DIGITAL BANKS
How can they deepen financial inclusion?

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Is retail banking changing at its core?

The world is rapidly changing. New technologies and business models are upending long-established markets across virtually every major sector. Financial services are no exception, as traditional retail banks are joined by a growing number of digital partners and other competitors.

What are the implications for incumbents, regulators, and investors? And what will this evolving landscape mean for financial inclusion and the many stakeholders working to make universal access a reality?

In mid-2018, CGAP launched an effort to understand this change and how it may alter the very nature and structure of banking. This presentation features our early findings concerning digital banking models.

We focus on three broad innovation spaces defined by different sets of actors.

- **Digital banks** from plain start-up competitors to radically new business models like banking-as-a-service.
- **Fintech start-ups** and funding + innovation ecosystems that enable them.
- **Platforms** like big tech giants in the United States and China and local goods or services platforms in emerging markets.

This initial slide deck focuses on digital banks. For content on the other innovation spaces, please stay tuned to www.cgap.org/fintech as we publish more work across this agenda.
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Executive Summary

- In recent years, financial access has expanded significantly as 1.2 billion people gained access to formal accounts. Yet those accounts have not led to widespread uptake of the full range of financial products and services: Financial inclusion advances have been broad, but shallow.

- This may be about to change. A new wave of technological innovation is transforming the banking industry in ways that may enable a deepening of financial inclusion, thanks to several significant developments:
  - Lower cost structure and greater scalability
  - Improved operational capabilities
  - Better and customized experiences and offerings

- Digital banks are firms that adopt new technologies to offer more effective banking services. They have the flexibility to serve new segments and create market dynamics that promote market efficiencies.

- The three emerging business models presented here are novel, distinct, and potentially disruptive in ways that may advance financial inclusion:
  - Fully digital retail banks
  - Marketplace banks
  - Banking-as-a-Service

- This presentation sheds light on the digitalization of banking, describes the three new business models, and hypothesizes about their potential impact on financial inclusion.
Executive Summary

- Our findings may be important not only for banks themselves, but for a range of providers:
  - Mobile money operators and emerging platforms may consider adopting similar strategies to aggregate services and digitize customer journeys.
  - Regulators and supervisors need to be aware of these new business models and start thinking about how to enable, regulate, and supervise them.
  - Investors may consider supporting the development of these business models to further advance financial inclusion, or simply to build the future of banking.
- In this presentation, “digital banking” is defined as an activity of licensed financial services providers that generates revenue from the intermediation of retail deposits and offers a retail payments solution for storing and moving money.
- This definition does not cover fintechs that offer purely payments or lending products.
  - A narrow definition helps us stay focused and as close as possible to the prevalent concept of banking found in regulation around the world.
  - Where relevant, such models are addressed.
Methodology Overview

This presentation features the following:

• **Interviews** with ~50 individuals (digital banks representatives, investors, experts, and other stakeholders around the world)
• **Desk research** of annual reports, press releases, news articles, and other public resources
• Application of the following frameworks to assess the information collected:
  o *Business model canvas* to compare different business models
  o *Financial inclusion impact* to estimate the potential of each business model to overcome inclusion barriers
• Analysis of **online customer reviews** of digital banking applications
• Analysis of **funding rounds** relevant to digital banking providers
I. Introduction
Progress has been broad, but shallow

• **1.2 billion adults gained access to formal financial accounts** for the first time between 2011 and 2017. Many of these are mobile money accounts.

• **Progress on access to savings, credit, and insurance has been far slower**, barely rising at all even as accounts become more commonplace.

• Lack of financial depth limits the usefulness of the accounts, resulting in low use and high dormancy.

• **1.7 billion people remain excluded**, even from basic accounts.

Source: Findex (World Bank, 2017)
Constraints on Providers

Banks in developing markets often are shackled by legacy operational models.

- **Distribution** is a major challenge for banks that depend on costly branches. Some banks have developed agent networks, but few have been successful or have achieved significant scale. Thin margins on transactional accounts limit how much providers can invest in agent networks. Hence, agents often offer convenience for existing customers instead of reaching out to new ones.

- **IT systems** often are outdated and expensive, which limit banks’ ability and flexibility to improve products or develop new ones, while tying up significant resources.

- **Product management** practices have been slow to adopt agile approaches, human-centered design methods, etc. They are less nimble when rolling out services and less responsive to customer needs.

