMS).

- **People who responded to any of the SMSs had higher savings:** Respondents (overall) have total savings which are 3.6% higher than those who did not respond
  - This was the case for SMS 1: Respondents of treatment group 1 (plain language) have total savings which are 5.5% higher than those who did not respond.
  - No significant differences found among those who received SMS 2.

  These results are statistically significant at the 1% or 5% level.
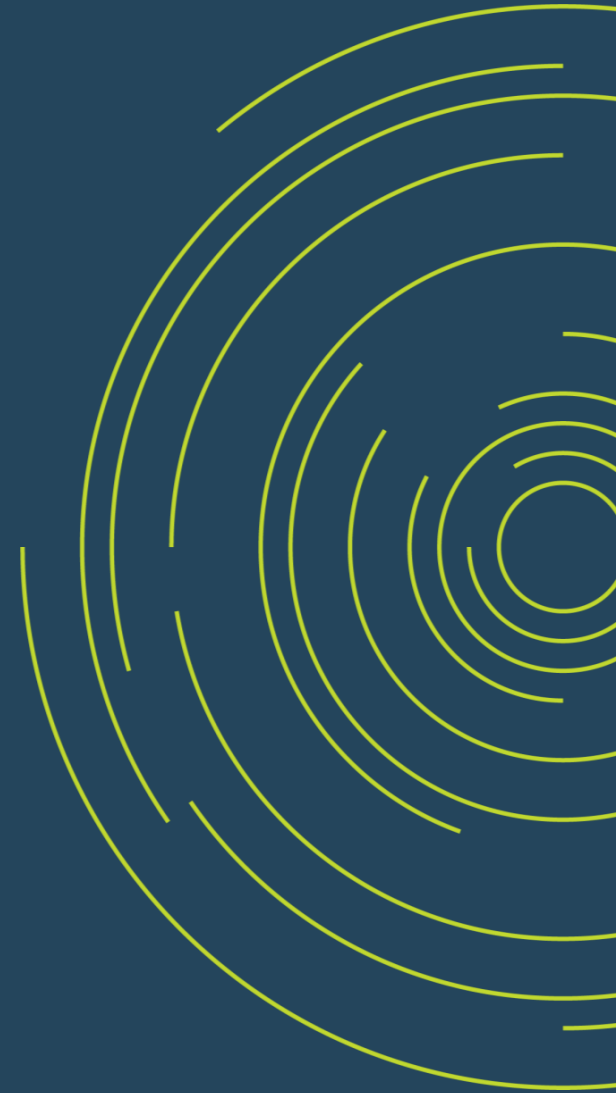
What does this tell us?

Based on the results from Experiment 1 and 2, it is not surprising that the responses from both SMSs in Experiment 3 were low. The reason for this is that a sample group with much lower savings, overall, was targeted than in previous experiments, and the fact that both SMSs included price. **Thus, price is a factor – this became evident from the answers people gave as to why the didn't take out the policy**: even those who were interested couldn't afford it

These predictions are supported by the results above, where only those with higher savings rates responded to the SMSs. In further regressions, we identified that higher savings increased the likelihood of responses

Experiment 4:

Salience of benefits

Is a specific benefit more salient for different customer groups?

Objective of this experiment

- In this experiment, we will test the salience of two different benefits (1. maternity & 2. funeral) with different customer groups. The SMS regarding maternity benefits will only go out to women, whereas the SMS regarding funeral benefits will go out to men and women.

SMS 1: Previously successful SMS from experiment 3
"NOTICE!! For only Ksh 3200 a year, you can get insurance that pays for your hospital bill of up to Ksh 100,000 when you get sick and need care. Send the word 'TIBA' to 20253 for more information."

