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The Customer Impact of Inclusive Digital Banking

IVO JENÍK

Executive Summary

THIS CASE STUDY PRESENTS INSIGHTS FROM CUSTOMER RESEARCH with TymeBank clients that bolsters CGAP's hypotheses around how digital banks can support the mission of financial inclusion. As a fully digital South African bank that disproportionately serves low-income rural customers, TymeBank has created a suite of basic products that cater to the essential financial needs of those customers, namely a low-cost transactional account and a high-yield savings account. Judging from product uptake and client testimonials, these products add to a compelling value proposition that not only resonates with customers but improves their lives.

TymeBank's distribution network, which is based on its partnerships with the nationwide Boxer and Pick n Pay (PnP) grocery store chains, helps to keep operational costs low and passes cost savings onto customers in the form of more affordable services. A clear majority of the bank's customers cite affordability as a key source of value and the reason they opened a TymeBank account. The distribution network also extends the bank's reach to areas that are underserved by traditional players. The affordability and accessibility likely explain why underserved segments, such as low-income women and rural customers, are over-represented in TymeBank's (active) customer base as compared to the overall banked population in South Africa.

Despite having access to other banking options, TymeBank customers overwhelmingly see no compelling alternatives in the market. Crucially, the value customers see in the bank appears to be inversely related to income, with poorer customers reporting higher levels of satisfaction.

Context

In today's high-tech financial services landscape, which is often dominated by headlines about fintech startups and tech giants, it is easy to overlook the role banks can play in advancing financial inclusion. The high cost of running brick-and-mortar branch networks has traditionally inhibited banks from serving less profitable client segments, including the low-income groups that are the focus of financial inclusion. Banks have also been slow to adapt the digital innovations that have helped some newcomers reach these segments at lower cost. It is no surprise that some observers have questioned whether banks are even relevant to financial inclusion.

However, there are reasons to believe that banks *can* play an important role in financial inclusion if they overcome the challenges of their legacy systems and processes and digitize operations. In fact, banks have advantages over other types of financial services providers (FSPs) that may allow them to have an outsized impact on financial inclusion – *if* they are willing to expand down- market. Most importantly, banks do not face the same regulatory constraints as other providers. Whereas mobile money providers and fintechs generally cannot provide a wide array of financial products (ranging from savings to credit), banks can. License to intermediate retail deposits further plays to a bank's advantage in the arena of digital credit. Banks can fund their lending portfolios with retail deposits that are typically cheaper than the other funding sources pure lenders use, which further reduces the cost of reaching low-income customers with credit.

BOX 1. **Digital banking business models**

Fully digital retail bank: A traditional banking business model improved by the latest digital technologies to offer a better banking experience at a lower cost.

Marketplace bank: A banking response to e-commerce and fintech competitors in the form of a one-stop shop for financial services run by a bank. Offers easy access to a variety of products and services.

Banking-as-a-Service: Tech companies with a banking license that represent the vision of banks as market utilities. BaaS improves access to cutting-edge technology and brings economies of scope and scale.

CGAP previously presented three emerging business models in banking that we consider to be particularly promising for financial inclusion (Jeník and Zetterli 2020). These models are *fully digital retail banks, marketplace banks,* and *Banking-as-a-Service (BaaS)* (see Box 1). We conclude that they have the potential to deepen financial inclusion by:

- Lowering the cost of financial services;
- Improving access to a greater variety of services;
- Creating services that better meet the needs of various customer segments; and
- Improving the customer experience.[1]

We analyzed several fully digital retail banks in a series of detailed case studies (Jeník, Flaming, and Salman 2020). One of these cases focused on TymeBank in South Africa. TymeBank is a fully digital retail bank founded with financial inclusion as a core business objective. Since its 2018 launch, the bank has onboarded over 4 million customers.