Mobile money operators (MMOs) often are constrained by their business model and risk appetite.

- **The revenue model** for successful e-money accounts centers on transaction fees. This limits the options MMOs have for creating broader offerings where transaction fees stand in the way of user uptake.

- **Regulation** typically limits the ability of MMOs to offer services beyond basic payments. Almost none has acquired a full banking license, and strategic partnerships with banks often are slow and difficult.

Banks and MMOs tend to adopt zero-sum, competitive approaches where the priority is to “own” the market and the focus is on selling products rather than on partnering to solve customer problems.
Limitations on the Consumer Side

• Most e-money accounts focus on payments, with limited savings, credit, or insurance offerings associated with them.
  o The value proposition is narrow for low-income consumers and leads to low use.
  o This is despite evidence that activity rates double when providers offer additional services.

• Direct and indirect costs of accessing services tend to be high.
  o Transaction fees often are major barriers to other products, e.g., savings and merchant payments.
  o Where credit is available, it often costs around 7–10% for a 30-day loan.

• Products often are not designed to meet the needs and circumstances of low-income customers, who tend to have low and irregular income, a frequent need for cash, limited literacy and numeracy, etc.

Source: GSMA, 2019
New technologies address constraints and limitations

- **Cost-efficiency & scalability** of complex tasks from automated processes
- **Lower origination and distribution costs** through new partnerships and channels
- Reduced minimum **viable scale** plus rapid & flexible **scaling up** from agile operational structures
- **Increased access** and convenience (24/7) for customers using digital channels
- Improved **customer engagement** through better user interface/user experience (UI/UX)
- **Data-driven business models** (e.g., open banking, risk-based pricing)
- **Contextualization** through sophisticated & complex real-time analytics (e.g., credit scoring, financial advice, real-time interpretation and analysis of photo and video)
New digital banking business models are being adopted across emerging markets

35+ digital banks in 20+ emerging markets
II. Emerging Business Models & Trends
A

Business Models
Emerging models need commonly understood names

- Digital banking has a variety of “names,” including neo banks, challenger banks, digital banks, greenfield banks, fintech banks, and many others.

- There is a lack of commonly accepted definitions. Terms can mean different things to different stakeholders. They often apply broadly across companies that may have significant differences in their core business model.

- A common definition of terms would help advance the discussion around these new business models. We are adopting a new set of categories that define them unambiguously.
  
  - The categories are based on the core business model—the primary value proposition, revenue drivers, target customer segments, etc.
  
  - The digital banking space is in flux and rapidly evolving—these categories will likely evolve as well.
Three New Business Models

**Fully digital retail bank**
A traditional banking business model improved with latest digital technologies to offer a better banking experience for **lower cost**.
*Examples: Brubank (Argentina), NuBank (Brazil)*

**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, offering easy access to a variety of products/services. *Example: Starling Bank (UK)*

**Banking-as-a-Service**
Tech companies with a banking license that represent the vision of banks as market utilities. Improves access to **cutting-edge technology** and brings economies of scope and scale. *Example: Kontist-solarisBank (Germany)*
What do they look like?

We’ll look at each model using a business model canvas—an analytical framework.

- **VALUE PROPOSITION**: What is offered and in what way is it valuable to the target customer.
- **TARGET CUSTOMERS**: Primary customer segment(s) targeted by business, if any.
- **BUSINESS LOGIC**: How the business creates value for the provider.
- **REVENUE MODEL**: How provider earns revenue, who is paying, and why they are willing to do so.
- **DEPENDENCIES**: Key relationships/dependencies crucial for the model to work.
Fully Digital Retail Bank

**Who?**
- Target Customers: Individuals, MSMEs

**What?**
- **Services**
  - Transactional account with payments instrument and app-based interface
  - Other services: Credit, Savings, Insurance
- **Value Proposition**
  - Access to broad range of banking services
  - Efficient, advanced & nimble customer-facing processes and services
  - Customized experience
- **Revenue Model**
  - Intermediation margin
  - Fees and charges

**How?**
- **Business Logic**
  - Automation & limited physical infrastructure reduce operational costs and enable rapid scaling
  - Free account incentivizes use of digital payments
  - Transactional data help tailor and cross-sell products
  - Make money from margins on other financial products
- **Dependencies**
  - Regulated and licensed as a conventional bank
  - Does not own distribution infrastructure. Uses those of other players sometimes complemented by own light physical access infrastructure (kiosks)
  - Sometimes operates under a nonbank license and/or relies on regulated partners
Greenfield banks launched as a new competitor in a market. Typically funded by venture capital and run as a tech start-up. Typically proud to be unlike banks in terms of strategy, operations, and culture. Some may benefit from specific licensing regimes (e.g., virtual banks in Singapore and Hong Kong).

