



THE POWER OF THE PLATFORM ECONOMY FOR FINANCIAL SERVICES

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Standard Bank ***IT CAN BE™***
Also trading as Stanbic Bank



CONTENTS

Foreword: Margaret Nienaber	/4
Executive Summary	/6
Introduction to the platform economy	/7
Section A	
01. The rise of the platform economy	/10
02. The transformation of the financial services value chain	/19
03. The new financial value stack	/24
04. Platform positions across the stack	/34
Section B	
01. Serai	/37
02. Discovery insurance	/38
03. Standard Bank	/42
Section C	
01. Strategy development for the platform economy	/47
02. Strategic choices for financial institutions in the platform economy	/50
Conclusion	/54
Biographies	/56



FOREWORD

Margaret Nienaber, Chief Executive of Client Solutions at Standard Bank Group

During the COVID-19 pandemic we have rediscovered the value of real human connections – be it with family, friends, communities and colleagues. It has also reaffirmed that digital technology has the innate ability to bring us closer together – to be more human and connected, not less.

Moreover, digitisation has sparked a marked adjustment in power away from corporates towards clients, other stakeholders and society at large. With digital disruption impacting almost every industry, clients have come to expect personalised service that can be accessed anywhere, at any time, via their preferred touchpoints.

As digitisation drives the convergence of industries across the globe, traditional financial services groups are contending with a range of new competitors. At the same time, however, the blurring of industry boundaries provides us with an opportunity to meet a wider array of client needs, deepen our customer relationships, and fulfill our purpose of driving Africa's growth and uplifting her people.

As Standard Bank continues to respond to the evolving needs of our clients and employees, we are accelerating the implementation of our future-ready strategy. In doing so, we are leveraging our core strengths in financial services, while seeking new opportunities to expand our offering and diversify our revenue streams further. This is in line with our ambition to be “truly digital and truly human”.

To get this right, we need to future-proof our workforce with hard skills such as data science and behavioural economics. Soft skills such as thoughtfulness, creativity and empathy will be equally as important as we strive to become more human, not less.

There can be no doubt that the platform economy is here and changing the rules of the game. However, to succeed, it requires strong partnerships to be established at various levels of the value chain. Knowledge, capability and skills are still being developed in this space and therefore organisations must actively develop and partner to leverage the requisite skills to make the platform economy a success across Africa.

As Standard Bank evolves from a traditional bank into a digitally-enabled, diversified services organisation, we will continue to enhance the value of our offerings by leveraging technology to provide a better understanding and risk assessment of each client. The end-consumer will ultimately feel the impact as we are better equipped to deliver exceptional, universal financial services solutions delivered in a digital and human way.

Ultimately, this platform strategy is rooted in our ambition to maximise our positive social, economic and environmental impacts across the African continent – our home.



MARGARET NIENABER



Margaret is Chief Executive of Standard Bank's new Client Solutions Business, focused on delivering innovative and cost-effective banking, insurance, investment and non-financial solutions to the Bank's client base, as well as through external partnerships.

As a "start-up with a 159-year legacy" Client Solutions plays a fundamental role in the delivery of non-financial services and solutions through strategic partnerships across different industries, as Standard Bank Group transforms into a platform business that delivers a range of individualised, instantly-available solutions, services and opportunities, enabled by modern digital technologies and delivered in whatever way a client prefers.

Prior to this, Margaret was the Chief Executive of Standard Bank's Wealth Division, a business that has been recognised as Africa's Best Bank for Wealth Management by Euromoney and boasts the largest Bancassurance arrangement on the African continent. The division was also named Top Stockbroker in South Africa by Intellidex and recognised in Nigeria as the country's largest Pension Fund Administrator and Asset Manager.

Prior to joining Standard Bank she served on the Santam Executive Team and managed the business's South East Asia expansion. In 2013, she was recognised as the Most Influential Woman in Business and Government (Financial Sector), and during her years in the Insurance industry, was a board member of the South African Insurance Association and President of the Insurance Institute of South Africa. She holds a BCompt and BCompt (Hons) degrees and qualified as a CA (SA) in 1997.



EXECUTIVE SUMMARY

The fast-growing platform economy, in which value-creating interactions are facilitated by digital intermediaries, presents financial services institutions with new opportunities to deepen their customer relationships and tap into non-traditional revenue streams.

Under this new business model, traditional banking, investment and insurance groups participate in 'ecosystems' in partnership with other financial and non-financial organisations. By collaborating, ecosystem participants can collectively fulfil a range of customer needs. A bank may coordinate with players in the housing, automotive and commerce industries to shape integrated customer value propositions, for example.

As these platforms grow, industry boundaries will be gradually dismantled. This means that traditional financial services providers will be able to fulfil a customer's primary demand – for instance, the acquisition and maintenance of a home – in addition to their secondary needs – in this case, a home loan.

As financial products become increasingly commoditised, this approach provides banks, investment firms and insurers with an opportunity to re-establish their customer relationships, particularly as they leverage ecosystem data to better understand each customer.

There are already numerous examples of ecosystems curated by large financial services groups. HSBC-backed Serai, for instance, is a platform that enables companies in the apparel industry to connect and conduct business in a trusted network. Discovery's Vitality platform provides insurance clients with access to a health and wellness ecosystem that consists of a wide

array of partner organisations, and Standard Bank's OneHub platform gives clients access to a range of services from external partners and the bank itself.

The platform economy has gained further relevance amid the COVID-19 crisis, and is increasingly shaping how financial products are distributed, how customers are served, and how underlying financial infrastructure is scaled.

In this paper, we analyse four common types of strategies pursued by financial services firms in the platform economy.

First, a company may transform into a platform business itself to unlock new growth opportunities. Second, incumbent firms may engage in collective action to meet the needs of the customer. Third, an organisation may develop new capabilities that can be licensed as a service across ecosystems. And finally, a company may decide to continue to build scale as a product provider. We believe that most firms will need to employ a combination of these strategies to effectively compete in this new world.

Ultimately, it is customers that will benefit most from this realignment of economic activity. As ecosystems grow and start to benefit from network effects, business clients and individual customers will be better understood, and ecosystem participants will be able to rapidly fulfil both their primary and secondary needs.

INTRODUCTION TO THE PLATFORM ECONOMY



The platform economy – the aggregate of economic activity and output mediated by digital platforms – rapidly grew in importance through the 2010s. In the early part of the new decade, the COVID-19 pandemic further fuelled the growth of platform organisations. In fact, the market valuations of platform firms has increasingly diverged from non-platform, and particularly non-technology companies. To understand the rising importance of the platform economy, we need to first understand how platform-enabled business ecosystems operate.

Traditionally, firms built scale through vertical integration given that the costs of coordinating activities beyond organisational boundaries were high. However, with digitisation accelerating, the costs of inter-firm coordination are plummeting. In our 2020 paper on Africa's platform economy, we highlighted the development of continent-wide standards and non-traditional digital infrastructure. New standards and reduction in infrastructure coordination costs provide the mechanisms for firms to coordinate their activities better. For instance, handset manufacturers, app developers, and network operators are able to coordinate their value creating activities around Google's Android infrastructure.

As a result of falling costs, companies are increasingly participating in business ecosystems – networks of interacting firms that coordinate their activities towards solving common customer problems. Traditional, vertically integrated firms were structured around production processes. Accordingly, industry boundaries mirrored production logic. In contrast, business ecosystems are built around a customer value proposition, and firms coordinate their activities to collectively deliver a compelling customer value proposition.

Ecosystems are not built around products, but around customer value propositions.

Consider the financial services industry, which is structured around traditional financial products. The industry's boundaries are growing less relevant in the world of ecosystems. A bank, for instance, can coordinate with players across industries – housing, automotive, local commerce, and others – to shape integrated customer value propositions.

Such partnerships would traditionally have been managed bilaterally, with limited ability to scale. However, in the platform economy, business ecosystems provide a scalable coordination mechanism to manage and coordinate activities. In doing so, a platform often occupies a central position in its ecosystem, with partner firms being increasingly dependent on the platform to organise activity in the ecosystem.

A platform¹ is a business that enables value-creating interactions between external producers and consumers. A platform provides open infrastructure for these interactions and sets governance conditions for them. Platforms generate value by reducing transaction costs and coordinating a range of external actors. Platform firms own key control points or competitive bottlenecks which other ecosystem firms need to access. The ownership of these control points provides strategic leverage to the platform firm.²

In the financial services sector in particular, platform business models are increasingly shaping how financial products are distributed, how clients are served, and how underlying financial infrastructures are scaled.

This paper explores how financial institutions can strategise and win in the platform economy.

¹. Parker, Geoffrey G., Marshall W. Van Alstyne, and Sangeet Paul Choudary. Platform revolution: How networked markets are transforming the economy and how to make them work for you. WW Norton & Company, 2016.

². For instance, platforms like Google and Facebook control user relationships and data which provides them leverage over other ecosystem firms looking to target these users.



