



# Overview and Lessons Learnt from Global FinTech Landscape and Nigerian FinTech Landscape

EFInA FinTech Report

December 2018

# Executive Summary



Over **\$100B<sup>1</sup>** has been invested in FinTechs globally. ~50% of this was in Digital Banking which is 1 of **4 key FinTech segments**. They all leverage 4 key emerging technologies: **API<sup>2</sup>, AI<sup>3</sup>, DLT<sup>4</sup> & Biometrics**



4 key success factors for international Fintech companies are: product **innovation**, strategic **partnerships**, **physical:digital** mix & **lower barriers** to service



Nigerian FinTech ecosystem comprises of **210-250 FinTechs**, 3 stakeholders, 4 enablers and funding partners who have invested over **\$250m** since 2014. Most FinTechs leverage **API<sup>2</sup>** technology



**Trends:** increasing lending & savings players, bank partnerships, telco competition & more innovation.  
**Gaps:** funding, regulation, information, strategic partnerships & corporate governance



4 ways identified to improve FI<sup>1</sup> through the FinTech space: more involvement from **banks**, increasing **micro-credit** access, enacting **effective regulation** and more **innovative yet simple** solutions

# Agenda

**Overview and Lessons Learnt from Global FinTech Landscape**

Nigerian FinTech Landscape



Fintech space has funding of over \$100b. Funding in 2015 rose due to lending segment, however in 2016 there was a dip as investors were cautious. The market has since recovered in 2018 due to investments in Payments segment



The global Fintech space broadly falls under 4 Key Segments and 9 Key clusters  
The Largest Cluster and segment by investment is Digital Retail Payments, and Digital Banking respectively



The 4 Key emerging technologies identified as: Application Programming Interface (API), Artificial Intelligence (AI), Distributed Ledger technology, & Biometrics



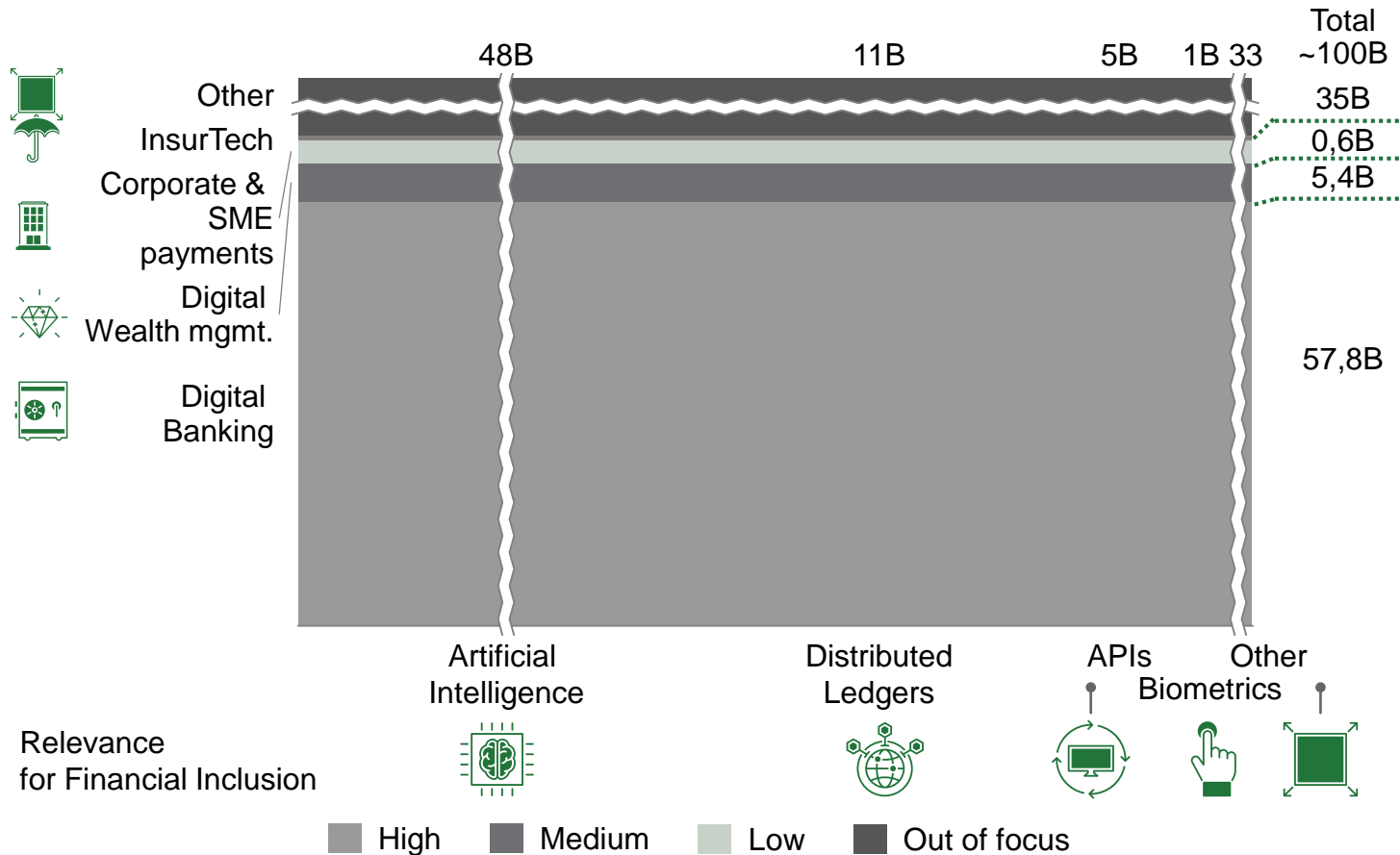
The 4 key success factors for international Fintech companies are: Product Innovation, Strategic partnerships, Physical:Digital Mix & Lower barriers to service