SMS 2: SMS to test maternity benefits with women
"NOTICE!! The only Ksh 3200 savings on your TREATMENT allows you to get insurance that covers up to Ksh 20,000 of your *maternity costs*. Send the word 'TIBA' to 20253 for more information"
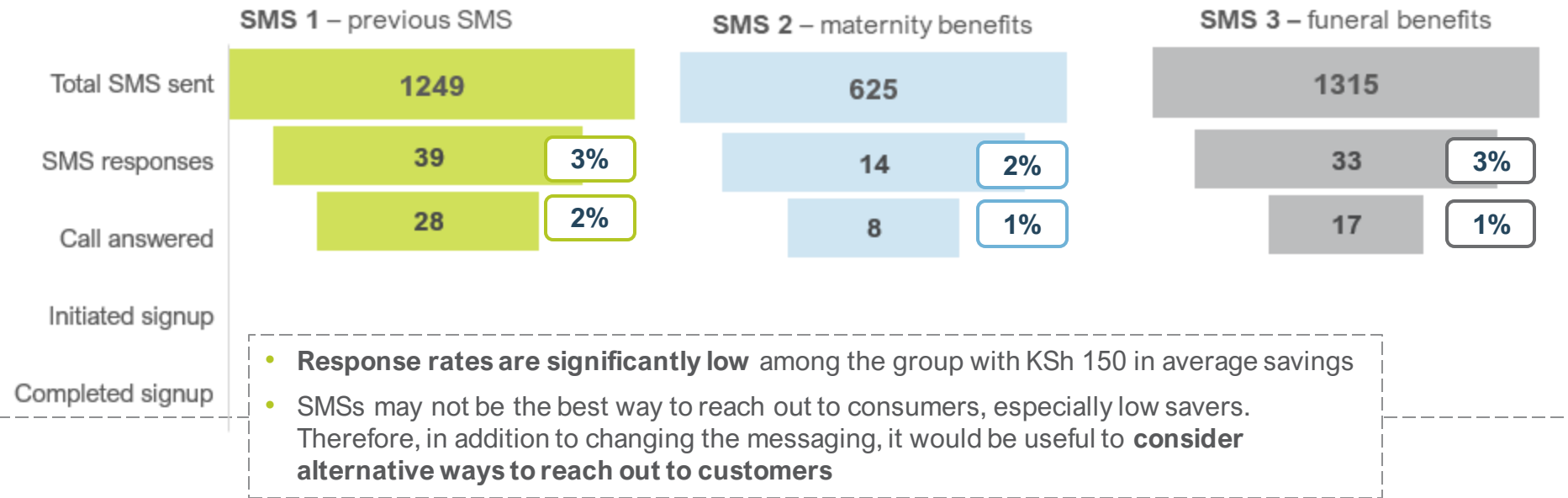

SMS 3: SMS to test funeral benefits with men and women
"NOTICE!! The only Ksh 3200 savings on your TREATMENT allows you to get insurance that covers up to Ksh 50,000 of your or a family member's *funeral costs*. Send the word 'TIBA' to 20253 for more information"

Experiment 4 results

Base SMS and funeral benefits SMS had slightly higher response rates

SMS 1 and 3 had response rates of 3%, compared to 2% for SMS 2

	SMS 1 – previous SMS	SMS 2 – maternity benefits	SMS 3 – funeral benefits
Total SMS sent	1249	625	1315
SMS responses	39 — 3%	14 — 2%	33 — 3%
Call answered	28 — 2%	8 — 1%	17 — 1%
Initiated signup			
Completed signup			

- **Response rates are significantly low** among the group with KSh 150 in average savings
- SMSs may not be the best way to reach out to consumers, especially low savers. Therefore, in addition to changing the messaging, it would be useful to **consider alternative ways to reach out to customers**

- The funeral benefits SMS resonated more with men than women
- The base SMS resonated more with women
- The base SMS was (overall) the most successful across both genders

		SMS 4.1 (successful SMS from experiment 3)	SMS 4.2 (SMS to test maternity benefits)	SMS 4.3 (SMS to test funeral benefits)
WOMEN	Old	9 (3%)	7 (2%)	9 (3%)
	Young	11 (4%)	7 (2%)	6 (2%)
	Total	**20 (3.2%)**	**14 (2%)**	**15 (2%)**
MEN	Old	12 (4%)	n/a	11 (3%)
	Young	7 (2%)	n/a	7 (2%)
	Total	**19 (3%)**	**n/a**	**16 (2%)**