SECTION A

/01

**THE RISE OF THE
PLATFORM ECONOMY**

/02

**THE TRANSFORMATION OF THE
FINANCIAL SERVICES VALUE CHAIN**

/03

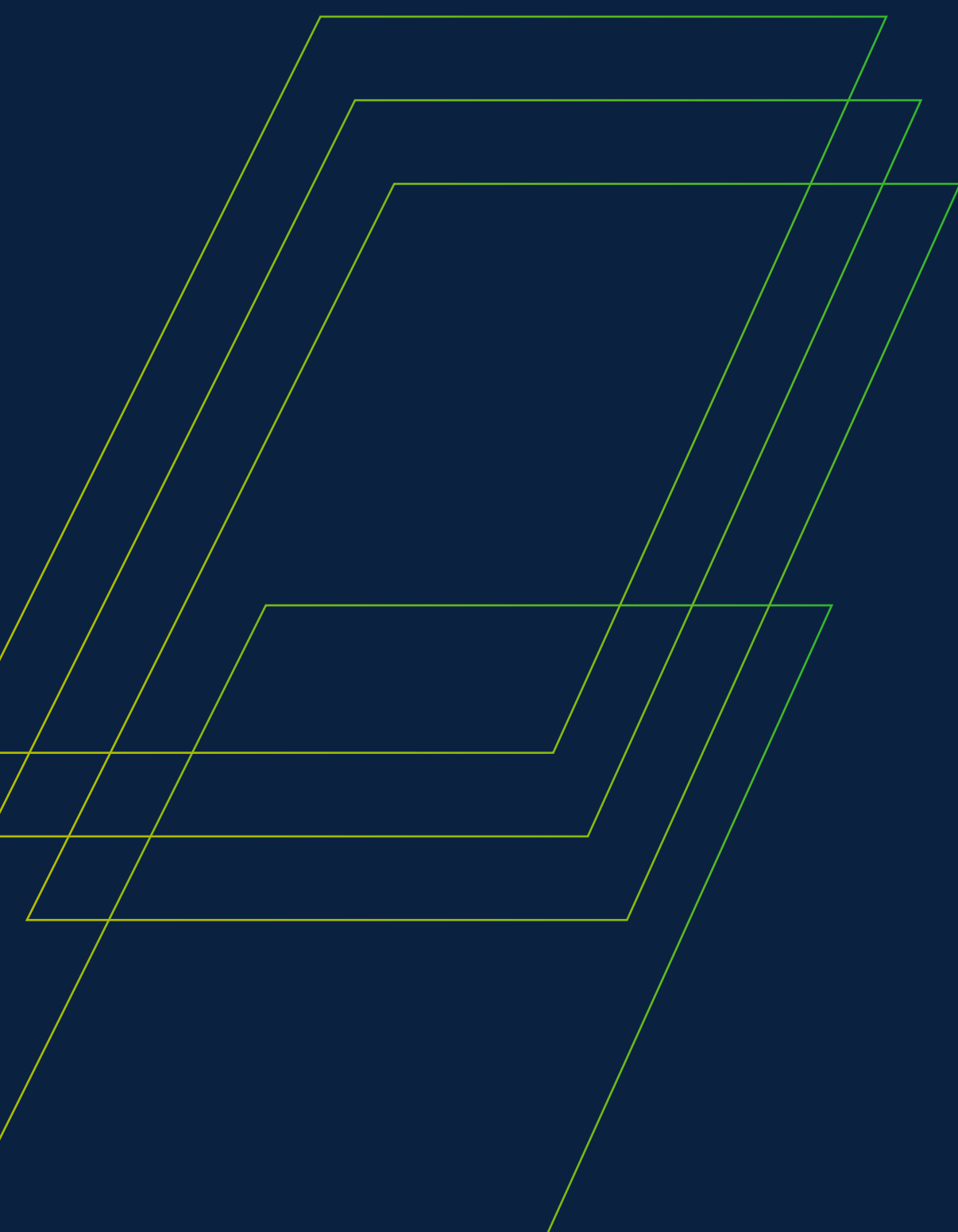
**THE NEW FINANCIAL
VALUE STACK**

/04

**PLATFORM POSITIONS
ACROSS THE STACK**

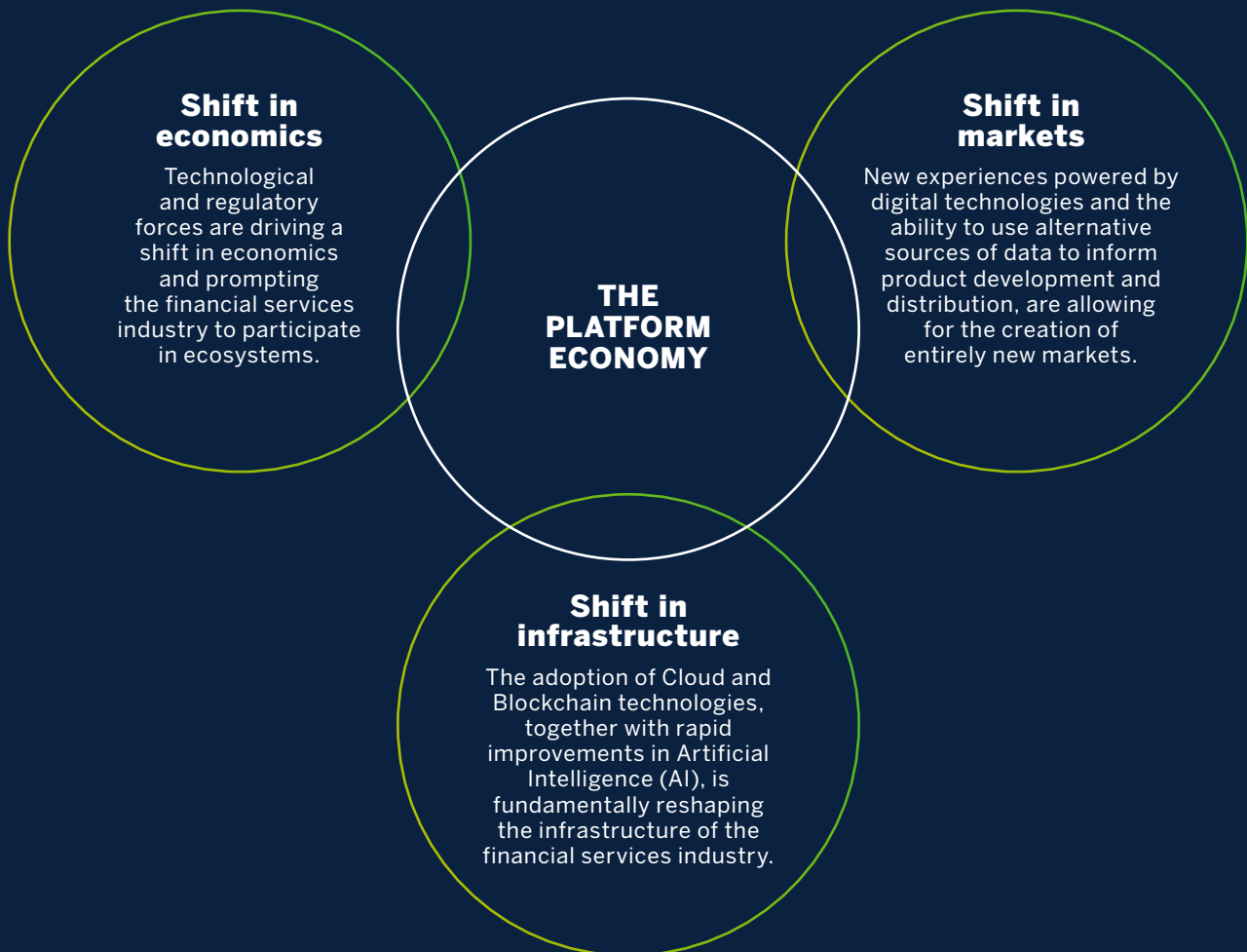
/01

THE RISE OF THE PLATFORM ECONOMY





The platform economy's rise is being powered by a shift in industry economics, in market behaviours, and in infrastructural technologies. Below, we explore the key shifts playing out and how they impact the traditional financial services value chain.





SHIFT IN ECONOMICS

First, technological and regulatory forces are driving a shift in economics and prompting the financial services industry to participate in ecosystems.

INCREASING COMPLEXITY PUSHING THE INDUSTRY INTO MODULAR ECOSYSTEMS

The financial services boom in the late 1990s and the 2000s was achieved partly through an expansion of the scope of financial firms, both in terms of product offerings and risk exposure. This introduced additional complexities, which reduced central managers' control over their firms, while also making decision-making more complex.

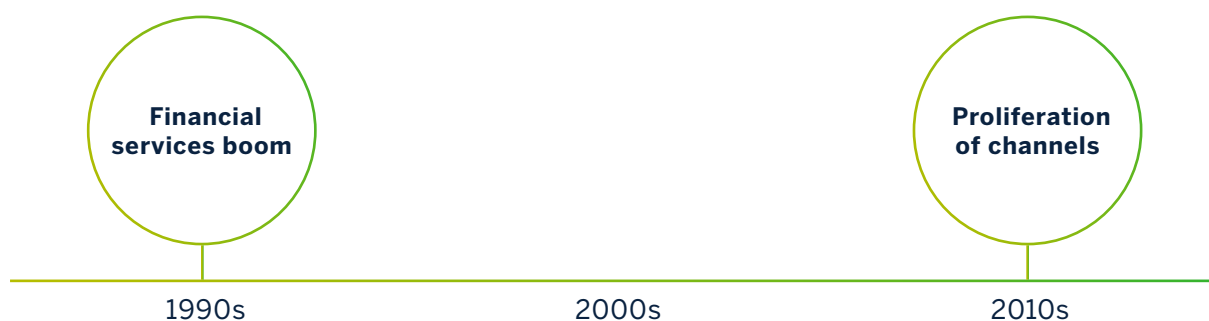
Several factors have driven this increasing complexity. A greater focus on regulatory compliance following the global financial crisis has led to increased data collection, monitoring, and reporting costs, particularly in large, complex operations.

The proliferation of channels over the course of the 2010s has yielded greater customer convenience and a superior user experience, but has increased operating and management overhead costs for banks. These channels tend to deliver products to the clients in a siloed approach that usually revolves around how the internal businesses within the bank are structured rather than focussing on client journeys and jobs to be done.

Financial services groups need to manage trade-offs across marginal operating costs, transaction values, and the likelihood of current and future sales, while choosing the appropriate channel mix, as these factors vary with every channel. Risk exposure also varies across channels, with partner channels posing different challenges. Banks also need to recognise that the commoditisation of their traditional products will mean that a more ecosystem led approach to the markets is now crucial.

Over the past decade and more, banks' IT systems have also become increasingly fragmented. Data relating to consumer preferences, as well as risk models, is often fragmented across different systems, and this drives up operating costs while making new product development more onerous.

The cost of performing transactions internally rather than externally determines the scope of a firm's activities. Given that the complexity of financial institutions has increased, the cost of performing transactions internally has also risen. This, in turn, gives rise to a need to move transactions outside the firm and into the ecosystem.



An expansion of the scope of financial firms, both in terms of product offering and risk exposure, resulted in the financial services boom in the late 1990s and 2000s; the proliferation of channels over the course of the 2010s is empowering the platform economy.



STANDARDISATION AND INTEGRATION MAKE INTERNAL TRANSACTIONS CHEAPER

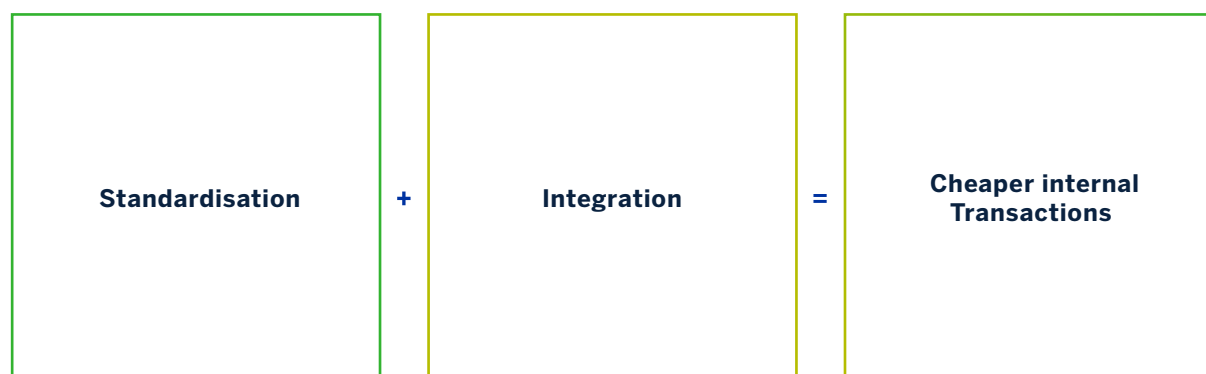
The rise of Cloud computing and improvements in data management technologies have enabled greater standardisation of internal data and processes at financial institutions.

Cloud-hosted workflows coordinate with each other more seamlessly, while big data technologies allow financial services groups to centrally manage data held across functions. The ability to create value from data will be a key differentiator for retail banks, and internal data standardisation and management plays a key role in successful data monetisation.

Internal data standardisation and management helps to automate compliance functions and regulatory reporting by managing data extraction and ingestion from various systems. This approach also helps to improve loan book profitability by allowing or a comparison of credit profiles against revenue and margins, thus reducing default risk and identifying the most profitable customers.

Centralised monitoring enabled by standardisation can also help to reduce financial crime. Finally, banks can improve debt collection efficiencies by analysing collection performance and debt recovery across different customer profiles to identify and prioritise customer types.

In effect, data and systems standardisation make internal transactions across various units of a bank far cheaper. Moreover, internal standardisation also enables the different parts of a bank to coordinate more cohesively with external partners and customers.



Data and systems standardisation and integration make internal transactions across various units of a bank far cheaper.



APIS AND OPEN BANKING MAKE EXTERNAL TRANSACTIONS CHEAPER

While standardisation makes internal transactions cheaper within a financial services organisation, the complexity of managing multiple operations within a single entity remains. However, the rise of application programming interfaces (APIs) and Cloud-hosted workflows reduce the costs of transacting externally as well, leading to an unbundling of the traditionally vertically integrated model and the reorganisation of the financial services industry into business ecosystems.

APIs provide functional interfaces and communication protocols for external parties to access account and transaction information securely in real time. This enables seamless coordination across internal business processes and external parties. Financial institutions can more flexibly structure and distribute products through third-party channels. They can also leverage external capabilities to run critical operations without needing to engage in multi-year IT implementations. IT teams within organisations are moving towards an internal serviced based architecture to enable the externalisation APIS for the developer community. APIs enable bidirectional data flows, enabling financial services organisations to capture data across external interactions and develop more robust data models to inform credit and risk.

In addition to market forces, regulatory forces are also pushing the industry towards open banking. Europe's payment services directive (PSD2) creates the legal framework for enabling an EU-wide single market for payments. Under PSD2, European banks and other payment service providers are

required to provide regulated third-party access to customer account data and allow other companies to initiate payments on the customer's behalf.

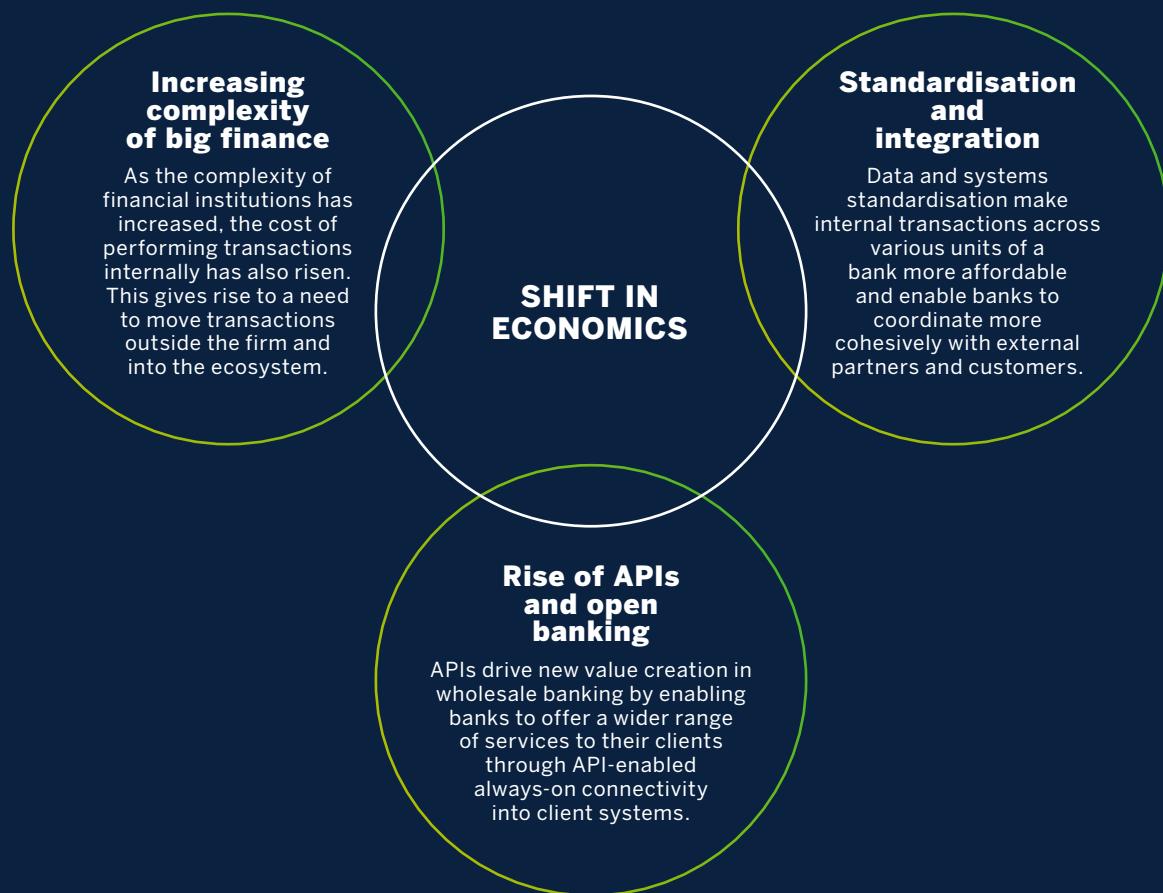
By breaking banks' control over these functions, regulations further enable some functions to shift towards external players in the ecosystem.

Given Africa's large unbanked population, open banking could facilitate financial inclusion in the future. Regulatory regimes on the continent are showing early signs of shifting in this direction. The National Bank of Rwanda (BNR) has modelled its approach on the EU's PSD2, allowing for new types of payment providers and the creation of a regulatory 'sandbox' for testing financial innovation in a controlled setting. Its regulations address data sharing and portability while managing user consent.

Finally, APIs drive new value creation in wholesale banking by enabling banks to offer a wider range of services to their clients through API-enabled always-on connectivity into client systems. Using APIs, banks can move beyond payment services to integrate payments with cash management, liquidity management, treasury, and trade finance services, while reducing servicing costs and improving responsiveness.

As more business processes move to the Cloud, API-based connectivity enables inter-process communication, and eventually inter-firm coordination along the value chain.

In this manner, APIs change the nature of inter-firm collaboration and allow for greater coordination, further pushing the industry to reorganise as modular ecosystems.



SHIFT IN MARKETS

Second, new experiences powered by digital technologies, as well as the ability to use alternative sources of data to inform product development and distribution, are allowing for the creation of entirely new markets where none previously existed, and the ability to penetrate underserved customer segments. The pandemic has further accelerated these trends by driving significant changes in consumer behaviour.

In general, these new behaviours shift consumer engagement away from traditional banking channels towards new platform businesses. Financial services are being commoditised and embedded into the experiences delivered by these platforms, with customer engagements mediated by the platform firm.