TymeBank offers low-income customers simple products at low prices, such as checking accounts, savings accounts, and debit cards – all through a distribution network that combines online and offline customer interaction based on

"I am able to transact for free at Boxer which helps me save on banking fees, ensuring that my money goes a long way."
– Female TymeBank customer, 22 years old

1 To assess bank inclusivity, we developed and implemented a four-dimensional framework focused on cost, access, fit, and experience (CAFE). See Jeník and Zetterli (2020), page 42. In a business-to-business (B2B) model, BaaS providers have other FSPs as their customers. Thus, their impact on end users is indirect.

partnerships with grocery store chains Boxer and PnP. In the area of credit products, TymeBank only offers a "buy now, pay later" option called MoreTyme. This case study provides a compelling example of how challenger banks can leverage digital technology to reach excluded customer segments with more affordable and useful products.

This paper builds on the TymeBank case study by examining the impact the bank's services have had on low-income customers. By combining a quantitative analysis of TymeBank customer data with a phone-based survey of a randomly selected sample of low-income customers, the paper addresses the following questions:

- Does TymeBank serve low-income customers?
- Are its products relevant to low-income customers?
- What impact do the bank's products have on low-income customers' lives, in their own words?

The aim of this research is to shed light on the potential of digital banks to deepen financial inclusion in a way that improves the lives of low-income customers. CGAP is conducting additional research with other providers to better understand the impact of new financial services business models on customers.[2]

TYMEBANK

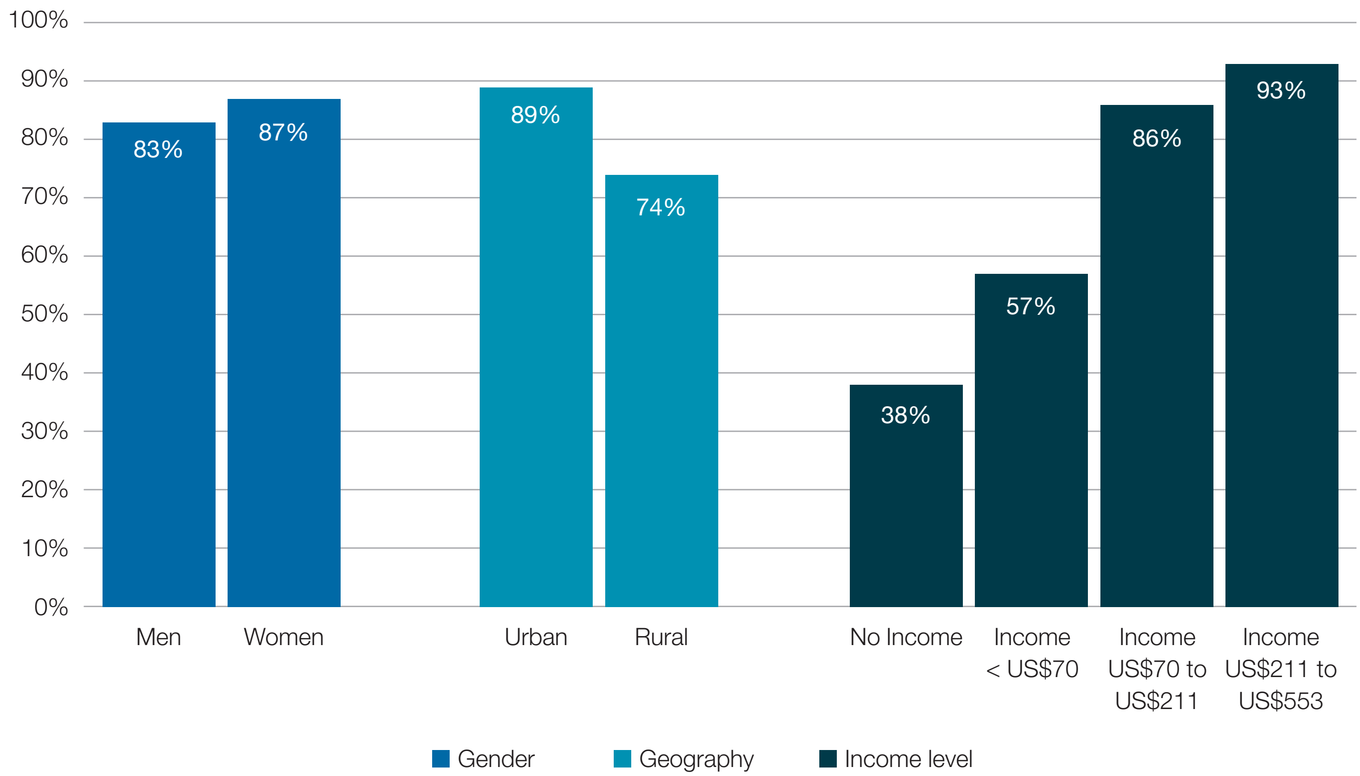
TymeBank's main value proposition consists of (i) simple, affordable, and accessible products; (ii) fast and automated onboarding; and (iii) incentive programs that appeal to target segments (e.g., the SmartShopper loyalty program). These are the qualities we would expect customers to point out when talking about the benefits of using TymeBank. They are also important features that respond to three frequently cited barriers to financial inclusion: (i) expensive services, (ii) limited access points, and (iii) prohibitive know-your-customer (KYC) requirements.[3]