Greenfield banks launched as an offshoot of an incumbent bank. Funded and often significantly staffed by the parent bank. Some deploy in the same market as the parent to pursue new segments and/or explore the potential of a digitally native offering. Some deploy in new markets as a low-cost way to expand the parent bank’s geographic footprint.

Incumbent banks that pursue a total digital transformation. Near-term goals: reduce operating costs and increase revenue. Medium-term goals: compete with digital challengers by acquiring their capabilities. Segment digital and traditional customers; seek to move customers from the latter to the former.
Fully Digital Retail Bank: TymeBank (South Africa)

**Target Customers**
- Mass-market individuals & MSMEs
  - Motto: “Design for the underserved and attract the overserved”
  - Over 100k customers in February 2019
  - Attract customers away from incumbents and offer the unbanked a less intimidating form of banking

**Value Proposition**
- Simple bank account with savings product (GoalSave) & unsecured personal loan (planned expansion to credit cards)
- Bank account is 50% cheaper than the next cheapest competitor account
- Incentivize saving w/ increasing interest rates in the savings product over time (first 30 days 6%, next 60 days 7%, 90+ days 9%)
- Access to credit based on alternative scoring

**Revenue Model**
- Transaction fees from merchant payments
- Commissions from customers who purchase top-up bundles from telcos
- Interest income from lending products

**Services**
- Free transactional account with personalized debit card & compelling UI/UX
  + Credit
  + Savings

**Business Logic**
- Mobilize deposits as a cheap source of funding and low operating costs to offer better interest rates on savings and less banking fees than incumbents
- Savings interest rates and transactional account services attract many customers. Sustainability achieved by offering a variety of lending products that have higher margins

**How?**
- Core system built on Amazon Web Services cloud
- Distribution via supermarkets: 80% of distribution through kiosks in the 750 Pick n Pay stores, 20% online
- Plug-and-play model provides flexibility and speed, but increases some dependencies (e.g., the core banking system from an outsourced provider)
Fully Digital Retail Bank: TymeBank (South Africa)

Flyer emphasizes ease of opening account, low cost, and accessibility through digital kiosks in Pick n Pay stores.

Mobile app emphasizes security and intuitive ease of use.

Tyme Coach app allows customers to monitor and improve credit score.
Marketplace Bank

**Target Customers**
- **Retail/MSME customers (front end)**
- **3rd party FSPs (back end)— one FSP per product type or hundreds of FSPs**

**Services**
- **Transactional account, financial advice, comparison tools & app-based interface**
- **Broad range of products**
  - Credit
  - Savings
  - Insurance

**Value Proposition**
- **Front-end customers**
  - One-stop shop for a variety of services
  - Contextual banking and e-commerce integration
  - Value-added services (e.g., financial advice, comparison tools)
- **Back-end FSPs**
  - Access to new market segments
  - Low-cost delivery channel for scaling up
  - Potential access to customer data

**Revenue Model**
- **B2C**
  - Revenue from core services (e.g., checking account)
- **B2B**
  - Commissions on referrals
  - Fee per API call
  - Product revenue share
  - Subscription model

**Business Logic**
- Focus on marketing, client acquisition, onboarding, and CRM rather than competition across variety of services
- A core product combined with services of others
- Increased customer loyalty and stickiness

**Dependencies**
- 3rd party products, either integrated with core products (e.g., co-branding) or offered under another brand
- Integrated nonfinancial services (e.g., accounting, e-commerce)
How does a marketplace bank work?

Marketplace banks are platforms, and as such, they **create value by facilitating exchanges** between two or more participants.

- **Core and additional services & app-based interface**
  - **Own products:** Unlike platforms that only match buyers with suppliers, marketplace banks attract customers by offering their own products.
  - **3rd party products** Marketplace of financial products and services offered by other FSPs—expands customer choice.