However, financial services firms that identify these shifts early may leverage them to their advantage to effectively create a central position in relevant business ecosystems.



PANDEMIC-INDUCED BEHAVIOURAL SHIFTS AND THE VALUE CHAIN

Sudden crises such as the COVID-19 pandemic are often accompanied by drastic behavioural shifts. These changes may lead to the migration of value from established business positions to new ones. This enables the rise of new players with innovative business models, which often commoditise existing business positions.

In the financial services industry, the increased adoption of contactless payments creates one such opportunity. Despite advances in contactless technology for well over a decade, the adoption of contactless payments had been slow, owing to a chicken-and-egg problem where customers were not incentivised to adopt contactless options unless merchants had already done so, and vice versa.

But, the pandemic sparked a sudden, large-scale behavioural shift as customers and merchants embraced contactless payments for health reasons.

With the chicken-and-egg problem regarding contactless payments solved, both the payer and payee markets may expand further to encompass new use cases. Since contactless payments essentially unbundle payments initiation and acceptance from physical cards and terminals, these functions can now be embedded into any interface – for instance, wearable devices or devices that can engage in machine-to-machine payments. Machine-to-machine payment systems have also grappled with a chicken-and-egg situation.

But as contactless payments come to the fore, and are unbundled from traditional point-of-sale terminals, payment services may increasingly be embedded into other machines and contexts.

Machine-to-machine payments could also serve as a springboard for entirely new merchant services ecosystems. Many merchant services platforms – Ant, Square, Stripe, and others – have been built around payments data. Contactless payments, and the subsequent rise of machine-to-machine payments, could create entirely new value pools by enabling new transaction types – for instance, vehicles paying parking meters at scale. Entirely new ecosystems could be developed around the data generated from these transactions. Datasets created by new payment channels will also create new markets for lending.

Further, the fact that payments can be embedded in many different contexts implies unique challenges relating to the management of collections and settlements in each context. Stripe has offered a solution for the platform economy, managing collection from the demand side and settlement for merchants. The rise of contactless payments creates an opportunity for similar modular payment players to emerge for different contactless payment contexts.

Of the shifts created by the pandemic, some will be temporary while others, such as those described above, could create new value pools and entirely new ecosystems of opportunity for financial services groups to migrate to.



CONSUMER LOYALTY SHIFTING FROM PRODUCT OWNERS TO EXPERIENCE CURATORS

Even before the COVID-19 crisis, the distribution of financial services was moving towards non-financial firms. Home loans are being distributed through digital real estate marketplaces, while auto insurance is embedded within a range of digital mobility experiences.

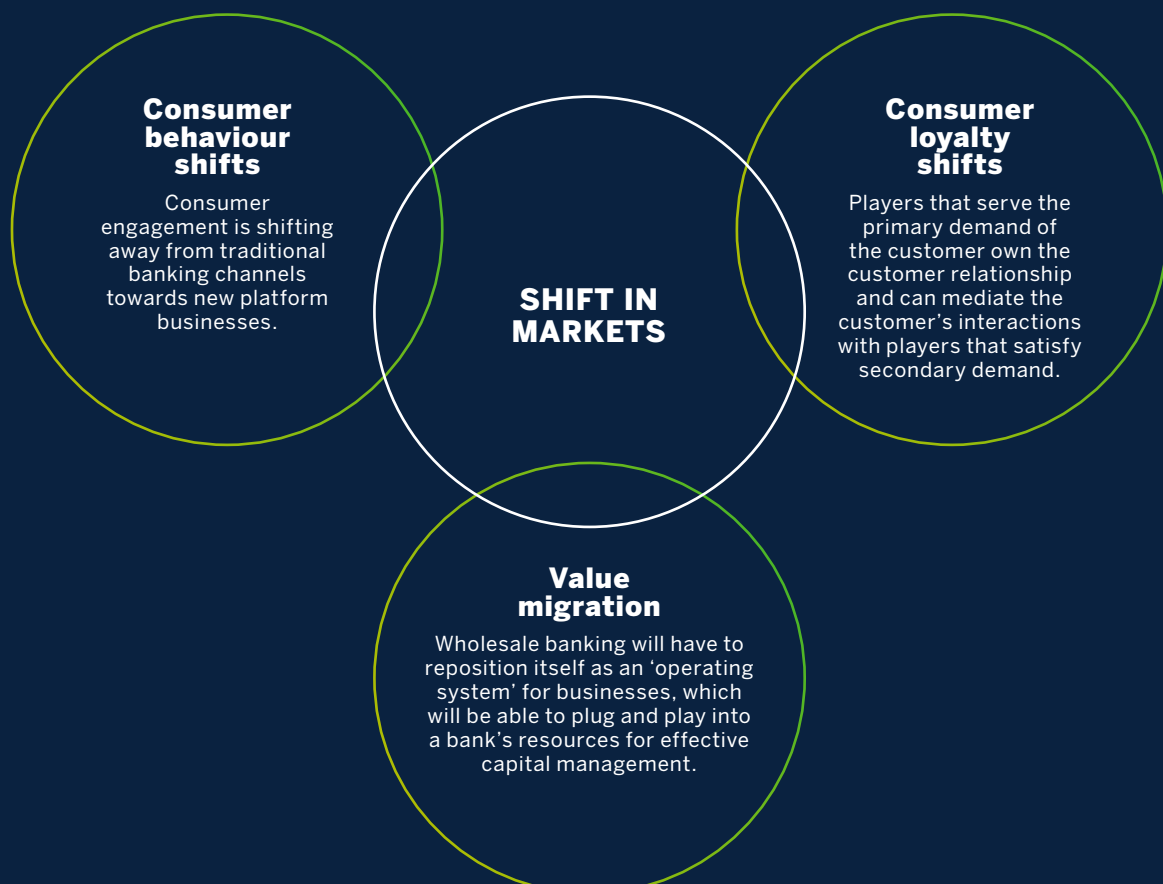
These platforms can better mediate the distribution and sale of a financial service on account of their ownership of the consumer relationship. Essentially, most of these services serve the primary demand of the customer – the need for housing or mobility – and create a secondary demand for the associated financial services.

Players that serve the primary demand of the customer own the customer relationship and can mediate the customer's interactions with players that satisfy secondary demand.

As a result, platform businesses have disintermediated financial services firms' relationships with customers.

To remain relevant and competitive, banks, investment companies and insurers will need to shift their focus towards primary demand as well.

In wholesale banking, this implies a shift beyond payment services to also address other banking needs, particularly liquidity management, treasury services, and trade finance. Wholesale banking will have to reposition itself as an 'operating system' for businesses, which will be able to plug and play into a bank's resources for effective capital management.



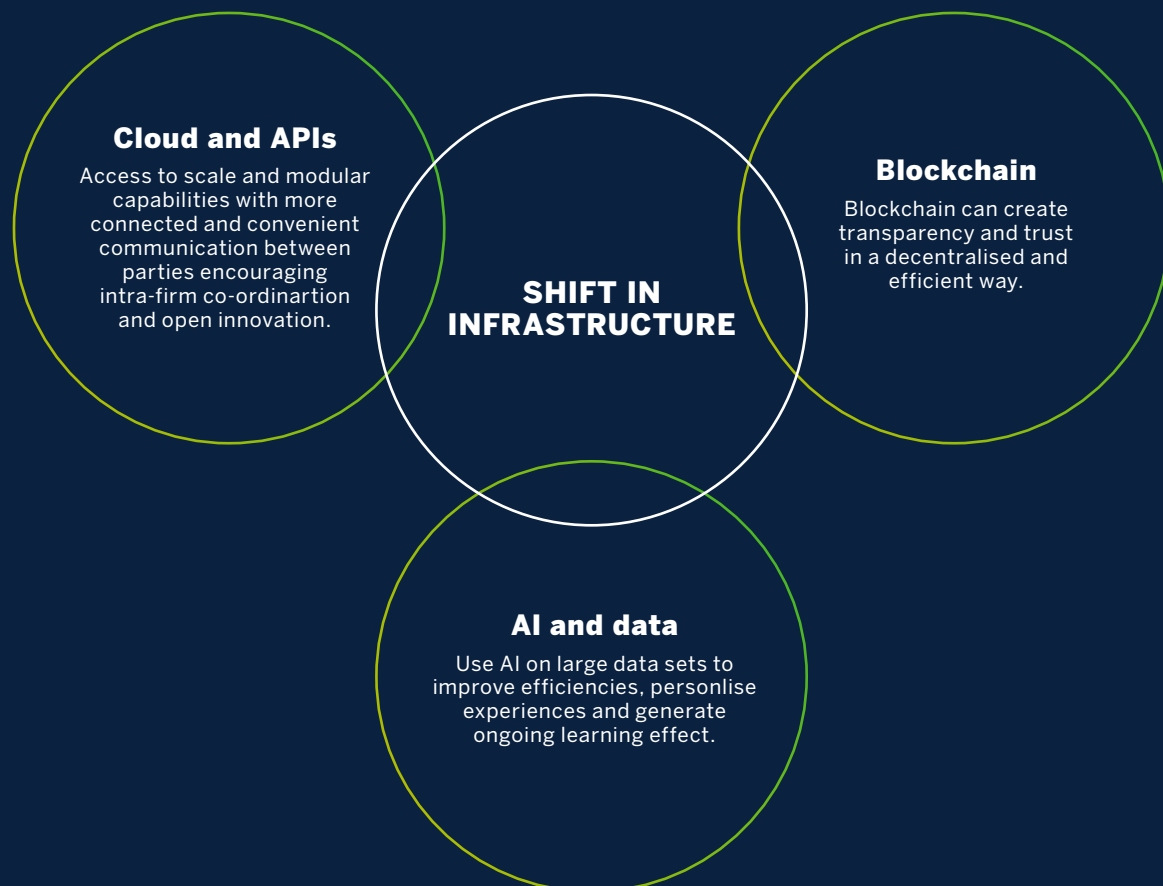


INFRASTRUCTURE DEVELOPMENTS

The third key shift in the platform economy is in the underlying infrastructure on which banking systems operate. Traditional systems were monolithic and prevented the modular provisioning of financial services. However, the adoption of Cloud and blockchain technologies, together with rapid improvements in Artificial Intelligence (AI), is fundamentally reshaping the infrastructure of the financial services industry.

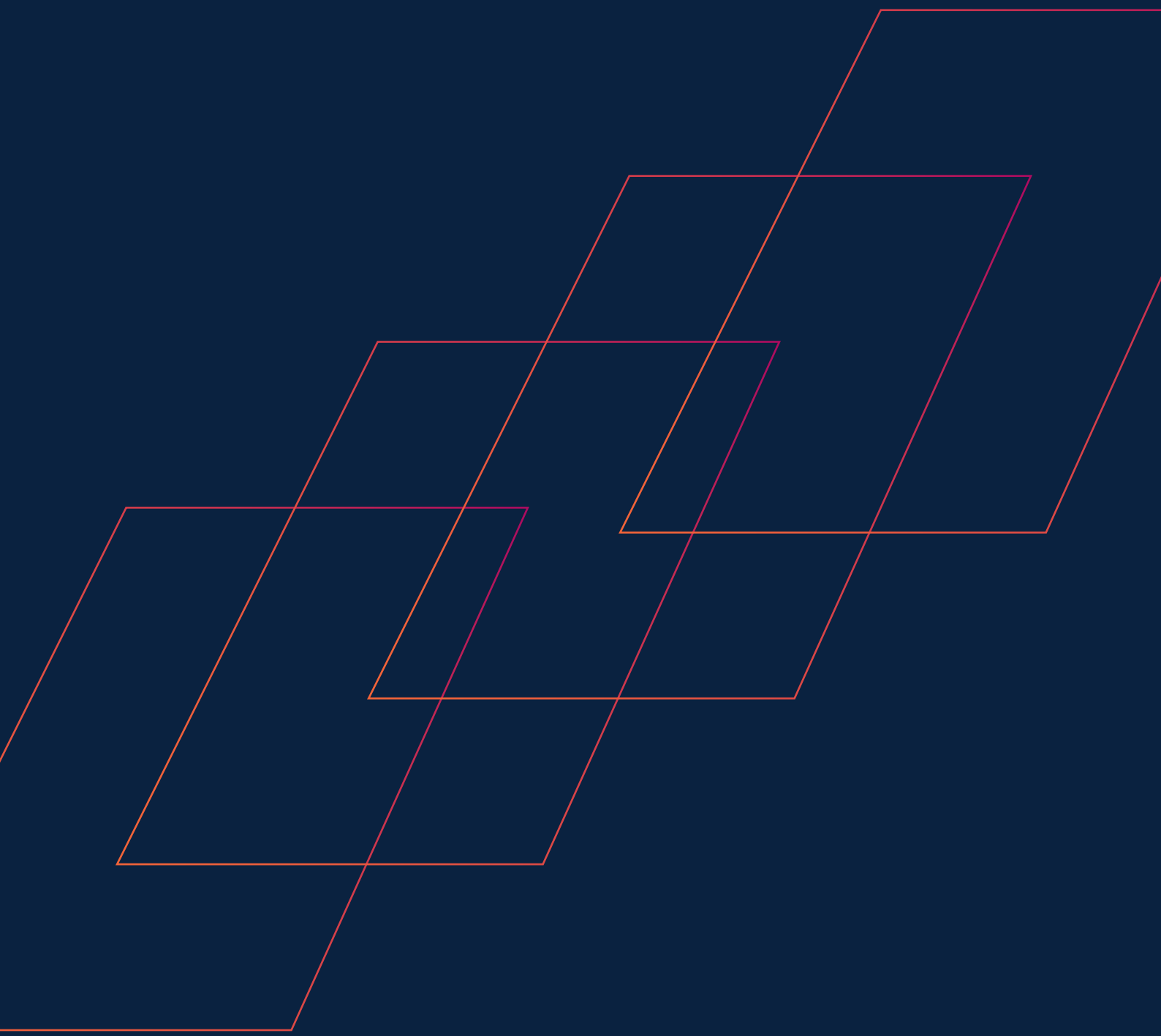
As previously mentioned, Cloud services are making financial services more modular. Cloud-hosted data and services can more effectively communicate with each other through APIs, allowing inter-firm coordination and open innovation. The rise of blockchain technology addresses many of the challenges inherent in traditional centralised banking.