> **"I can save money very easily, and my children send me money very easily, and I can get it near my house. The money I save allows me to buy bread for my grandchildren."**
> – Female TymeBank customer, 71 years old

Product affordability relies on TymeBank's ability to maintain low operational costs and proportionally reduce them further as the bank grows. Current cost efficiency is due to the bank's technology and microservice architecture (Flaming and Jeník 2020), its branchless model, and digitally facilitated onboarding. TymeBank onboards approximately 110,000 customers per month: about 93,500 through kiosks at an estimated cost of US$3 per customer, and about 16,500 via web at approximately US$0.60 per customer.[4]

2 See collection of CGAP research on fintech and new financial services business models: www.cgap.org/Fintech
3 World Bank Global Findex Database (2017): https://globalfindex.worldbank.org/
4 ATM-like machines placed in partner grocery stores – mainly PnP and Boxer – allow for automated customer onboarding in less than five minutes.

FIGURE 1. **Financial inclusion rates in South Africa**



Source: FinMark Trust Finscope (South Africa) 2018 database. Income noted is monthly income.

SOUTH AFRICA[5]

South Africa enjoys relatively high levels of financial inclusion, including a banked adult population of approximately 85 percent in a market dominated by the country's well-established commercial banks. However, many customers only use their bank account to receive government benefits; other use cases lag. There is little to no use of non-bank mobile money wallets.

Across demographic, socioeconomic, and geographic factors, financial inclusion levels positively corelate with higher age (people aged 18–29 are among those least included), urban areas, income level and regularity. Only 38 percent of individuals who reported having no income are banked, while 31 percent are entirely excluded.

METHODOLOGY

For the qualitative analysis based on customer interviews, 1,162 customers were screened from an overall sample of 10,000. The aim was to reach those TymeBank customers living in poverty (i.e., 70 percent or more likely to be living on less than US$5.50). Ultimately, 278 customers were identified for in-depth interviews. The screener surveys were conducted partly through interactive voice response (IVR) surveys and partly through live phone calls.

5 This section is based on data from the FinMark Trust Finscope (South Africa) 2018 database: https://finmark.org.za/data-for-financial-markets

The quantitative analysis used customer data from TymeBank to assess the potential impact of the bank's offering on its customer base, particularly individuals from groups that generally exhibit lower levels of financial inclusion. The data examined spanned a nine-month period from July 2020 to March 2021. The analyzed data correlated to active EveryDay account customers, defined as those who had performed a transaction within the past 30 days. Various sets of proxies were applied to estimate income level (e.g., onboarding location, outstanding balance, frequency of transactions, average size of transactions).

> **"I now easily send money without any charges."**
> – Male TymeBank customer, 37 years old

The analysis considered several important caveats:

a) We recognize that TymeBank is not representative of all fully digital retail banks in South Africa or elsewhere. The findings presented in this paper should not be interpreted as automatically applicable to other digital banks without careful consideration.

b) The research was conducted during the COVID-19 pandemic; some findings were or could be affected (e.g., as customer behavior changes in response to the pandemic).

c) Despite our best efforts to exclusively focus the analysis on low-income segments, we were unable to identify customers based on their stated income levels since TymeBank does not collect that information. Customer segmentation was performed through the previously mentioned set of proxies for the customer data analysis and through the screening questionnaire for the customer interviews.[6]

d) The quantitative analysis focused on active customers with at least one transaction performed over the past 30 days, unless otherwise noted.

e) Where customers stated they had been financially excluded before opening a TymeBank account, we did not identify the underlying cause(s) of financial exclusion.