## Key takeaways

# Fintech market funding of ~\$100B is largely centered around Digital banking leveraging four key technologies

## FinTech market segments



## Comments

- Largest market theme is Digital Banking
- Most important technological segment is Artificial Intelligence
- Most relevant segments for financial inclusion are in market segment Digital Banking and technological segments Distributed Ledgers, APIs and Biometrics

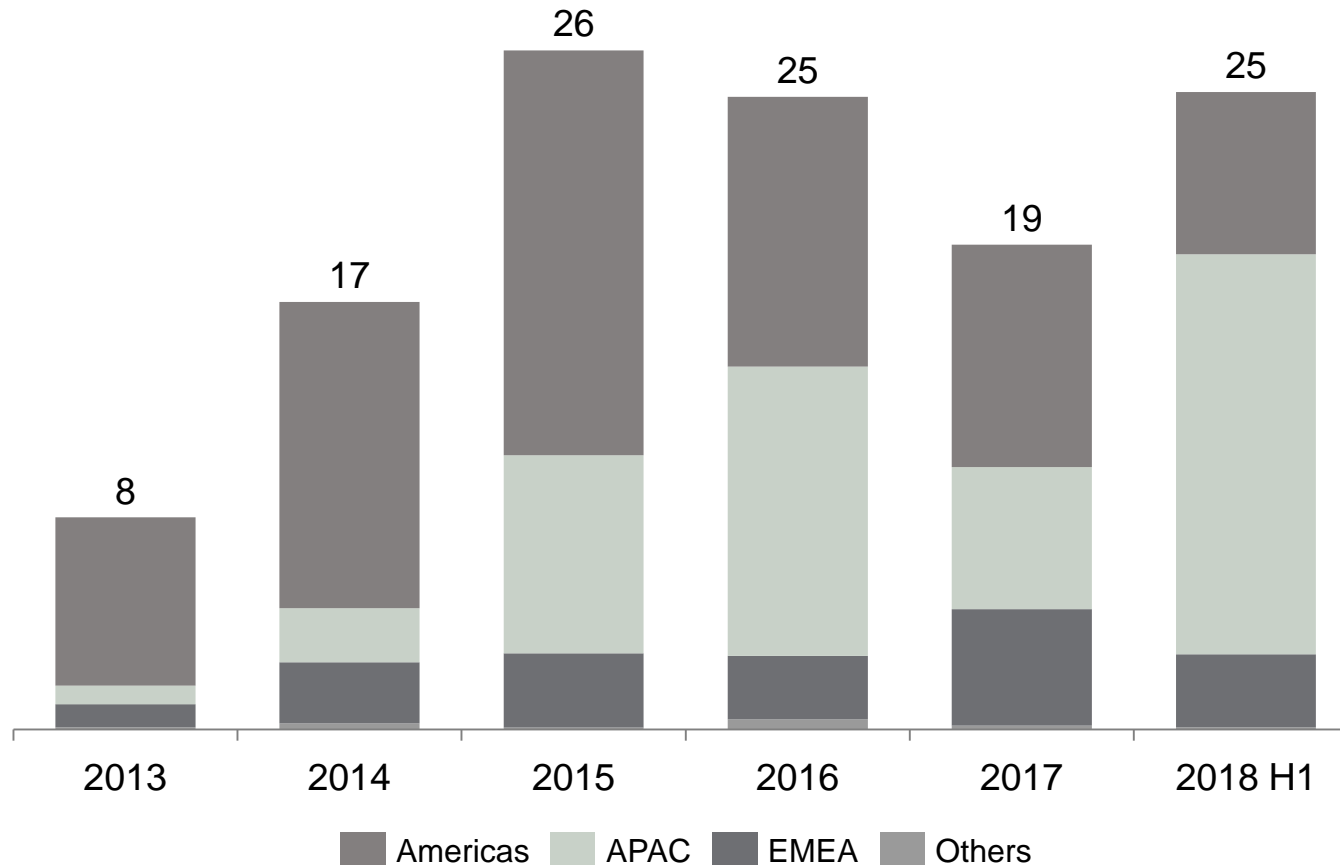
Note: Scale only indicative showing relations. Numbers represent cumulative funding/ICO funding, Other includes segments such as Technology, Support, Wholesale Trading