Finally, leveraging AI, financial services organisations can automate high-volume transactions, and in doing so, capture greater data across these transactions, thereby building more sophisticated risk and credit models.



/02

THE TRANSFORMATION OF THE FINANCIAL SERVICES VALUE CHAIN





FROM VERTICALLY INTEGRATED VALUE CHAINS TO HORIZONTALLY LAYERED ECOSYSTEMS

Banks have primarily performed the transformation function and served to collect deposits and pay interest on savings. Other core functions included payments, lending and asset management. Through the 1990s and early 2000s, banks bundled financial services and acted as 'one-stop shops' for their customers. However, these bundled services were not structured around customer needs – they were optimised around the capabilities of a bank's delivery channel.

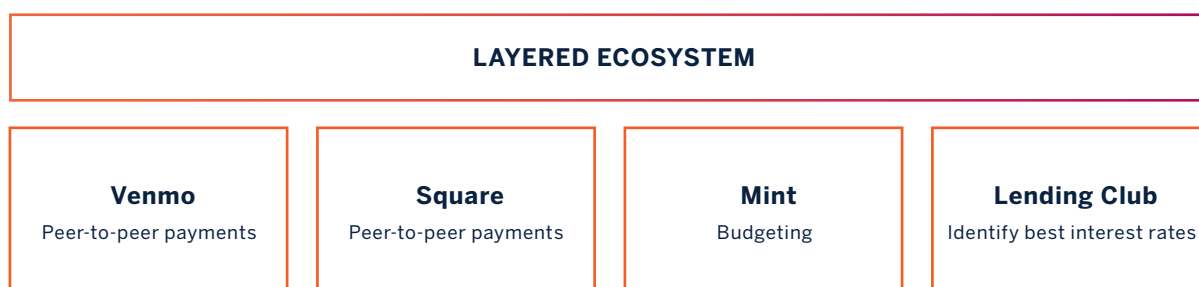
As transaction costs fall with the emergence of new digital infrastructures and new mechanisms to organise the market for financial services, the vertically integrated value chain starts to unbundle. This is giving rise to new specialised competitors – agile and innovative 'fintechs' that focus on specific tasks in the value chain.

From the late 2000s to the mid-2010s, we saw the emergence of fintech challengers that specialise in particular activities across the financial services value chain. In doing so, they effectively 'unbundle the bank'. Venmo and Square started by specialising in peer-to-peer (P2P) payments, Mint specialised in budgeting, and Lending Club helped consumers identify P2P loans with the best interest rates.

This unbundling of the vertically integrated industry architecture is creating a more modular, layered ecosystem where firms at every layer specialise in a particular value-creating activity.

Multiple competing firms can take up positions that were previously occupied by a single financial services firm, thus driving down margins and expanding consumer choice.

In these modular ecosystems, firms increasingly retain those activities where they possess superior capabilities. Over time, this has a positive reinforcement effect, as these firms increasingly develop competitive advantages by specialising in their niches, while letting go of activities in which they are less strong. Moreover, the low costs of API-based coordination with other firms further validates specialisation, since firms can invest in specific capabilities in a particular part of the value chain, while participating in larger business ecosystems that consist of firms across layers.



The unbundling of the vertically integrated industry architecture is creating a more modular, layered ecosystem where firms at every layer specialise in a particular value-creating activity.



FROM UNBUNDLING TO 'REBUNDLING' AND THE RISE OF PLATFORM BUSINESS MODELS

Fintechs began by 'unbundling' financial services. Several factors drove the unbundling of the financial services value chain, including improvements in automation. The rise of robo-advisors such as Wealthfront and Betterment, for instance, meant the routine functions of financial advisors were automated, enabling these players to provide balanced, diversified portfolios at lower management fees. Second, fintechs with lower cost structures exploited margin arbitrage to offer credit at better interest rates than incumbents. Third, fintechs leveraged data advantages and non-traditional data sources to target niche, underserved markets, underwriting customised loans and developing primacy of the user relationship.

However, unbundling creates a fragmented customer journey and increases search costs for consumers. Moreover, unbundling in itself does not necessarily yield sustainable business models.

In the news media industry, for instance, the traditional newspaper was unbundled by digital distribution models.

Eventually, Facebook 'rebundled' this function via a news feed, and Google arguably did the same through its search engine. Both 'rebundlers' then centralised advertising power and moved it away from traditional news providers. Similarly, in the music industry, file-sharing services such as Kazaa and Napster unbundled albums, although Spotify's playlists essentially re-bundled them.

In a similar vein, unbundled financial services are unlikely to remain standalone functions. Rather, unbundled services will likely serve as entry points to attract customer engagement and then rebundle services around consumer needs.

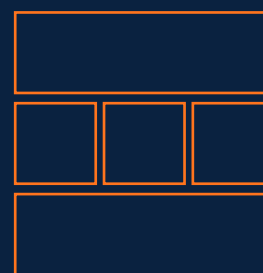
Through the mid-to-late 2010s, financial services were rebundled as start-ups that initially focused on one service – typically payments – started to offer a larger range of products and services. Consider Square, which expanded from a phone-based point-of-sale terminal for on-demand workers into a financial services platform focused on businesses' financing, payroll, and payments needs. Similarly, Ant started out as Alipay – a payments provider – and then added lending and other financial products. Stripe started as a payments API and now combines small business solutions and treasury services.



Vertically integrated financial services



Unbundling of financial services



Rebundling of financial services



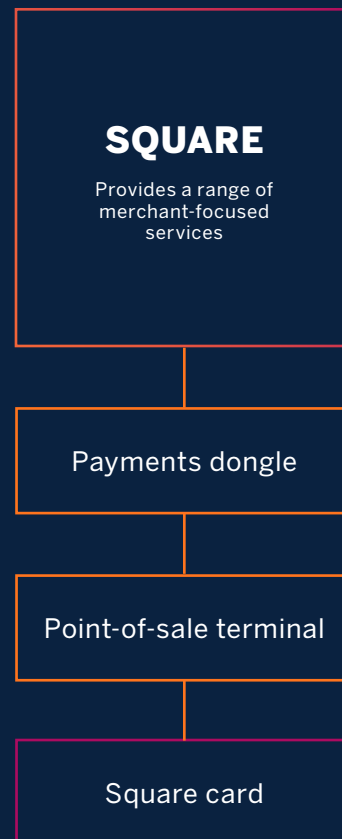
Rebundling in ecosystems is centred around consumer needs, and typically follows three key steps. First, a firm uses an unbundled service to gain primacy of the consumer relationship. Second, the firm leverages this customer relationship to capture data and construct superior identity management and credit scoring capabilities. Finally, using these superior prediction models to understand and predict customer needs, eligibility, and relevance, the firm rebundles other financial services around the consumer.

Today, Square provides a range of merchant-focused services and serves both small and large merchants across multiple industries, with a focus on retail, restaurants, and on-demand services.

Square started by offering a small device that could be attached to a phone to enable credit card transactions. The payments dongle allowed companies that provide home delivery and off-location services to accept payments via credit cards using just their phones. Square then expanded its suite of products to launch a point-of-sale terminal targeting larger merchants in the retail sector. Square's virtual terminal allows merchants to accept payments online, and the Square reader software development kit (SDK) allows even offline merchants to integrate Square's payments capabilities into different workflows and on third-party devices and hardware.

These payments services constitute the springboard around which Square built its larger ecosystem. The company launched Square Card, a debit card that allows merchants to access money in their Square account and make payments with it. Square Capital lends money to small businesses based on actual sales data from their point-of-sale terminals.

Square could also move into the payroll space given that its Square Cash application, which is aimed at consumers, can be used by the employees of a Square merchant client, meaning that merchants could pay their employees through the application. Square also manages the customer directory and provides analytics services across the entire ecosystem of connected products. Further, it integrates with a range of third-party business management services. Square essentially provides a platform to rebundle horizontally across multiple services.



Square expanded from a phone-based point of-sale terminal for on-demand workers into a financial services platform focused on businesses' financing, payroll, and payments needs.



VALUE CREATION IN ECOSYSTEMS: PRODUCTION AND CONSUMPTION ECOSYSTEMS

In the platform economy, the distribution of financial services is decoupling from the manufacturing of these services. Across the industry's value chain, we are seeing the emergence of distinct production and consumption ecosystems.³

The production ecosystem is comprised of activities further down the value chain which are organised around a core production process. The consumption ecosystem comprises activities further up the value chain which are organised around jobs to be done for the consumer.

Production ecosystems rely on mechanisms that coordinate components across firms to develop a common product or service, which is centered around a customer value proposition.

For instance, in the financial services industry, a mechanism to organise and standardise fraud detection across multiple institutions would create production efficiencies as each firm would benefit from the collective knowledge.

Consumption ecosystems rely on mechanisms to reduce search costs for consumers by providing aggregation services and access to multiple providers.

For instance, a system that recommends the most appropriate home loan to a user, based on data from their home-buying journey, reduces search costs for users and allows them to avoid being evaluated by multiple financial institutions.

PRODUCTION ECOSYSTEM

Activities further down the value chain which are organised around a core production process.

CONSUMPTION ECOSYSTEM

Activities further up the value chain which are organised around jobs to be done for the consumer.

Across the financial services industry's value chain, we are seeing the emergence of distinct production and consumption ecosystems.

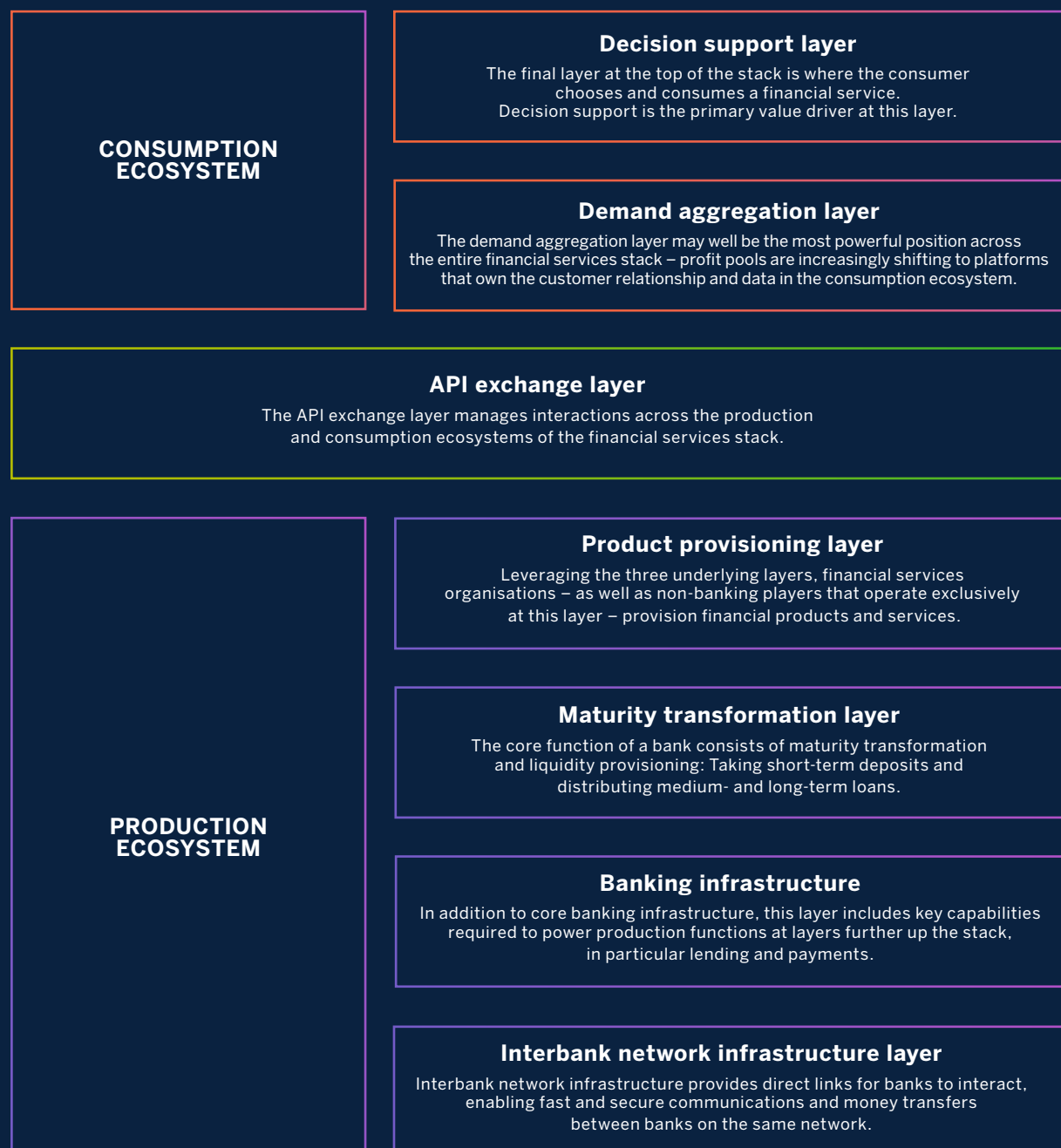
³. Mohan Subramaniam, Bala Lyer, Venkat Venkatraman – Competing in digital ecosystems – Business Horizons (2019)

/03 **THE NEW FINANCIAL VALUE STACK**



As the financial services industry reconfigures into ecosystems, and as value is directed towards new business models, the vertically integrated value chain of the financial services industry is being transformed into a layered financial services stack.

This stack has seven distinct layers that span the production and consumption ecosystems. The production ecosystem, further down the stack, comprises the underlying interbank network infrastructure, banking infrastructure, transformation functions, and product provisioning. Further up the stack, the consumption ecosystem spans consumer-focused decision-support systems and market aggregation platforms. Industry-wide integration infrastructures may play a role in the middle, linking the production and consumption ecosystems. We explore each layer in more detail below.





INTERBANK NETWORK INFRASTRUCTURE LAYER

Interbank network infrastructure provides direct links for banks to interact, enabling fast and secure communications and money transfers between banks on the same network. The SWIFT payments network – and competitors such as the Depository Trust & Clearing Corporation (DTCC) – provides clearing and settlement services to financial institutions. Increasingly, distributed ledger technologies (DLT), such as blockchain, enable more efficient record-keeping for loans, investments, and even securities clearing.