Key Findings

DOES TYMEBANK SERVE LOW-INCOME CUSTOMERS?

Our research showed that TymeBank serves a higher proportion of low-income customers than the typical bank in South Africa, and a significantly higher portion of the most financially excluded segment.

Low-income customers in South Africa are relatively highly banked, although they are under-represented. South Africans earning US$200 per month or less constitute 47 percent of the population but only 41 percent of the banked population.[7] However, we

6 The quantitative analysis used the average monthly inflows of customers originated at PnP Value stores (US$271) and Boxer stores (US$224) to estimate income level. The qualitative analysis estimated that 35 percent of TymeBank's customers live on less than US$5.50 per day, based on the screener survey findings.

7 The FinMark Trust Finscope (South Africa) 2018 database: https://finmark.org.za/data-for-financial-markets

estimate that this segment represents 48 percent of TymeBank's active user base.[8]

Among the three-quarters of TymeBank customers for whom data are available, 58 percent live in metropolitan areas and 42 percent in rural areas. This compares to South Africa's rural population of 35 percent (as of 2016); we estimated this share to be even lower in 2021 (approximately 30 percent).[9] Hence, rural customers appeared to be noticeably overrepresented in the TymeBank user base.

Young, rural, low-income women comprise the most financially excluded and underserved segment in South Africa. This group forms 2.3 percent of South Africa's banked population but 7 percent of TymeBank's active base – nearly three times as much.[10] Finally, 13 percent of TymeBank's active customers are first-time bank customers.[11]

From a more general perspective, women in the low-income segment represent a higher-than- average share of the bank's overall customer base sample (65 percent versus 57 percent),[12] which suggests that low-income women particularly benefit from TymeBank's services.

These findings lead us to conclude that TymeBank customers disproportionately seem to come from traditionally unbanked and underserved segments. In fact, the evidence suggests that the bank's customer base may particularly skew toward the most underserved segments.

FIGURE 2. **Gender split (TymeBank)**

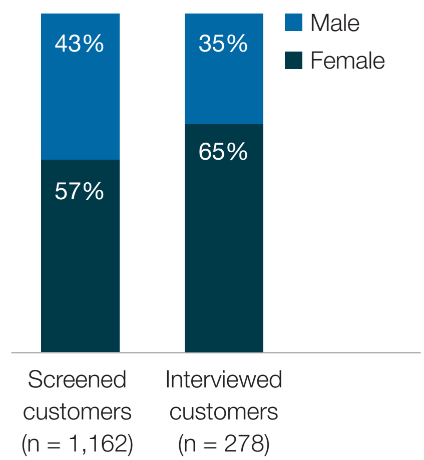
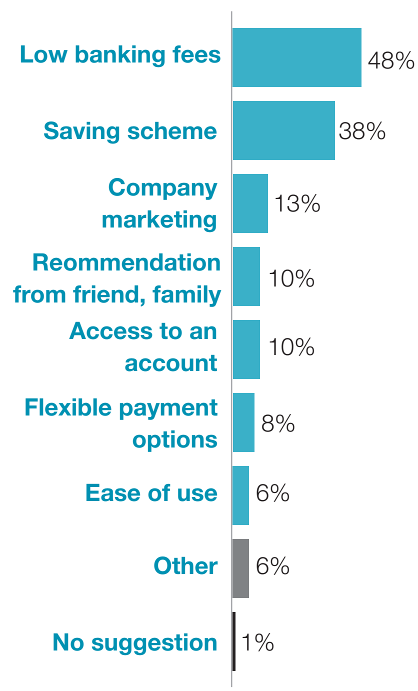


FIGURE 3. **Motivation to sign up for TymeBank services**

Q: What made you decide to sign-up for an account with TymeBank? (n = 278)



DOES TYMEBANK OFFER PRODUCTS THAT ARE RELEVANT TO LOW-INCOME CUSTOMERS?

Customers find TymeBank's products useful and act upon features designed to promote certain behaviors.