Barriers to uptake
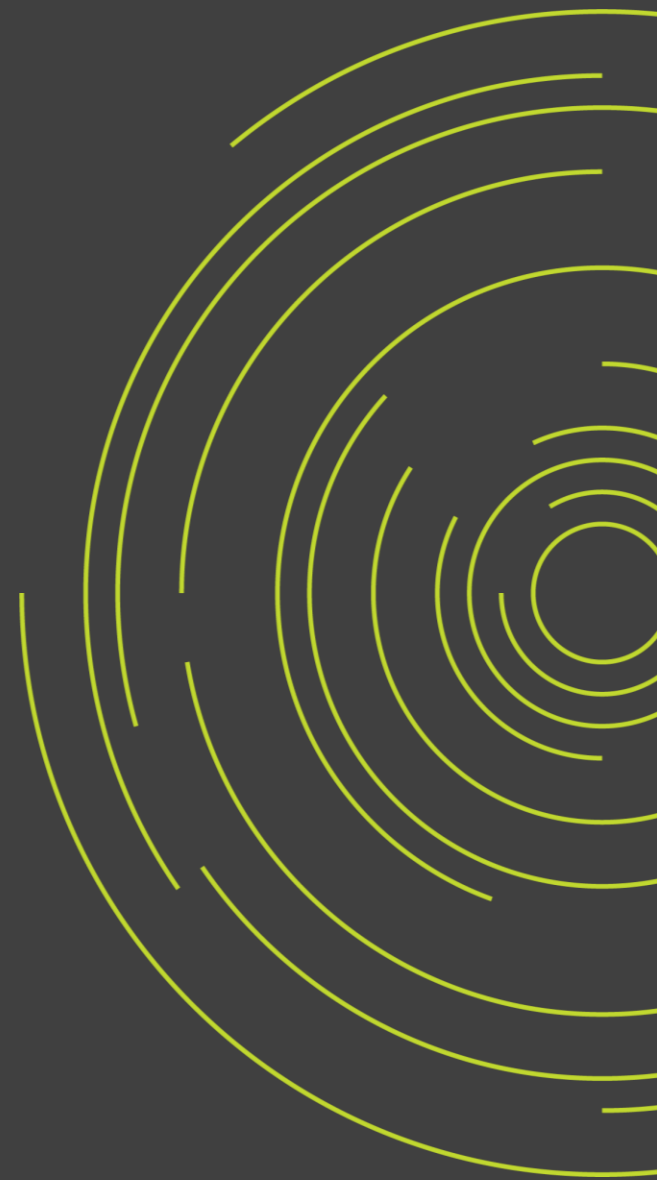
Reason for not taking out policy

## Why individuals did not take out the policy

	Experiment 1	Experiment 2	Experiment 3	Experiment 4
Needs to top up	18%	21%	40%	21%
Financial constraints	16%	15%	23%	21%
Needs to think about it	15%	9%	11%	21%
Call back	9%	23%	3%	17%
Prefers partial payments	5%	4%	10%	0%
Phone issues	4%	9%	3%	4%
Other	15%	11%	0%	0%

Other includes Can't talk now; Already been called; Wrong person; Needs to clear balance; Not interested, checking balance and too old

Key takeaways:

- **Needing to top up funds and financial constraints** - main reasons why people did not take out the policy
  - Perhaps it would be good to try target people at a different time of the month (i.e., when they typically get paid), as some individuals said 'try again in 2 weeks'
  - Consider targeting individuals with higher savings amounts
- **Needing to think about it** was also a key reason people did not take out the policy. Perhaps scheduling a time and date for the next call will be good to give them time to think about it.