RippleNet, for example, provides a DLT-based decentralised network for the real-time settlement of international payments. RippleNet's On-Demand Liquidity (ODL) product uses Ripple's digital currency, XRP, for fund transfers, while xCurrent provides a messaging system for payments that competes with SWIFT. ODL allows cross-border payments to be processed without the need for pre-funding, as the exchange is managed through XRP rather than conventional bank accounts. ODL enables payments companies and non-banking institutions to benefit from higher liquidity, and lets them easily open overseas bank accounts, without the risk of money laundering. In general, blockchain-based systems such as RippleNet, help reduce network and messaging costs for payments systems and trading platforms, thus reducing administrative overheads, eliminating human error, and preventing fraud.

Inter-bank networks also include DLT-based trade finance infrastructure such as Vakt, Contour and Aroko. Multiple banks, often operating in consortiums that include logistics and procurement companies, use shared DLT-based infrastructure to

seamlessly share documentation related to trade finance transactions. Given Africa's fragmented trade landscape, this type of solution could create massive efficiencies at the network infrastructure layer. Efforts are already underway in this regard. For instance, the African Digital Asset Framework (ADAF) – which is geared towards transactions in digital currencies and assets – uses the Raise security token to digitise real-world assets such as real estate and fine art, allowing them to be more effectively traded over new markets.⁴

In the property and housing market, UK-based Coadjute provides a similar Blockchain-based network for secure and cheaper interactions between estate agents, conveyancers, surveyors, brokers, and lending banks.

In Africa, public-private partnerships may play an important role in delivering interbank network infrastructure.

For instance, Mastercard's partnership with Rwanda is helping to digitise government services, particularly national healthcare claim payments, while also setting up an interoperable mobile banking system. Alibaba's Electronic World Trade Platform (eWTP) provides another such example, again in partnership with Rwanda. As more companies and public organisations join eWTP, it could serve to create a common technical backbone for all trade activity in the region.

⁴ <https://www.tralac.org/blog/article/13921-how-can-blockchain-support-intra-african-trade.html>



BANKING INFRASTRUCTURE LAYER

The banking infrastructure layer has traditionally been dominated by suppliers of core banking systems, including Oracle's FlexCube, Edgeverve's Finacle, and FIServ's DNA. Core banking systems enable banking functions, including posting deposits to accounts, creating a loan account, updating the general ledger daily, and managing intra-day ledger balancing. Core banking capabilities include financial control, risk calculation and management, and liquidity assessment and maintenance, amongst others.

The monolithic technical architecture of traditional core banking systems has long discouraged the modularity needed to participate in ecosystems. However, several firms, including Plaid, Tink, and TrueLayer, now enable banks to modularise banking products and services, making them accessible to external applications. In Africa, startups such as Mono⁵, Okra⁶, Pngme⁷ and CloudBadger operate similar business models.

These firms establish core systems in corporate and retail banking as well as in treasury and capital markets through open APIs. This allows financial institutions to provision their products and services modularly and make them externally consumable as APIs – on which external fintechs can develop new solutions.

As African financial institutions digitally transform and participate in the platform economy, technology groups and other financial services firms have an opportunity to create back-end digital financial infrastructure that will help to accelerate the entire process.

Alibaba and Ant provide a compelling example in this space. Alibaba's Aliyun provides financial infrastructure to banks in several countries, including Pakistan and the Philippines, and is likely to bring these infrastructural services to Africa as well. Ant provides an AI-powered risk engine, AlphaRisk, to other financial institutions so that they can improve their credit scoring capabilities. And Ant's AI-powered Caifuhao platform provides back-end services for asset management companies. Asset managers open corporate accounts on the platform and use its AI capabilities to gain better insights on consumers.

As they look to digitise their operations to participate in the platform economy, African financial services organisations will need to determine the most appropriate back-end digital financial infrastructure to build new systems on.

⁵. <https://medium.com/mono-hq/raising-500-000-pre-seed-to-double-down-on-building-the-plaid-for-africa-6891c6bbf48a>

⁶. <https://www.forbes.com/sites/meghanmccormick/2020/05/31/meet-the-woman-behind-okra-africas-first-api-fintech-super-connector/?sh=2a65dc20561d>

⁷. <https://medium.com/pngme/africa-is-about-to-experience-an-open-banking-revolution-ac59af274c87>



In addition to core banking infrastructure, this layer includes key capabilities required to power production functions at layers further up the stack, in particular lending and payments. Supporting capabilities at this layer include identity management and credit scoring.

Credit scoring is another key capability in the platform economy. In Africa's vastly unbanked landscape, building credit scoring capabilities is an important opportunity. Credit scoring enables access to credit, but more importantly, it can also serve as a reputation scoring mechanism to determine access to other non-financial services.

While traditional credit access was collateral-based, emerging credit scoring models leverage other data sources.

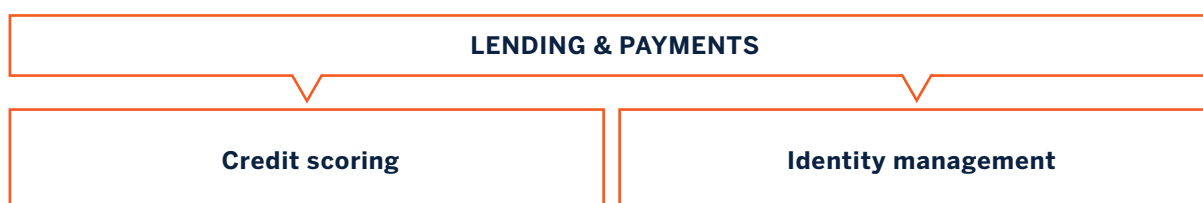
In Africa, a range of startups and traditional firms have built lending models using non-traditional data sources. In the agricultural sector, Apollo Agriculture uses satellite imagery data to determine the credit-worthiness of farmers, while APA Insurance uses similar data sets to inform risk, and First Access uses weather and warehouse records to calculate credit scores for farmers.

Companies such as SyeComp gather geospatial data through a combination of satellite and drone imagery, while FarmDrive employs a blend of social, agronomic, environmental and satellite data to develop credit scores.⁸

Other startups including Tala and Branch, claim to use data points from mobile usage to build out credit scoring models. Nigeria-based Social Lender uses social signals from social media platforms to build credit scoring models.

These capabilities, while traditionally bundled inside a bank, will increasingly be provided by independent firms. If successful, these players will provide such capabilities across multiple financial services firms and learn from the data captured across the sector, further reinforcing their capabilities.

In this manner, a bank's ability to lend in the future will no longer be limited by its access to historical lending and repayments data.



In addition to core banking infrastructure, this layer includes key capabilities required to power production functions at layers further up the stack, in particular lending and payments.

⁸ <https://farmdrive.co.ke/credit-scoring>



MATURITY TRANSFORMATION LAYER

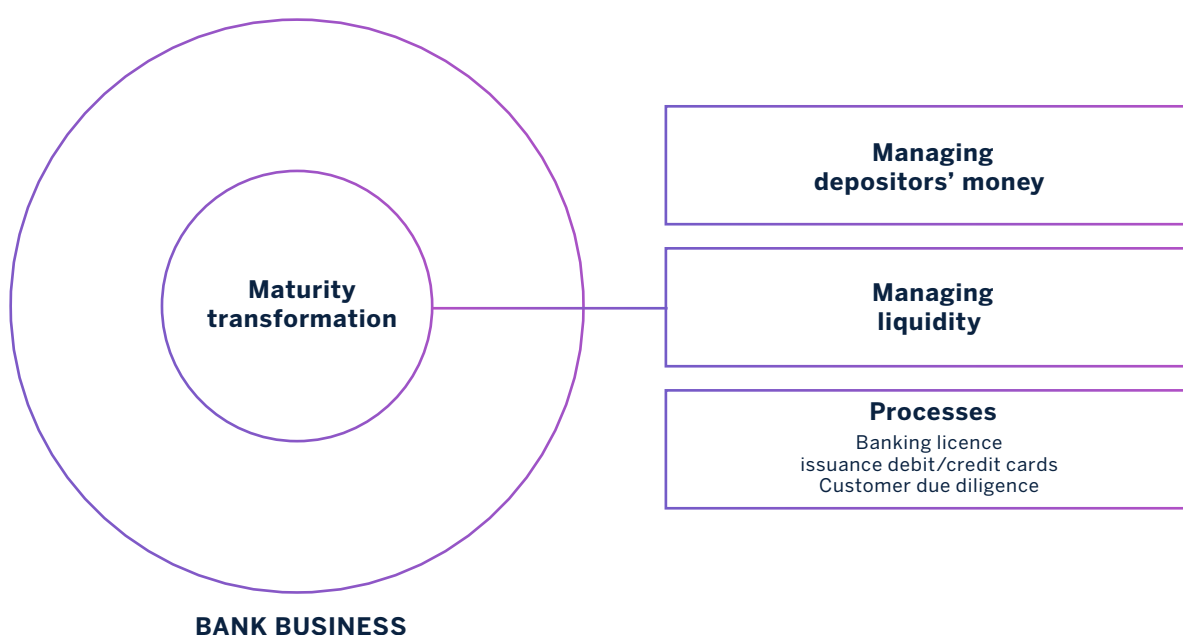
The core function of a bank consists of maturity transformation and liquidity provisioning: Taking short-term deposits and distributing medium- and long-term loans. Maturity transformation lies at the core of a bank's business, where it manages how depositors' money may be used most effectively while also managing liquidity to enable the depositor to withdraw their rightful wealth as and when required. The transformation function also encompasses processes which attract depositors and creditors, such as having a banking licence, issuance of debit/credit cards and customer due diligence.

Even as technological forces shift the financial services sector towards the platform economy, banks will continue to play a strong role in maturity transformation.

Improvements in AI can help financial services firms to forecast customer demand and internal liquidity needs better, and this will contribute to more effective transformation functions.

At this layer, specialised firms will emerge that can better manage depositors and creditors who have been underserved by traditional banks. In emerging markets – Africa in particular – non-banking financial institutions may obtain a banking licence and perform this function of attracting depositors and creditors, either on behalf of the bank, or on a standalone basis. Using proprietary data advantages, these firms may enable financial inclusion by banking the unbanked. Kudimoney and Sparkle, two fintech challengers, have received banking licences from the Central Bank of Nigeria.

Despite banks' perceived advantages at this layer, the emergence of digital fiat currencies – for instance in China – poses potential challenges to the ability of banks to compete at this layer in the long term. The shift to digital fiat currencies will likely erode retail deposits, as funds held in banks will be converted into digital fiat money and will not be available to support lending. To sustain and grow their lending businesses, banks will need to leverage more expensive sources of funds, including wholesale financing and/or debt issuances.



Maturity transformation lies at the core of a bank's business, where it manages how depositors' money may be used most effectively while also managing liquidity to enable the depositor to withdraw their rightful wealth as and when required.



PRODUCT PROVISIONING LAYER

Leveraging the three underlying layers, financial services organisations – as well as non-banking players that operate exclusively at this layer – provision financial products and services. With the shift to the platform economy, these products and services are increasingly consumable as APIs.

Products such as loans and home loans may be served as APIs, but risk becoming commoditised as open banking proliferates and offerings from multiple banks compete for the same customer's attention.

On the other hand, some financial services functions may even be deployed as key capabilities to enable interactions in third-party platforms' ecosystems. Stripe, one of the best examples in this space, allows developers to process payments and money transfers between customer and merchant accounts.

Noting the rising complexity of managing payments on multi-sided platforms, Stripe positioned itself as a payments enabler for the platform economy, managing collections across customer accounts and settlements across merchant accounts. In a similar manner, Nium, formerly Instarem, has positioned itself as a cross-border payments enabler for the platform economy and for

industries such as travel and maritime, which frequently require cross-border payments management.

Given the fragmented financial services landscape across Africa, the management of cross-border payments at low fees will enable the growth of the platform economy across the continent.

Flutterwave, a Nigerian startup, integrates Africa's diverse payment systems through a single API. Moneywave, a solution by the company, enables local merchants to send and receive money across Africa instantaneously, via an API connection. WeCashUp – another API provider – enables online merchants to accept mobile-money payments.

Payments and money transfers from Africa to other countries is another important function. SimbaPay provides such a capability and has partnered with Family Bank Limited, a leading bank in Kenya, and WeChat to facilitate Kenya-China trade activity.

The ability to modularise and provision financial services as APIs enables unbundling and rebundling in the financial services industry. Rebundling typically occurs at one of the top three layers of the stack – in the consumption ecosystem, which we visit next.



Stripe positioned itself as a payments enabler for the platform economy, managing collections across customer accounts and settlements across merchant accounts.



THE API EXCHANGE LAYER

The API exchange layer manages interactions across the production and consumption ecosystems of the financial services stack. On one hand, this layer aggregates product-provisioning APIs across the financial services production ecosystem. On the other hand, it integrates across websites, apps, and other digital services in the consumption ecosystem, providing them with access to these APIs.

In this manner, the API exchange layer is the first layer in which financial services may eventually be rebundled.

A player at the API exchange layer may rebundle multiple third-party financial services and resell the overall solution to demand-side players further up the financial services stack.

The Plaid Exchange is an example of a player operating at this layer. It integrates its capabilities in this space into its position in the banking infrastructure layer. Plaid Exchange enables banks to set up an integration and exchange layer around their products and data, allowing external data aggregators or fintechs to access these products and data.

With every financial services firm provisioning its product as APIs, players at the API exchange layer manage the aggregation and provisioning of these products across multiple firms. Players at this layer also use core banking capabilities to make these APIs consumable by third-party non-banking entities.

THE DEMAND AGGREGATION LAYER

Financial services organisations continue to be asset managers in the production ecosystem, but profit pools are increasingly shifting to platforms that own the customer relationship and data in the consumption ecosystem. In this context, the demand aggregation layer may well be the most powerful position across the entire financial services stack.

There are two distinct factors that create opportunities for players at the demand aggregation layer. First, the financial identity of the typical African user is often not owned by a traditional financial services group. One of the biggest opportunities for banks, asset managers and insurers is to rethink their business models to better own and curate the financial identity of the user. Second, the ability to aggregate demand is increasingly shifting from players that serve secondary demand to those that serve primary demand. For example, a car purchase represents a consumer's primary demand, while the car loan is a secondary consideration. In the platform economy, firms will need to understand the user's primary demand in order to own the secondary demand.