- **Range of 3rd party products**
  - Credit
  - Savings
  - Insurance

- **Retail/MSME customers (front end)**
- **3rd party FSPs (back end)—integrating one FSP per product type and/or hundreds of FSPs**
- **Core banking services** manufactured, delivered, and controlled by the marketplace bank (e.g., checking account, savings, credit)
- **Additional services** complement the core product and marketplace offering. These may relate to finance (e.g., financial advice, product comparison, personal finance management tools) or may not (e.g., accounting, e-commerce).
Aggregate products and providers much like retailers in consumer goods

Marketplace banks differ in the breadth & depth of their product offering and in the level of integration of 3rd party services into the core product line.

<table>
<thead>
<tr>
<th># of services</th>
<th># of providers</th>
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<tbody>
<tr>
<td>few</td>
<td>many</td>
</tr>
<tr>
<td>FARMERS MARKET</td>
<td>Limited variety of services offered by many providers competing with each other. E.g., consumer credit offered by several lenders.</td>
</tr>
<tr>
<td>SHOPPING MALL</td>
<td>Large variety of services offered by many competing providers. Customers can compare multiple services and choose based on individual preferences.</td>
</tr>
<tr>
<td>BAKERY</td>
<td>Limited number of services from a few, carefully selected providers. Services may be white labelled for or co-designed by the marketplace bank and integrated with its core product line.</td>
</tr>
<tr>
<td>CONVENIENCE STORE</td>
<td>Large variety of services from a few, carefully selected, strategic partners. Services may be white labelled for or co-designed by the bank and integrated with its core product line.</td>
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### Marketplace Bank: Starling Bank (United Kingdom)

<table>
<thead>
<tr>
<th>Who?</th>
<th>What?</th>
<th>How?</th>
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<tbody>
<tr>
<td><strong>Target customers</strong> (focus on front end)</td>
<td><strong>Services</strong></td>
<td><strong>Business Logic</strong></td>
</tr>
<tr>
<td>Individuals &amp; MSME customers (front end)</td>
<td>Transactional account, personal finance management tools, app-based interface</td>
<td>A licensed bank with a marketplace that complements the main suite of basic banking products and presents growth potential as the product offering expands</td>
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- **Value Proposition**
  - Fast, convenient, UI/UX-friendly, range of PFM tools
  - Additional functionalities for MSMEs (e.g., accounting, automated tax form filing, HR management tools)
  - Marketplace includes insurance (Nimbla), credit (Growth Street), accounting (Xero)

- **Revenue Model**
  - Traditional revenue (interest, fees, commissions)
  - Commission: customer acquisition fee or revenue share from partner connected via the marketplace
  - Fee: B2B services to other financial providers

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<tr>
<th>Dependencies</th>
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<tbody>
<tr>
<td></td>
<td>Choice of partners based on technology and values</td>
</tr>
<tr>
<td></td>
<td>Services offered by 3rd party providers are integrated with bank's product offering</td>
</tr>
<tr>
<td></td>
<td>Goal: create an open marketplace where any provider that passes the due diligence process can offer products to bank customers using a two-way data flow</td>
</tr>
</tbody>
</table>

- **Example 3rd party products**
  - Credit
  - Insurance
  - Investment
  - Accounting
  - Tax
  - Legal
  - Project Management

- **Example**
  - Individuals (460K current accounts in Feb. 2019): urban, adult men in 30s
  - MSMEs (30K accounts in February 2019): single directed companies, sole traders
  - 3rd party providers offering services via Starling Marketplace
  - Developers and 3rd party providers using Starling Open APIs to develop their own products
“The Starling Marketplace will become our customers’ go-to place for financial products. As a Marketplace partner, your app will be showcased in our curated Marketplace as an option for our customers to integrate with.”—Starling Bank, November 2019

Source: https://www.starlingbank.com/marketplace/
3. Banking-as-a-Service

**Target Customers**
- Digital consumer companies (e-commerce)
- Fintechs without banking license
- Licensed FSPs (fully digital retail banks, payments services providers)

**What?**

- **Services**
  - Cloud-based core banking system + Banking license + Balance sheet

**Value Proposition**
- Specializes in technology and regulation
- Builds a tech stack rather than becomes a B2C bank
- Achieves economies of scope & scale by commoditizing parts of the banking value chain

**Revenue Model**
- Pay-per-use fees on API calls
- Monthly subscriptions
- Product-level revenue share
- Risk underwriting

**Business Logic**
- Holds full banking license
- Integrates tech solutions by 3rd parties (a middle layer between B2B and B2C fintechs)

**How?**

- **Context**
  
- **Dependencies**
  
- **Who?**
  
- **What?**
  
- **How?**
  
- **Services**
  
- **Value Proposition**
  
- **Revenue Model**

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BaaS and the Layers of Banking Tech Stack

Banking-as-a-Service (BaaS) offers a combination of banking tech stack and banking license (which requires compliance with local banking regulation and enables the BaaS player to intermediate funds and have a banking balance sheet). Many providers specialize only in the banking tech stack, a model typically known as Software-as-a-Service (SaaS).