Key insights & considerations
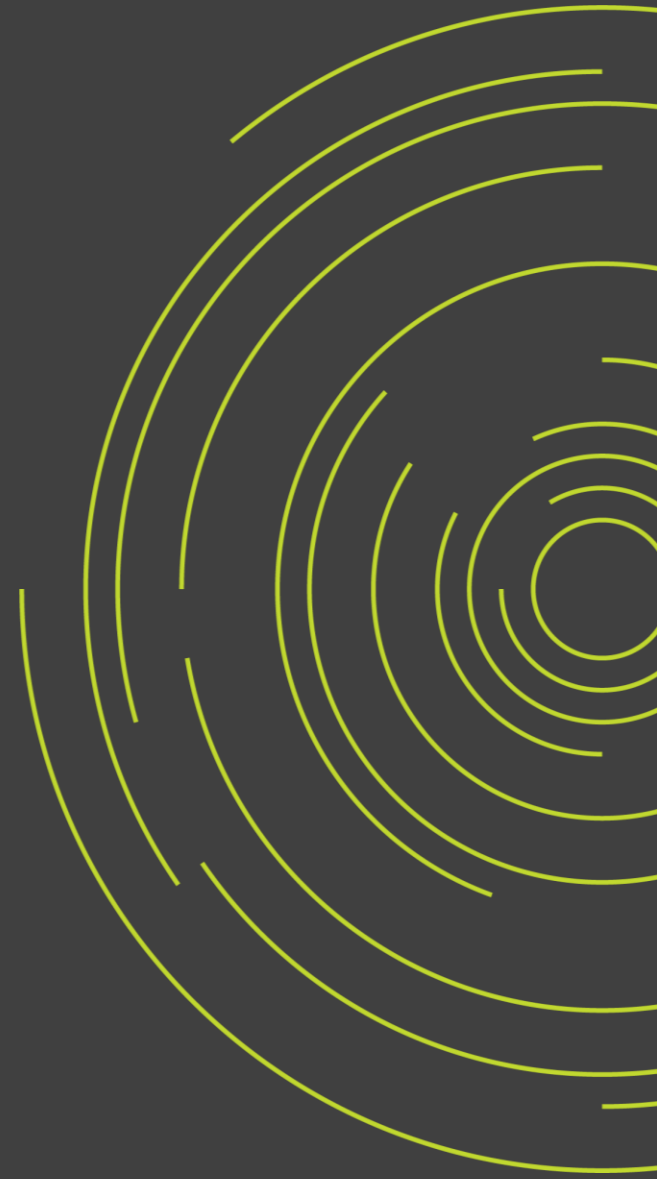
Key insights
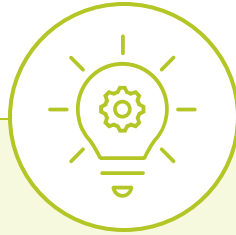
1. Experiment 1 shows us that individuals' savings rates have an impact on whether they show an interest in the product, with **higher savings rates being correlated to more responses**.

2. Although a predictable result, an interesting insight from this experiment is that people with lower savings are more likely to respond when price is excluded from the messaging. This insight is validated across later experiments, where **mentioning price appears to drive away low savers**, and excluding price seems to encourage them to explore insurance options.

3. **Time of year appears to have a significant impact on individuals' willingness to explore insurance options**, with response rates being low in December and early January. This finding is supported by much of the qualitative notes captured by those in the call center, where customers asked to be called back after January or later in the year.

4. **Different benefits resonate between men and women**. The funeral benefits SMS resonated more with men, while women preferred the original SMS. This might suggest something about who manages large household expenses and the fact that men might feel more of a need to 'provide' for their families. Thus, communication strategies should take gender into account to improve their effectiveness

Key considerations

Having a random sample is key for effective experiments

- It is important to ensure, as much as possible, that there are no underlying differences between the samples (e.g., demographics, savings rates) to ensure that the outcomes from each experiment are unbiased.

- Randomisation can be successfully achieved by using identifiers that are randomly generated or assigned when customers join.

- These experiments were designed assuming that the sample was entirely randomized; understanding that the target group was comprised of low savers would have changed the initial approach to the interventions and experiment design.

Think about leveraging alternative channels to reach out to customers

The overall low response rates across the experiments show that SMSs may not be the best way to reach out to consumers, especially if they have low incomes. Therefore, in addition to changing the messaging it would be useful to consider alternative ways to reach out to customers

Thank you

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About Cenfri

Cenfri is a global think-tank and non-profit enterprise that bridges the gap between insights and impact in the financial sector. Cenfri's people are driven by a vision of a world where all people live their financial lives optimally to enhance welfare and grow the economy. Its core focus is on generating insights that can inform policymakers, market players and donors who seek to unlock development outcomes through inclusive financial services and the financial sector more broadly.

About FSD Africa

FSD Africa is a non-profit company that aims to increase prosperity, create jobs and reduce poverty by bringing about a transformation in financial markets in sub-Saharan Africa (SSA) and in the economies they serve. It provides know-how and capital to champions of change whose ideas, influence and actions will make finance more useful to African businesses and households. It is funded by the UK aid from the UK Government. FSD Africa also provides technical and operational support to a family of 10 financial market development agencies or "FSDs" across SSA called the FSD Network.