In the platform economy, financial services organisations will need to move beyond traditional know-your-customer (KYC) processes to create more comprehensive financial identities for users. In China, PingAn's OneConnect and Alibaba's Sesame Credit have successfully created such identity management systems, which have a range of uses, including computer vision-based security screening, credit scoring and access to travel services. Much like Africa, China's population was largely unbanked, with poor identity data, before Alibaba and PingAn created their identity management capabilities.



In Africa, BanQu uses blockchain technology to provide financial identities to the unbanked, while South Africa-based ThisIsMe provides a user data management capability and verification system aimed at businesses, allowing them to reduce fraud and automate identity authentication in user workflows.⁹

Meanwhile, at the demand aggregation layer, insurance firms have an opportunity to move from this one-time data capture event to a continuous data flow, leveraging connected devices and digital services. Some insurers, such as Progressive Insurance, provide data-capturing devices for cars to monitor driving behaviour and provide personalised premiums. These data flows can also inform product innovation at insurance firms.

More importantly, over time, insurance firms can work with third parties to serve these users, based on this data. While insurance serves a secondary need arising out of an adverse event, these third parties can serve the user's primary needs. For example, data on a user's wellness or driving habits may be used to build platforms that provide services from third parties. Health insurers can build platforms that connect patients with wellness and care services, while auto insurers can offer value-added services from driving schools, service centres, fuel stations, and so on.

Financial profile aggregators, including Mint and Yolt, aggregate data across financial institutions to create a single financial profile of the user. These aggregators also connect users with relevant offers from third parties. In general, countries that have fragmented financial services landscapes, with multiple financial relationships per user, are most likely to support this model.

However, with widespread API deployment, the barriers to entry for such a business model are reduced. The competitive advantage for financial profile aggregators was previously based on their proprietary screen-scraping technologies. But as financial services firms focus more on APIs, data aggregation is less of a challenge. In this new landscape, these platforms will need additional data, beyond account data, to differentiate themselves. They will also need to onboard third parties faster, in order to provide a range of services to the user, including non-financial services.

Peer-to-peer marketplaces for financial services also aggregate demand at this layer. Where traditional banks do not lend without collateral, peer-to-peer lending platforms such as Africa's Pezesha, facilitate entirely new interactions using alternative data sources that banks typically do not have access to or do not use. On the other hand, as lending platforms gather more data about their ecosystems, manual curation and under-writing can increasingly be performed by algorithms, which scales the underwriting process. As more diverse data comes in, the platform's ability to predict high-quality borrowers increases, which in turn leads to lower risk. As a result, the platform can price loans more attractively, leading to even more lending activity and data. This creates a positive feedback loop.

⁹ https://h2.vc/wp-content/uploads/2018/11/Fintech100-2018-Report_Final_22-11-18sm.pdf



THE DECISION SUPPORT LAYER

The final layer at the top of the stack is where the consumer chooses and consumes a financial service. Decision support is the primary value driver at this layer. If branches were the demand aggregation points in the traditional financial services value chain, the advisors, agents, relationship managers and salespeople formed the decision support layer.

However, with improvements in AI and natural language processing, new data-driven decision support systems can be deployed to inform and aid the user's decisions. AI-enabled chatbots and robo-advisory services enable scalable and customised deployment of the decision support function. In general, firms that have unique access to data flows and scoring mechanisms will be best positioned to enable decision support in the platform economy.

More importantly, the decision support layer requires financial services firms to move beyond banking. If firms are to occupy a central position in their respective ecosystems, they will need to address customers' financial needs in the context of their associated non-financial needs.

To compete effectively in this layer, banks, investment managers and insurers will have to move from serving the secondary demand – a loan or insurance product, for instance – to serving the primary demand. Financial services groups that understand and own the primary demand of the user – for example, a home or a car – will be best placed to differentiate themselves and tap into new revenue streams, even as their traditional products become commoditised. For instance, home loan providers will need to understand the overall customer journey across house searching, purchasing, ownership, and sales. Similarly, payments providers will need to understand consumption preferences to better serve their customers at the point of need and to retain primacy of decision support. As banks, asset managers and insurers participate in the primary demand space, they will be better positioned to monetise non-financial interactions.



In the traditional financial services value chain, the advisors, agents, relationship managers and salespeople formed the decision support layer. However, with improvements in AI and natural language processing, new data-driven decision support systems can be deployed to inform and aid the user's decisions.

/04

PLATFORM POSITIONS ACROSS THE STACK



Platforms may be established to coordinate interactions in the production ecosystem – further down the stack – as well as in the consumption ecosystem. However, platforms at different layers of the stack take on entirely different functions and architectures.

At the demand aggregation and decision support layers, platform companies aggregate consumer demand by providing consumer-facing services, and leverage their control over consumer data to orchestrate interactions with producers of financial services. These platforms act as gatekeepers¹⁰ of market access. They perform four key functions: The provisioning of consumer services, data management, onboarding providers of financial (and non-financial) services, and matchmaking.

These platforms benefit from learning effects, whereby the more data they capture on consumers, the better their ability to deliver a personalised experiences, leading to greater consumer engagement and even greater data capturing. They also benefit from network effects as more producers attract more consumers and vice versa.

At the API exchange layer, platforms aggregate multiple distribution partners in the consumption ecosystem and multiple financial services and data partners in the production ecosystem, and manage the rebundling of financial services and the provisioning of APIs across these players.

They also benefit from network effects, whereby more distribution partners attract more API providers, and this results in greater choice for distribution partners, thus attracting even more partners.

Further down, in the production ecosystem, platform firms provide core production infrastructure, standards, and data assets to coordinate activities.

These platforms coordinate the production activities of ecosystem firms towards a common output. They specify standards and data models that organise and support participants' activities, they engage in open standards development, and they invest in interoperability. They also attract third-party service providers. For example, Amazon Web Services integrates apps from third-party providers through its AWS Marketplace. In the production ecosystem, these platforms may capture industry-wide data and may benefit from learning effects, whereby greater data capturing improves prediction models, leading to greater platform adoption, and ultimately larger data reservoirs.

¹⁰. Furman J, Coyle D, Fletcher A, McAuley D, Marsden P. Unlocking digital competition. Report of the digital competition expert panel. 2019



SECTION B

The financial services value stack provides a central framework for developing business models and strategic choices in the platform economy. Below, we consider three examples of financial institutions that have strategised across the stack to develop new business positions.

/01
SERAI

/02
DISCOVERY INSURANCE

/03
STANDARD BANK

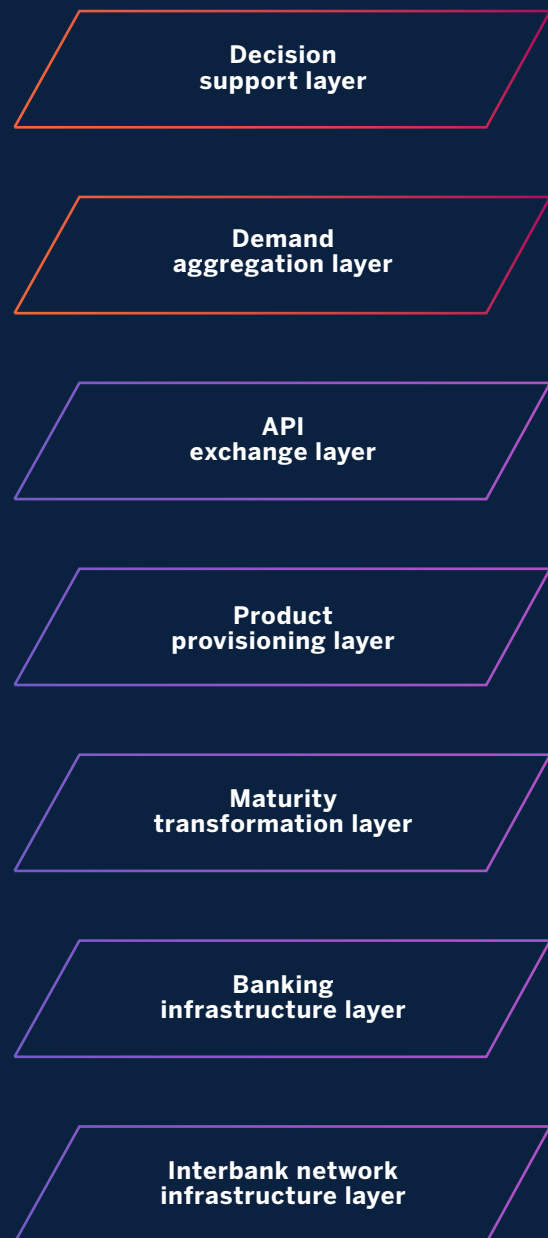
/01 SERAI

Serai, backed by HSBC, has created a platform to enable manufacturers, suppliers, buyers, retailers and brands across the apparel industry to conduct business in a trusted network.

The platform – a business-to-business social network of sorts – enables companies to showcase their areas of expertise, discover other businesses anywhere in the world, connect with them, and build trustworthy relationships. Serai also aggregates third-party services and tools, which allow businesses to manage sourcing and transactions.

Serai's partnership with Coats Digital, for example, provides capabilities for design, material selection, product creation, supplier and capacity management tools, and order tracking services. Similarly, the Res.Q application provides tools for quality management through real-time production floor data capture and analytics. Production quality inspection data across the entire factory floor is captured to categorise abnormalities and divert notifications towards specific teams, enabling decision support and resource mobilisation. Coface, a digital risk management service, enables businesses to access a range of credit risk management services at discounted rates. Serai also offers credit lines to members, without requiring traditional collateral.

Serai largely operates at the upper two layers of the stack – the demand aggregation and decision support layers. Its competitive advantage largely resides in these two layers. At the demand aggregation layer, Serai builds a trusted network of businesses across the apparel industry and provides them with tools to transact. At the decision support layer, Serai enables search and information services that inform business transactions.



As it evolves, Serai may plug into other platforms at the API exchange layer, and through that, gain access to products from third-party financial institutions at the product provisioning layer. However, its control over credit scoring and the associated data capturing provides it with a differentiated platform position in the value stack.

/02 **DISCOVERY INSURANCE**

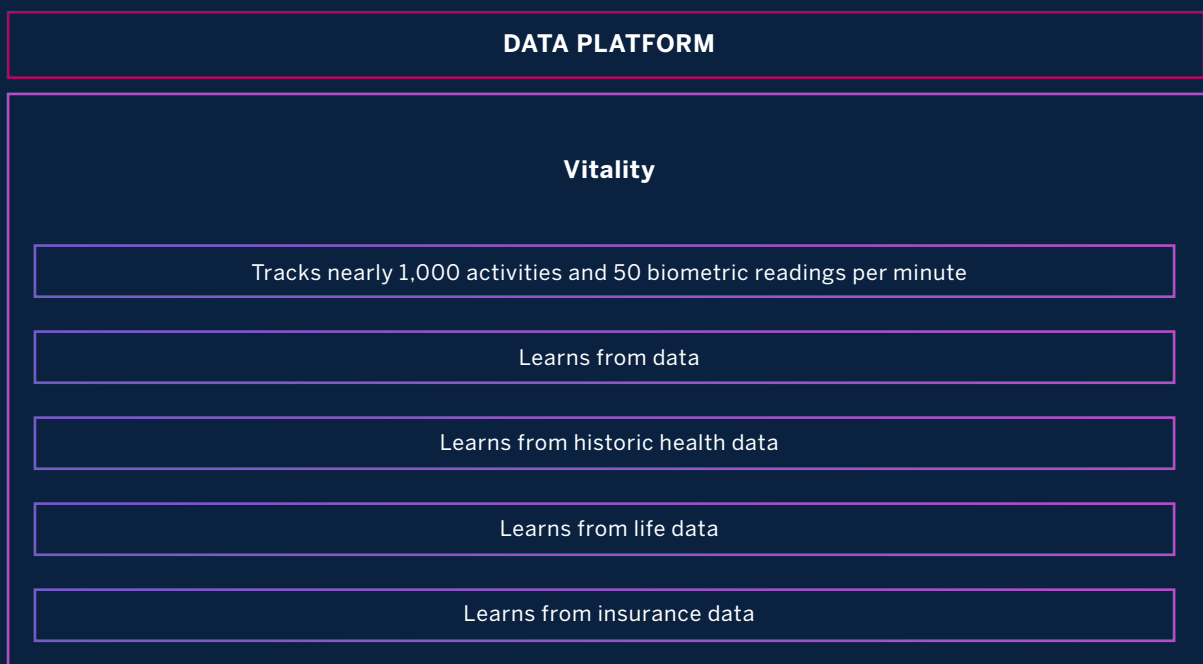


South African insurer, Discovery's Vitality platform, is essentially a health and wellness ecosystem. The platform allows users to track their health and engage in healthier habits to earn loyalty points. For instance, walking 10,000 steps a day¹¹ – measured by a connected wearable activity tracker – earns the user 100 points. Heart-rate monitor users who achieve more than 80% of their maximum heart rate for more than 30 minutes get 300 points. Users who meet their goals qualify for rewards, including gym subsidies and flight discounts across Discovery's partner network.

As users engage in healthier living, the insurer benefits not only from fewer claims but also from additional sources of revenue generated through ecosystem interactions. This revenue can be reinvested in the ecosystem to further create healthy habits – leading to a feedback loop where healthier users lead to higher profits, which in turn leads to further investment in incentivising healthy living.

Apple Watch is a key partner for Vitality Active Rewards. An insurance client receives an Apple Watch on a monthly repayment plan, with monthly instalments waived if the user is physically active. This incentive encourages users to exercise. The platform also sets personalised goals for users and creates reward schedules to continuously encourage them to be healthy.