The bank's customers particularly value the low cost of its services and the convenience of access and usage. The lower their income, the more value customers seem to derive from its services. While the vast majority of TymeBank customers have previously held bank accounts, 67 percent say they see no good alternative to TymeBank (Figure 4). This response is despite the fact that, as of the time the research was

8 Using place of origination (PnP Value and Boxer stores) as a proxy for low income.
9 South Africa Gateway. Available at: https://southafrica-info.com/infographics/infographic-south-africas-rural-urban-population-1960-2016/
10 The FinMark Trust Finscope (South Africa) 2018 database: https://finmark.org.za/data-for-financial-markets
11 n = 1,162.
12 Comparing screened customers (n = 1,162) and interviewed customers (n = 278).

conducted, the bank still only had a relatively modest payments and savings offering and had yet to launch credit products. (TymeBank has since launched MoreTyme, a "buy now, pay later" consumer credit product.) Customer endorsement seems driven by the strength of the bank's value proposition and the low cost of its services. When asked, customers specifically appreciate the low fees (48 percent) and the high-yield savings account (38 percent).

> **"[TymeBank] banking fees are low; you are able to save.... I am able to purchase from retail outlets with my card, and it is easy to deposit into the account via till points."**
> – Female TymeBank customer, 46 years old

Importantly, women make up a larger share of the total number of GoalSave (savings account) users compared to their representation in the overall customer base (3 percentage points higher). This finding suggests that female customers find value in the product, although they had slightly lower savings per user than men (US$58 versus US$59). The number of their deposits exceeds the number of withdrawals.

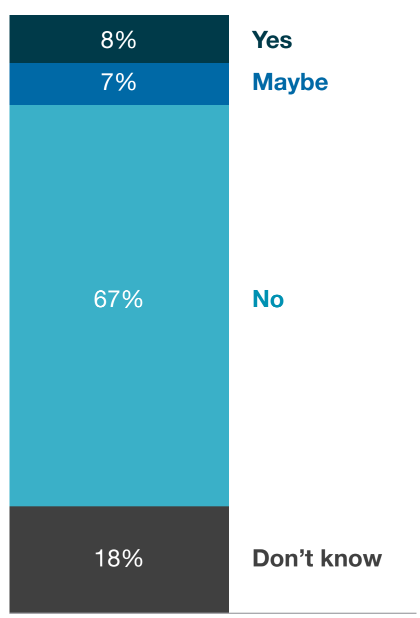
We did not find any significant differences in usage and product lifecycle patterns across income groups (aside from the frequency and size of transactions that correlate with income level), which suggests that TymeBank covers its customers' essential needs across segments. The similarities in lifecycle (behavior patterns across products, such as most frequently performed type of transaction and their change over time) indicate that customers across income levels increase their engagement as they grow confident with the products.

However, important nuances do exist. For instance, the most excluded segment uses till machines for cash-in and cash-out transactions that are free-of-charge (and perhaps more accessible in certain areas), compared to the ATMs other segments prefer. This may be explained by price sensitivity that drives the preference for free till point withdrawals compared to ATM withdrawals, which are charged at US$0.61 per part of US$70.

The value generated for low(er) income customers will hopefully further expand as TymeBank expands its product offering (e.g., insurance and diverse credit products).

FIGURE 4. **Perceived alternatives to TymeBank**

Q: Could you easily find a good alternative to TymeBank? (n = 278)