SaaS tech companies do not have a banking license. They partner with FSPs to provide tech solutions, either via APIs or otherwise, that fulfill the back-end function of the banking value chain for their client. Software is sold on a subscription or a pay-per-use basis.
Banking-as-a-Service: solarisBank (Germany)

**Who?**
- **Target Customers**
  - FSPs, fintechs, e-commerce

**What?**
- **Services**
  - Cloud-based core banking system + Banking license + Balance sheet

**Value Proposition**
- **Fast and cheap go-to-market** without significant up-front CapEx investment
- **Full suite of customizable products**: white label solutions for core banking, cards, payments, consumer lending, SME lending, know your customer, blockchain solutions, etc., via APIs; for some larger clients, customize white-label solutions
- **Low cost compliance**

**Revenue Model**
- Monthly fee for use of the predefined white-label solution
- Higher charge for customization

**How?**
- **Business Logic**
  - Quick-fix solution gets client businesses off the ground quickly
  - Likely market growth as new entities enter the market (partially driven by initiatives such as open banking) and incumbents need to digitalize

**Dependencies**
- **B2B2X and white-labelling model relies on partnerships**
- Has partnered with 50 companies since 2016
- Parts of the BaaS stack are integrated with B2B providers (e.g., IDnow)

**Example**
- Originally focused on enabling fintechs to quickly acquire the banking capabilities needed to go to market without heavy CapEx
- High demand among e-commerce providers, established banks (digital brand offshoots), and comparison aggregators
- Popular among Chinese and other international providers seeking to enter the European Union market
solarisBank

Kontist offers bank accounts for freelancers and self-employed persons by leveraging solarisBank’s license and tech stack accessed through APIs.

Tech stack includes services and capabilities developed by solarisBank or 3rd parties.

Example

Kontist offers bank accounts for freelancers and self-employed persons by leveraging solarisBank’s license and tech stack accessed through APIs.
Specialization
Models in Four Key Functional Layers

Balance Sheet
Provision of capital, risk management, and underwriting of products at the retail or wholesale level, asset/liability management.

Product
Design and manufacture of individual financial products and services.

Customer Relationship
Customer acquisition, sales, servicing, and permanent primary interface.

Distribution
Physical touch points for distributing products and serving customers.

These four layers offer a high-level view of the main elements in manufacturing and distributing financial products and services.

A traditional bank typically builds capabilities to cover all four layers in a vertically integrated business.

New business models instead focus on certain layers and partner on others. They gain competitive advantages around certain functions, while they optimize their costs in others.
New models represent different choices for strategic focus across layers

**Traditional banks** are vertically integrated & rely on in-house solutions

**Fully digital banks** eliminate or outsource the physical distribution layer

**Marketplace banks** bring in 3rd party product providers, to double down on the customer relationship layer

**BaaS providers** relinquish the customer layer, in order to double down on products and underwriting
Fintechs increasingly offer “digital banking” services without a full banking license

They are blurring the line between banks and nonbanks.

- Sometimes they have a payments or other financial license; sometimes they rely on a fully licensed partner bank.
- They tend to look a lot like banks, and consumers typically cannot easily tell the difference.
- This trend illustrates how the financial sector is growing more modular and challenges our understanding of what is banking or a bank.

They fall outside the scope of our definition of banking, and hence we do not cover them in this work.
Nonbank Versions of the Digital Banking Models

These nonbank models are similar to the new digital banking models. FSPs share many elements and consumers may think they are the same as digital banks, except that they do not have a banking license. Since they are often easier to set up, they may outnumber digital banks in a given market.

This raises important questions for regulators to consider, not least since many of those providers focus on the customer relationship layer while heavily outsourcing or aggregating the financial product offering, underwriting, and compliance elements. How should (banking) regulation be applied to these models?

### Fully Digital Retail Bank

A large and growing number of nonbanks offer mobile wallets, prepaid or debit cards, other payments services, and simple credit products under a payments license and/or through partnership with a bank. They often refer to their services as “digital banking.”