Data captured by the Vitality platform can also help identify population health trends. For instance, in the US, Vitality's data revealed that people aged 65 who exercise four times per week have about the same level of COVID-19 mortality risk as people aged 45 who exercise just once per week.¹²



¹¹. <https://www.americanbanker.com/news/why-banks-are-rewarding-customers-for-exercising>

¹². <https://www.thinkadvisor.com/2021/02/21/john-hancock-has-not-so-secret-weapon-for-tracking-covid-19/>

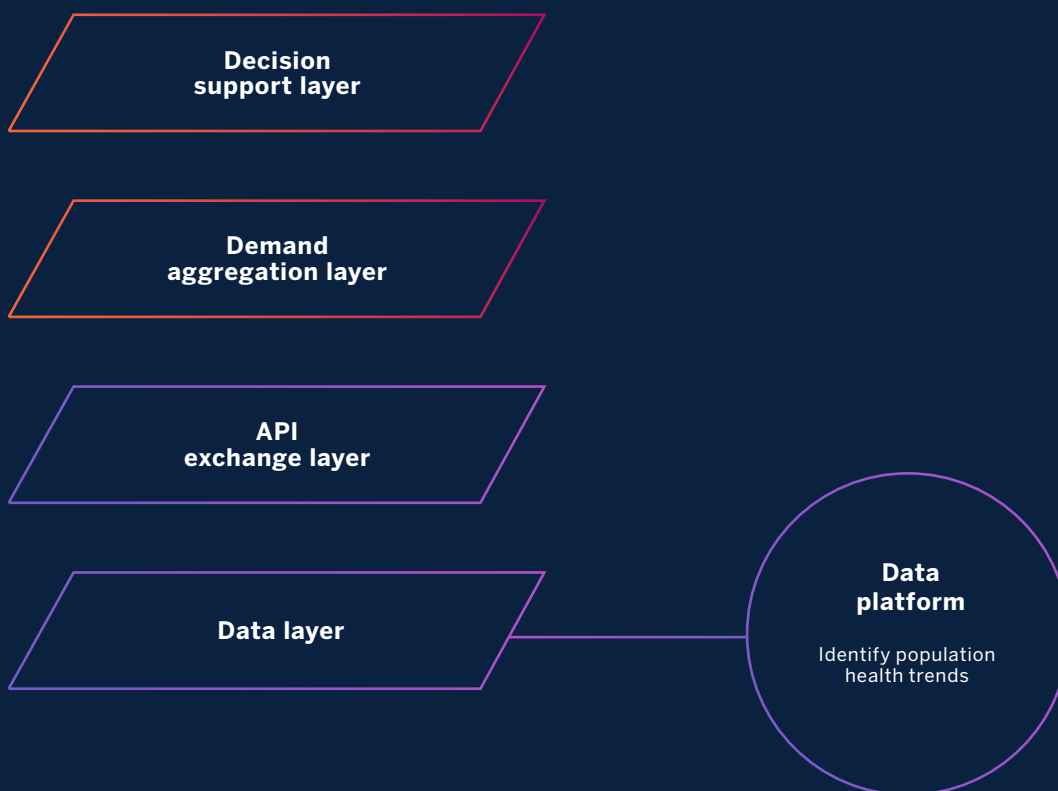


Vitality is fundamentally a data platform. It tracks nearly 1,000 activities and 50 biometric readings per minute and learns from this data, as well as historic health, life and insurance data. The platform operates at the infrastructure layer. This is illustrated with a modified version of the stack below – the platform operates at the purple layers and partners in the red layers.

At the demand aggregation layer, Discovery partners with other firms globally on a platform-as-a-service model. It partners with AIA in southeast Asia, Generali in Europe, John Hancock in the US, Manulife in Canada, and Ping An in China. To the extent that Vitality manages the data platform, it continues to retain the data advantages that enable it to power decision support, while partnering with other insurers at the demand aggregation layer.

The platform also partners with health and fitness applications at the demand aggregation layer. For instance, in December 2020, Vitality partnered with Strava, the fitness app and community, to extend the platform to Strava's 73 million athletes.

Overall, shifting the focus as an insurance player from cover to wellness can potentially lead to a change in client demographics. In the traditional insurance model, healthy users tend to leave and unhealthy ones tend to stay on as they need cover. But in this new model, healthy users may become increasingly engaged, thereby lowering the overall risk profile.



Vitality is fundamentally a data platform creating a health and wellness ecosystem. The platform allows users to track their health and engage in healthier habits to earn loyalty points.

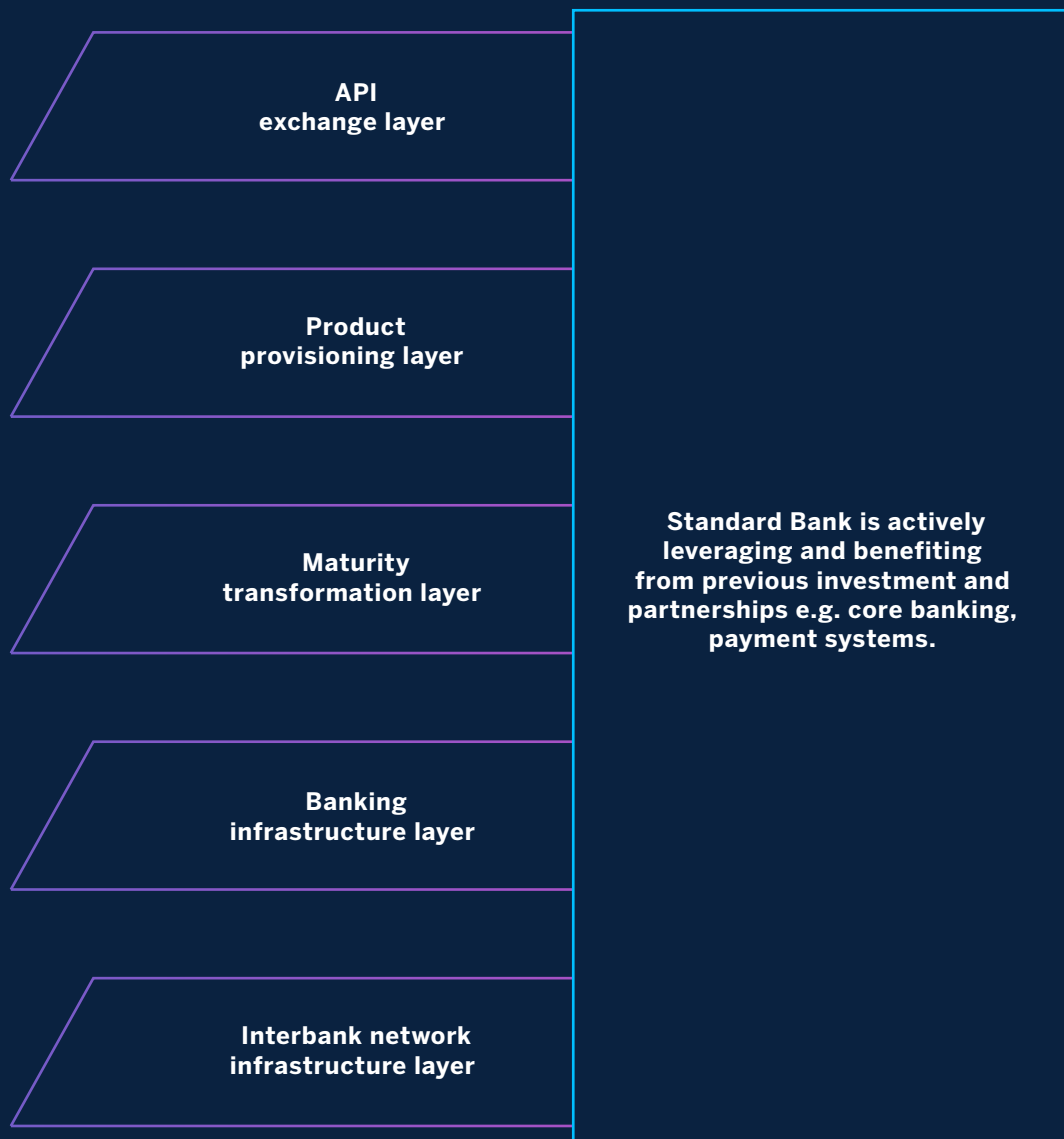
/03 STANDARD BANK



Standard Bank is actively migrating towards being a platform organisation as the bank leverages its regional presence alongside its existing and new solutions.

Standard Bank Group Chief Executive Sim Tshabalala explains that:

We don't want to be the shop, we want to be the mall. We want to provide both our own services and the services of our partners in the Standard Bank Group ecosystem.¹³



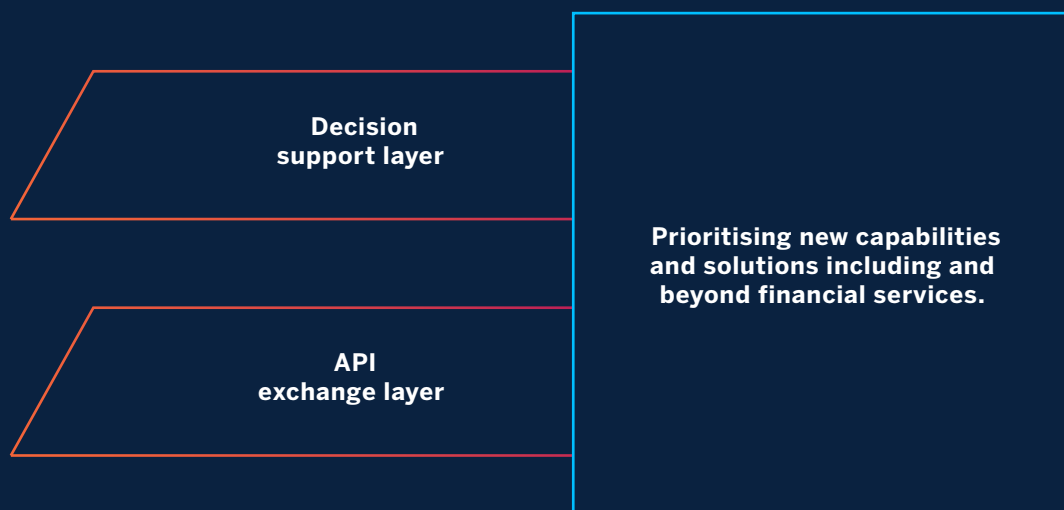
Standard Bank is actively migrating towards being a platform organisation as the bank leverages its regional presence alongside its existing and new solutions.

¹³ <https://www.standardbank.com/sbg/standard-bank-group/whats-happening/newsroom/standard-bank-group-collaborates-with-salesforce-towards-becoming-a-platform-business>



The Standard Bank Group is leveraging its core assets and client focus to look beyond financial services to solve for and better satisfy their clients' needs. There is a recognition that the opportunity to deliver value lies in utilising the Group's own capabilities and augmenting them through a network of partnerships.

The requirements from clients, that have been articulated or understood through usage, allow the bank to extend and enhance products and services. These capabilities are concentrated at the decision support and demand aggregation layers within the financial services value chain, whilst actively leveraging the previous investments across the foundational layers. An example of these foundational investments is reflected in the capacity built at the product provisioning layer through partnership with the likes of Salesforce.com, Microsoft and Amazon.



Standard Bank recognises that the opportunity to deliver value lies in utilising the Groups own capabilities and augmenting them through a network of partnerships.



Within its growing portfolio of platform businesses, OneHub and Unayo are two examples that operate at various levels of the Financial Services valuestack.

OneHub

Standard Bank's Wholesale Clients developed OneHub as a Business-to-Wholesale Clients business marketplace for digital services, both financial and non-financial. OneHub provides clients with a portfolio of services and tools, which can be consumed as building blocks, to streamline their own processes. This will enable clients to utilise capabilities that Standard Bank has used internally and is now making available to its corporate clients as well as those provided through partnerships with curated suppliers.

One of the solutions already on the platform is aimed at making the account-opening and onboarding process more efficient for businesses. This includes KYC capabilities.

Within the context of the financial services valuestack, OneHub drives decision support by providing a range of services to meet specific needs and by capturing future requirements. This encourages growth of the client and partner base within the aggregation layer and API exchange layer, further extending the reach of OneHub.

The platform has already been well received, in May 2021 Global Finance recognised OneHub as one of ten 'outstanding innovations in corporate finance' as part of its annual 'The Innovators' programme.¹⁴ As it grows, the OneHub ecosystem will give clients access to an expanding range of service providers and capabilities.

Corporates and Partners will also gain access to the OneDeveloper solution, which offers an API sandbox for the developer community, through this capability APIs can be discovered and securely accessed to build new solutions to complex business to business problems.

Unayo

Standard Bank believes that rural and emerging economies should no longer remain underbanked and unnoticed in a world of digitisation and online banking. As such, they have launched a global platform for all of Africa's people, designed to close the gap on financial inclusion and solve for the last mile. UNAYO or "You have it" combines the simplicity of mobile money with the sophistication of banking and uses technology to disrupt both ecosystems. It connects traders, small businesses, communities, entrepreneurs, buyers, sellers, me and you.

UNAYO gives everyone the power to move their money online. Customers can create a profile, sign up in minutes, and start banking in seconds on USSD or the app. The platform allows users to perform transactions like scan-to-pay, access funds in their bank account, send money and make payments across borders. Customers can also create payment vouchers, receive disbursements from donor organisations, do day-to-day banking, and utilise cash-ins and cash-outs. This functionality allows them and their business to transact anywhere; securely, swiftly, and simply from their phone.

UNAYO's roadmap includes savings products, revolving loans and forex, all of which will be designed with the customer front of mind and ensures that the platform remains relevant and provides customers with the best features. This initiative is underpinned by the trust and reputation that Standard Bank has developed, nurtured and enhanced over the years. This solution further enhances the decision support layer of the stack and supports the bank's strategy to transition into a platform organisation.

¹⁴ <https://www.gfmag.com/media/press-releases/press-release-global-finance-names-innovators-2021-and-outstanding-innovations-finance>



SECTION C

/01

**STRATEGY DEVELOPMENT
FOR THE PLATFORM ECONOMY**

/02

**STRATEGIC CHOICES FOR FINANCIAL
INSTITUTIONS IN THE PLATFORM ECONOMY**

/01

STRATEGY DEVELOPMENT FOR THE PLATFORM ECONOMY



The stack provides a central framework for strategy development in the platform economy. As we note with the examples above, financial services organisations may take up different positions across the stack to configure their business models.

Financial services firms will have to engage in strategy development in a three-step framework:

First, they will need to selectively determine which positions in the value stack they will continue to play in, and which businesses they divest.

Second, having chosen positions across the stack, they will need to reinforce these positions by developing business models that integrate multiple positions.

Finally, firms will need to develop a mechanism to monitor competitors, especially indirect competitors who move into their positions from another layer of the stack.

1. CHOOSING POSITIONS ACROSS THE STACK

To develop competitive advantages in the platform economy, financial institutions cannot rely on traditional vertical integration. Instead, they will need to strategise across the stack.

Financial services groups that merely follow the herd into open banking, without making strategic choices across the stack, will lose relevance as their products become commoditised.

Those that do not migrate from serving secondary demand to serving primary demand will face growing challenges in the consumption ecosystem as non-banking players wrest consumer engagement away from traditional players.