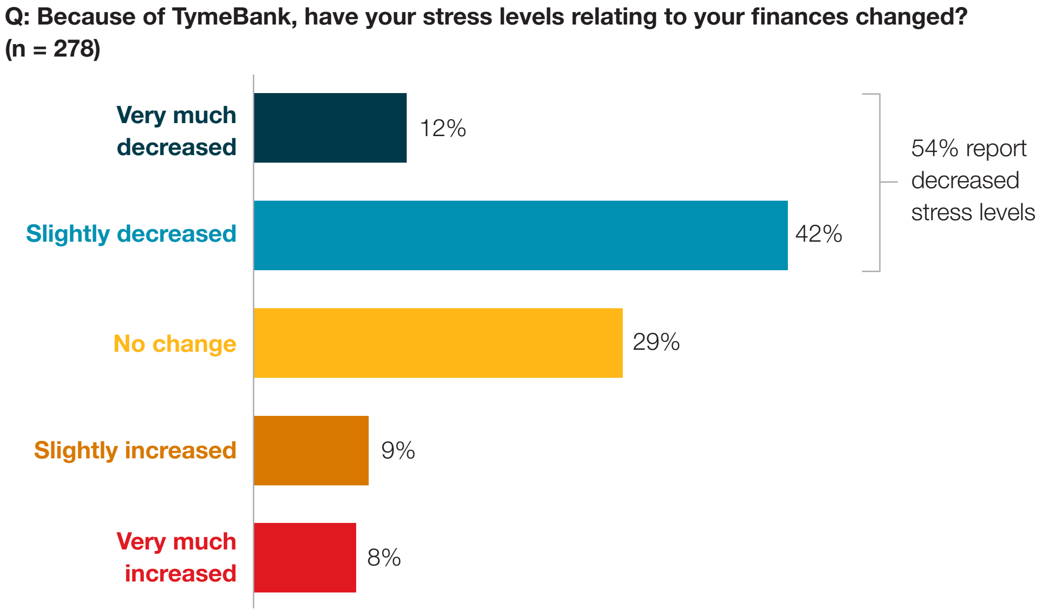


WHAT IMPACT DOES TYMEBANK HAVE ON CUSTOMERS' LIVES?

Most customers report positive life changes due to their use of TymeBank. Importantly, levels of customer satisfaction increase as customer income decreases. This suggests that the TymeBank value proposition tailored to lower-income customers resonates well.

We relied on the actual voices of customers from the demand survey to gauge the impact the TymeBank offering had on its users. When asked, 73 percent of customers reported

FIGURE 5. **Changes in stress levels of customers using TymeBank services**



a positive change in quality of life attributable to TymeBank. The change could be associated with multiple factors. For instance, 80 percent of interviewed customers reported a decrease in the amount spent on bank fees, which is crucial for low-income segments that have historically experienced cost as one of the biggest barriers to financial inclusion. Nearly a third (31 percent) of customers who reported life improvement said that their access to financial services had expanded thanks to TymeBank. Customers also reported an improved ability to digitally transact and receive money (51 percent and 55 percent of all interviewees, respectively).

> **"I was able to get good returns on the interest when I was still saving, which then helped my family and I during the first difficult period of the lockdown to sustain ourselves as there was no income."**
> – Female TymeBank customer, 49 years old

One of the most important findings concerned the ability to save. Seventy-three percent of interviewed customers reported an increase in their savings balance due to TymeBank. Savings likely drove customers' ability to achieve their financial goals (68 percent) and improve financial resilience (32 percent).

These findings support our overall hypothesis that digital banks are well placed to deepen financial inclusion with cheaper, better products that reach beyond payments and are relevant to improving the lives of low-income customers.

It is critical to note that the high interest yield on the GoalSave savings account was among the reasons most prominently cited by customers as driving them toward TymeBank. Our finding that female and young TymeBank customers were more likely to save using the bank service compared to what nationwide averages suggest was also important. While the national numbers show a 9 percentage point gap in formal savings between men and women (35 percent versus 26 percent), the gap among TymeBank customers favored women by 10 percentage points (45 percent versus 55 percent).

Our findings also revealed areas for improvement. Perhaps not surprisingly, TymeBank customers have not been spared the surge of fraud in South Africa. Ten percent of customers reported challenges concerning security and protection of funds. Six percent of respondents mentioned delays in service delivery and nearly the same share complained of issues related to digital access. Complaints were related to system downtime, clearing time (TymeBank is planning to offer real-time clearing), and the general concerns first-time users may have about their funds.

When asked about potential improvements, the presence of physical branches scored the highest (11 percent), followed by improved security (9 percent) related to the challenges mentioned in the previous paragraph and improved digital services (5 percent).

While these findings are encouraging, more research is needed before conclusive statements can be made about the broader role of digital banks in advancing financial inclusion. We encourage other experts to undertake similar research and add to the emerging evidence on the impact of digital banks on financial inclusion.

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