### Marketplace Bank

A broad range of nonbank fintechs, e-commerce providers, and “super apps” aggregate third-party financial services for their customers to increase consumer value, stickiness, and add a revenue stream.

### BaaS

Several different models are analogous to BaaS. Some providers offer a similar service but rely on a bank partner that has a license. Others offer a combination of software and some sort of license (e.g., a payments license. Wirecard and Green Dot started this way, but eventually developed a full banking offering.)
Market Dynamics
The digital banking space is interconnected and evolving

New business models in banking do not exist or operate in isolation.

The space is dynamic—some business models depend on others, and some morph into others.

While the market will likely remain in flux for some time, three aspects of the new digital banking models have emerged.
BaaS Enables Digitally Native Challengers

• An important clientele of BaaS providers are fintech start-ups that have a clear idea of the client segment they want to serve and the value proposition they want to offer, but lack the capabilities (technical and/or regulatory) to do so without substantial investment.

• Instead of burning investor money to build such capabilities in house, many choose to implement an off-the-shelf solution offered by a BaaS provider, thus limiting the amount of resources and time needed to launch a marketable product.

• They may build their value proposition on the banking stack offered by BaaS providers, and then expedite their transformation into digitally native challengers.

• Big tech companies interested in entering financial services without acquiring their own banking license also can benefit from BaaS.
More and more providers are taking up marketplace models, because as a single provider, it is difficult for them to offer a variety of financial services and products.

In particular, challenger banks expand their offerings and create stickiness by building financial service “grocery stores” by integrating financial services and products offered by 3rd party providers.

This creates new sources of B2B revenue for the bank while allowing smaller, product-focused fintechs to reach a large customer base through the bigger player’s platform.

Digital banks are able to offer contextual banking—hyper-individualized products and services offered at the right moment, often in the context of other financial or nonfinancial transactions.
III. How can digital banking advance financial inclusion?
Two Pathways to Advance Financial Inclusion

1. Intentional inclusion
   - Firms that pursue digitalization provide the infrastructure needed to service unbanked and underserved customers.
   - Providers see these segments as commercial opportunities and seek to make profits from serving them.

2. Unintentional inclusion
   - Firms pursue digitalization as part of a broad mass-market strategy primarily aimed at better serving customers who are already served by the banking system.
   - Firms do not see financial inclusion as their objective; however, financial inclusion may be a byproduct of the low cost and large scale they reach.
Impact on Inclusion: Cost, Access, Fit, Experience

**Cost**

Does the business model make financial products or services more affordable for providers to offer and for underserved customers to use?

- Lowers end-user fees
- Offers more flexible payments
- Reduces the need for expensive devices
- Requires less or cheaper connectivity
- Reduces the need for collateral

**Access**

Does the business model make financial products or services more accessible to underserved customers?

- Expands range of products on offer to underserved segments
- Expands eligibility through innovative CDD
- Expands eligibility through innovative risk assessment
- Requires less interaction at physical transaction points
- Expands or improves the distribution of physical transaction points

**Fit**

Does the business model make financial products better suited to the needs and wants of underserved customers?

- Addresses a customer need not served by traditional products
- Better aligns with the needs and wants of underserved customers
- Allows greater customization to different situations, user needs, and preferences
- Is better suited for target customers
- Has higher general trust and satisfaction from users

**Experience**

Does the business model make financial products easier for underserved customers to use and understand?

- Has product features that are easier to access, understand, and compare
- Has an interface that most customers find easy to understand and use
- Delivers clear value to users
- Helps users identify, understand, and resolve problems
- Gives users control over data
- Provides stronger technical security
Cost

- Lower cost of physical infrastructure
- Automation of back-end and front-end functions
- RegTech lowers compliance cost
- Cloud-based, SaaS services shift costs CapEx to OpEx

Access

- Digital channels & 3rd party distribution (including agents) bring services closer to customers and make them available 24/7
- Alternative data expand eligibility (e.g., access to credit)
- Intuitive UI/UX makes the service easier to access

Fit

- Technology stack provides flexibility to add products and tailor functionality (including catering to niche customer segments)
- Integrated personal finance management tools help with personal finance
- Service-oriented architecture and open APIs create flexibility and efficiency in designing suitable products

Experience

- Convenient 24/7 availability of services
- Behavioral nudging promotes beneficial consumer behavior
- Greater control and transparency increases customer trust
- Integrates into the lifestyle of digitally native customers