Banks will most likely continue to play a strong role in the maturity transformation layer and will continue to serve products at the product provisioning layer.

However, these plays are unlikely to create competitive advantages in the platform economy as most banks become relegated to the position of commoditised producers in other platforms' ecosystems.

In order to compete effectively, financial services firms will have to play at one or more of the three platform positions mentioned above. Alternatively, financial institutions with strong technology capabilities could provision these through other financial and non-financial ecosystems.



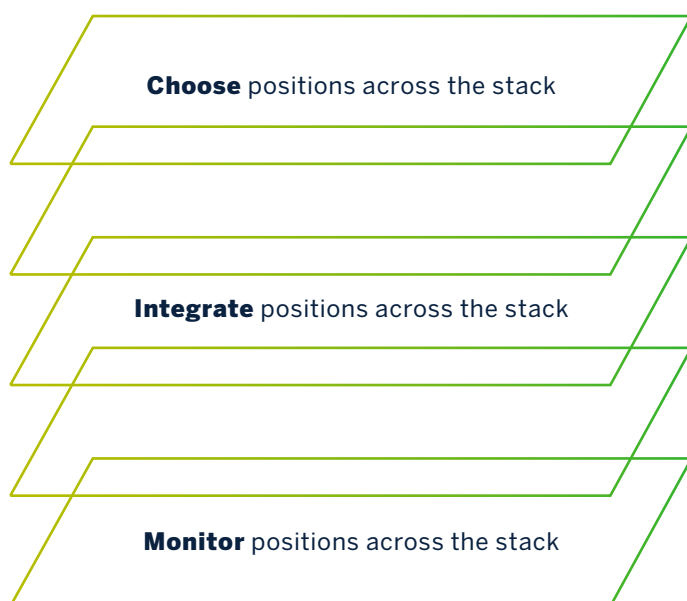
2. INTEGRATING POSITIONS ACROSS THE STACK

Financial services organisations will need to strategise separately for each layer, but will also have to think across the stack to integrate their advantages across multiple layers. For instance, firms that operate at the demand aggregation layer as well as the API exchange layer will compete more effectively at the API exchange layer, because of their access to proprietary data and services.

Similarly, financial institutions that operate at the decision support layer and develop access to unique consumption data can use that data to better inform credit scoring in the production ecosystem. This, in turn, improves their ability to provide decision support in the consumption ecosystem, thereby creating mutual reinforcement across the positions.

3. MONITORING MOVEMENTS ACROSS THE STACK

Possibly the most interesting component of ecosystem competition is when a company operating in one layer of the value stack, develops the capabilities to move into new layers. Consider, for instance, a payments provider such as Stripe moving into identity management for merchants, and eventually into providing business setup services to those merchants. As another example, Ant Financial started with Alipay at the demand aggregation layer and subsequently moved into the banking infrastructure layer with Caifu hao. Dominant players rarely operate at a single position on the stack. Instead, they migrate to new positions, and by integrating across these positions, they are better able to compete against players that specialise at a particular layer of the stack. Hence, **financial services groups should proactively monitor for companies making movements across the stack.**



Financial services firms will have to engage in strategy development in a three-step framework.

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STRATEGIC CHOICES FOR FINANCIAL INSTITUTIONS IN THE PLATFORM ECONOMY



In the platform economy, incumbent firms that run product-based business models will need to understand the shift in industry economics and craft responses accordingly. These firms will need to employ a combination of offensive and defensive strategies to take up new positions on the value stack, while defending existing ones. Sometimes, firms may proactively commoditise their existing positions before other platforms do so.

We note four common types of strategies pursued by firms in the platform economy.

First, a firm may transform into a platform business itself. Not all incumbents will do this successfully, but the few that do will unlock new revenue streams that would not have been accessible via traditional business models.

Second, some firms may engage in collective action in partnership with other incumbent firms.

Third, firms may develop new capabilities which may then be licensed as a service across ecosystems.

And finally, firms may continue to scale as product providers.

Most firms will need to employ a combination of these strategies to effectively compete.

TRANSFORMING INTO A PLATFORM BUSINESS

Incumbent firms may pursue platform positions in various layers of the stack. For instance, Italian bank Banca Sella Spa's Fabrick platform operates at the API exchange layer of the stack.

It aggregates, integrates and coordinates a range of APIs and services developed by ecosystem players. Solutions available on Fabrick range from PSD2 compliance solutions to sophisticated online payments, electronic invoicing, supply chain financing, and online equity crowdfunding support solutions.

Further up the stack, in the demand aggregation and decision support layers,

South African insurer Discovery has created a health and wellness ecosystem around its Vitality platform, where users track their health and engage in healthier habits to earn loyalty points.

These points are redeemable across a third-party network that includes the likes of British Airways, Emirates, and Europcar.

With healthier habits, Discovery benefits from fewer claims and from additional sources of revenue generated through the ecosystem. Healthier users lead to higher profits for the insurer, which in turn leads to further investment in the ecosystem. The platform tracks nearly 1,000 activities and 50 biometric readings per minute and learns from this data as well as historic health, life and insurance data.



ENGAGING IN COLLECTIVE ACTION IN PARTNERSHIP WITH OTHER INCUMBENT FIRMS

Collective action by incumbents may be an effective strategy to dominate a layer of the stack when no single firm is in a position to do so. Collective action may also level the playing field if these firms agree on commoditising a certain layer of the stack. As platforms build scale through network effects, non-platform firms lose bargaining power. However, joint coordinated action by such firms can enable responses at scale.

Collective action may take many forms. For instance, new distributed ledger technologies enable coordination on data sharing and aggregation, whereby multiple incumbent banks pool their data resources to coordinate better without requiring central platforms.

Collective action may also see financial institutions working together to create a shared service. In Sweden, payments service Swish was launched by the top six banks in the country, in cooperation with the central bank. Swish is now used by over 70% of the country's population. By coordinating at a common layer, incumbents prevent new platforms from being established in that layer and shift competition to other layers of the stack.

Collective action may also involve public-private partnerships. The India Stack provides underlying public digital infrastructure comprised of a biometric identity management system and e-KYC and e-documentation services.

It also includes an instant payments system that enables API-based peer-to-peer money transfers, whereby banks collectively integrate their APIs to enable inter-bank transfers. The India Stack enables smooth transfers between bank accounts as well as payment wallets, through universal payments interface (UPI).

Sometimes, incumbents may create common datasets that they would otherwise not have had access to individually. This can commoditise platforms' data advantages if such datasets become open-source projects. For instance, Mozilla's Common Voice project aggregates global voice data training sets to counter Amazon and Google's control over speech recognition data.

DEVELOPING CAPABILITIES THAT OTHER PLATFORMS NEED

Firms that do not build platforms themselves could build capabilities that will play a critical role in other platforms' ecosystems. Financial services firms that have developed sophisticated KYC capabilities could consider offering these capabilities in third-party non-financial ecosystems. In Africa, where the population remains largely unbanked, an identity management system could create a strong position across ecosystems.

Credit scoring is another data-driven capability that could be extended across multiple platforms, and firms with access to unique data flows and scoring mechanisms will be best placed to develop and offer this capability.



DEFEND EXISTING VALUE CHAIN POSITIONS

Finally, financial institutions could defend their existing value chain positions as producers. Most firms that continue to build products and services will have to work with other platforms to expand the distribution of their products and services. These 'producer' companies can build a position of strength if they differentiate themselves and are able to gain reputation and influence in the platform's ecosystem.

While partnering with platforms, traditional financial institutions may gain access to new clients. Insurance firm CIC partnered with M-Pesa to launch micro-insurance products, whereby the insurer can accept payments and manage claims payouts using the user's M-Pesa balance.

Financial services firms may also partner with platforms to improve their balance sheet management. In the US, financial institution Union Club partnered with peer-to-peer lending platform Lending Club to buy personal loans through the platform and co-create credit products. This allows Union Bank to serve high-risk customers while also benefiting from higher interest.

Other firms may participate on platforms as innovation partners, consuming data flows from other platforms through API integration, and creating new value in the form of analytics, decision support systems, or a new user experience, using this data.

Incumbent financial institutions will need to employ a combination of these strategies in the platform economy. Timing these strategies well is important. Collective action, for instance, needs to be coordinated before any single firm develops powerful network effects. By coordinating on Swish, banks in Sweden were well positioned to engage with Apple Pay when it entered the country, whereas banks in other countries did not have that benefit.

Hence, sensing platform movements early is important in crafting the most appropriate responses.

CONCLUSION



There can be no doubt that the platform economy is here and changing the rules of the game. It is increasingly shaping how financial products are distributed, how customers are served, and how underlying financial infrastructure is scaled.

The platform economy's rise is being powered by a shift in industry economics, in market behaviours, and in infrastructural technologies. It has gained further relevance amid the COVID-19 pandemic which has fuelled the growth of platform organisations as people and businesses prepare for a more digital future.

In pursuit of new revenue streams, existing incumbent organisations are increasingly participating in business ecosystems. These ecosystems are built around a customer need and companies coordinating their activities to collectively deliver a compelling customer value proposition. These ecosystems provide a scalable coordination mechanism to efficiently manage and orchestrate activities.

Digitisation is driving the convergence of industries across the globe resulting in traditional financial services groups contending with a range of new competitors. The implications could be dire for financial services organisations that are unwilling to adapt their strategies in these changing times. As platforms reach scale, it is difficult for businesses that rely on traditional value chains to match the growth of a platform business. Conversely, opportunities are vast for those willing to embrace this new world.

Digitisation and changes in societal habits have made products more commoditised and easily available. The new competitive advantages are built around great personalised client experiences and affinity towards a common purpose. Clients will continually expect greater levels of personalisation and it is important for organisations to understand that those demands cannot always be delivered

through internal capabilities. Therefore, organisations need to evaluate the capabilities that are critical for growth and consolidate their focus areas around these capabilities.

As the financial services industry is unbundled, and as value is directed towards new business models, the vertically integrated value chain of the industry is being transformed into a layered financial services value stack. To succeed in this new world, financial services providers need to understand the dynamics of the platform business and choose their position within the value stack.

In this paper, we have explored four common types of strategies pursued by financial services firms in the platform economy:

- 1. Transform into a platform business to unlock new growth opportunities.**
- 2. Partner with other incumbent firms to collectively meet the needs of clients.**
- 3. Develop capabilities that other platforms need that can be licensed as a service across ecosystems.**
- 4. Defend an existing value chain position and continue to build scale as a product provider.**

Most financial services organisations will need to adopt a combination of these strategies to effectively compete in this new world.

To take advantage of the platform economy, financial services organisations will need to embrace partnerships and build the skills and capability to manage diverse networks. Organisations will then need to invest to gain a competitive advantage. Knowledge, capability and skills are still being developed in this space, especially in Africa. Therefore, organisations must actively invest in developing partnerships to leverage the requisite skills to take advantage of the opportunities offered.

BIOGRAPHIES



KENT MARAIS



Group Head of Digital Channels, Wholesale Digital, Standard Bank Group

Kent has a wealth of experience in the financial services industry, with over 20 years' experience in short-term insurance and banking. He has been with Standard Bank Wholesale Clients division for close to 10 years, having joined in 2011 as Head of Product Management in Transactional Products and Services. He is currently Executive Head of Digital Channels for Standard Bank Group's Wholesale Clients unit.

Kent holds a Bachelor of Commerce Honours degree in Business Economics (Risk and Insurance Management) as well as a Master of Business Administration (MBA) from the University of the Witwatersrand. He has also completed an Advanced Management and Leadership Programme at University of Oxford's Saïd Business School.

Kent started his banking career as Business Unit Manager at Nedbank in 2000 and worked in a variety of operational and leadership roles before being appointed as Group Head of Digital Channels for Wholesale Clients in 2018.

Kent is well versed in leading business units, managing large business-improvement projects, product management, channel management, driving strategy, digitisation, planning, performance and profitability.



JONATHAN LAMB



Executive: Platform Business Lead, Wholesale Digital, Standard Bank Group

Jonathan has more than 16 years of regional and global expertise in banking. He has been part of Standard Bank Group's Wholesale Clients division for more than 13 years, having joined as Lead Analyst for Payments in Information Technology. Covering a variety of roles since then, he is currently Executive Head of Platform Business for Standard Bank Wholesale Clients.

Jonathan holds a Bachelor of Science honours degree in Information Systems & Computer Science from Rhodes University. He has also received several professional certifications, and most recently, he completed the Senior Executive Programme Africa at Harvard Business School.

Jonathan started his banking career in the UK in 2005 and has worked in various roles across information technology, product enablement and channel management before being appointed as the Platform Business Lead for Wholesale Clients Digital in 2018.

Jonathan has extensive executive-level expertise in digital channel & product strategy formulation and in execution across multiple African markets and customer segments. He also has broad practical experience in platform business models in Africa and is regarded as a subject-matter expert in this space. He has a passion for using digital strategy with practical delivery to drive client experiences and has had significant customer-facing experience in the corporate and investment banking domain.



SANGEET PAUL CHOUDARY



Global Advisor: Platform Economies and Network Effects

Sangeet Paul Choudary is the founder of Platformation Labs and the best-selling author of Platform Revolution and Platform Scale. He has advised the leadership of more than 35 of the Fortune 500 firms and has been selected as a Young Global Leader by the World Economic Forum.

Sangeet's work on platforms has been selected by Harvard Business Review as one of the top 10 ideas in strategy, alongside Michael Porter, Clayton Christensen and others, and is one of the rare articles to have been featured thrice in the HBR Top 10 Must Reads compilations.

Sangeet is a member of the WEF's Global Future Council, an Entrepreneur-in-Residence at INSEAD Business School, the co-chair of the MIT Platform Strategy Summit, and the youngest ever recipient of the IIMB Distinguished Alumnus Award.

Sangeet holds several key positions across the financial services industry. He is appointed to the ING Group's Global Innovation Council and serves on the board of the ASEAN Financial Innovation Network. He is a frequent keynote speaker at leading global forums including the G20 Summit, the World50 Summit, the United Nations, and the World Economic Forum.

Sangeet also chairs the Platform Institute, which runs platform strategy and transformation programs for banks around the world. He was also appointed the content director of Santander Group's leadership academy and was responsible for designing and chairing the transformation program – Leading in the Digital Age – for their top 1000 global leaders.

For more information on Sangeet's work, visit www.platformthinkinglabs.com and platform.institute.



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