Low operating costs and lower CapEx may enable a lower floor for pricing overall

Getting banking closer to wider customer segments through technology & alternative distribution

Improved business intelligence supported by technology leads to greater personalization

Customer-centric approach improves confidence through intuitive interfaces, individual approach, and responsiveness
Marketplace Bank

Cost
- Shared features with fully digital retail bank
- Cost savings from specialization and efficiency at product level
- Pricing affected by increased competition among product providers
- Low cost of client acquisition and product delivery for partners

Economic efficiencies create the potential for downward price adjustments

Access
- Better access to a variety of services
- Lower search and switching barriers for consumers
- Easier comparison shopping and product discovery

Diverse offerings improve access to broader financial services and their comparability

Fit
- A wider offering allows for better choice
- Personalized offering, recommendation, and advice

Diverse offerings enable better response to customer needs and individual circumstances

Experience
- One-stop shop for a variety of financial needs
- Comparison shopping is easier

Convenience of supermarket is applied to financial services

For marketplace banks and BaaS, players such as mobile money providers (e.g., MTN, Safaricom, bKash) are likely to use a similar model to expand and deepen their product offering.
Banking-as-a-Service

Cost
- Commoditized banking solutions bring economies of scale
- Lower cost of entry for 3rd party providers

Access
- Enables a wide range of providers to offer banking services

Fit
- Banking utility enables wider reach by nonbank providers

Experience
- Indirectly—providers specialized in UI/UX customer-centric solutions may offer banking services
- Contextual banking—hyper-individualized products and services
  - Enables seamless integration of financial services in nonbank contexts

The BaaS model can streamline digitalization of FSPs who traditionally serve low-income customers such as MFIs and SACCOs. Providers such as Teknospire and FutureLink Technologies, which we would categorize as SaaS, currently serve these FSPs and over time may add a regulatory component to get closer to the BaaS model.
Areas for Digital Banking to Strip Out Business Costs

According to interviewees:

• Customer acquisition cost can fall to around 5–15% of that of a traditional retail bank

• Some digital banks were able to spend just 1–5% of the cost of operating a branch by using alternative distribution channels

• Cost-to-income can be more than 20% lower for banks serving customers through digital channels when compared to serving them through traditional channels

Interviews with ~50 individuals. For detailed methodology see Slide #6.
Digital banks can advance financial inclusion directly through efficiency/effectiveness but also through new market dynamics

- Partnerships can enable incumbents to expand into new segments
- Aggregation of services and contextual financial services of providers who already serve lower income customers
Next Steps
What’s next?

- Quantitative and qualitative **analysis of the impact of financial inclusion** across business models. The sample will consider:
  - Geography
  - Relevance for financial inclusion
  - Data availability
- Documentation of **case studies** of specific digital banking providers that can inspire others.
Thanks go to Sean de Montfort (Financial Conduct Authority of the United Kingdom) who was substantially involved in this research and helped shape early iterations of this presentation. Schan Duff (CGAP) and Matt Homer (The New York State Department of Financial Services) contributed their insights on the taxonomy and business model framework, interviewed investors, and analyzed customer reviews of selected banking apps. Other contributors included Maria Fernandez Vidal and Gayatri Murthy of CGAP who helped develop the business model canvas and the financial inclusion assessment framework.

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## Acronyms and Initializations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>API</td>
<td>Application Programming Interface</td>
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<td>B2B</td>
<td>Business to Business</td>
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<tr>
<td>B2C</td>
<td>Business to Customer</td>
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<tr>
<td>BaaS</td>
<td>Banking-as-a-Service</td>
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<tr>
<td>CAC</td>
<td>Customer Acquisition Cost</td>
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<td>CapEx</td>
<td>Capital Expenses</td>
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<td>CDD</td>
<td>Customer Due Diligence</td>
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<td>FSP</td>
<td>Financial Services Provider</td>
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<td>KYC</td>
<td>Know Your Customer</td>
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<tr>
<td>MMO</td>
<td>Mobile Money Operator</td>
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<tr>
<td>MSME</td>
<td>Micro-, Small, and Medium Enterprise</td>
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<tr>
<td>PFM</td>
<td>Personal Finance Management tools</td>
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<tr>
<td>SaaS</td>
<td>Software-as-a-Service</td>
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<tr>
<td>UI/UX</td>
<td>User Interface Design/User Experience</td>
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