Source: BCG FinTech Control Tower


























# Global FinTech investments in the half year of 2018 rebound from a 3-years decline

## Total FinTech Funding, \$B (2013-2018)



- Big boom in funding in 2015 due to investments in lending segment
- Markets became more cautious and investors questioned room for additional players leading to dip in 2017
- However the market has picked up in 2018 due to funding in Payments segment in APAC giants such as Ant Financial

# There are 9 key clusters in FinTech market segments...

Segment	Cluster	Cumulative Equity Funding <sup>1</sup>	2017–2018 H1 CAGR <sup>2</sup>	Relevant Technology	Key Drivers	Key Players
Digital Banking 	1 Digital retail payments	\$30B	81%	DLT	New payments categories such as P2P, mobile wallets, cashless society	 蚂蚁金服 paytm 
	2 Payments infrastructure	\$2.1B	31%	DLT	Use of cryptocurrencies to enable next gen. P2P and B2C payments	 coinbase  Ledger  kyber.network
	3 Lending	\$25.7B	-53%	DLT	Leveraging digital connectivity and analysis to offer alternative options for credit	 用钱宝 Nav 
Corporate and SME Payments 	4 SME payments	\$0.9B	24%	API/DLT	Tech-enabled solutions for underserved market	 Bill.com  EBANX veem
	5 Corporate payments	\$2.2B	25%	DLT	Digitization of manual processes, cost and operational efficiency	 TRADESHIFT  highradius kyriba
InsurTech 	6 Life and personal insurance	\$0.4B	269%	AI/DLT	Digitization of manual processes	 GRYPHON  Singapore Life policygenius
	7 Claims and benefit handling	\$0.2B	30%	AI/DLT	Digitization of manual processes	 decisely  snapshot
Digital Wealth Mgmt. 	8 Digital investment mgmt.	\$3.4B	36%	API	Generational wealth transfer to tech-enabled clients	 eToro  ADDEPAR wealthfront
	9 Retail trading platforms	£2.0B	33%	API	Democratization of capital markets and trading activities	 robinhood  富途证券 Swell

1. Cumulative equity funding 2000–2018 H1 does not include M&A and IPO funding 2. CAGR displayed is Compound Annual Growth Rate for 2017–2018 H1  
Source: BCG FinTech Control Tower

## ... with 4 main technologies (DLT, AI, APIs and Biometrics)

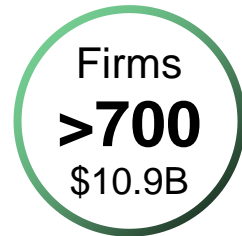
Number of firms/  
Cumulative equity  
and funding,  
2000-2ICO1 018  
H1

Top use cases

Example FinTechs  
leveraging the tech



Distributed  
ledgers



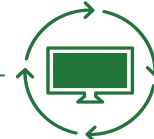
- Digital retail payments
- Investment
- Trading infrastructure



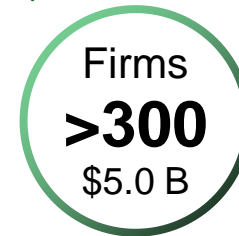
Artificial  
intelligence



- Personalization
- Credit scoring
- Risk assessment
- Fraud detection



APIs



- Financial marketplaces and aggregation
- Banking platforms
- Trading infrastructure



Biometrics

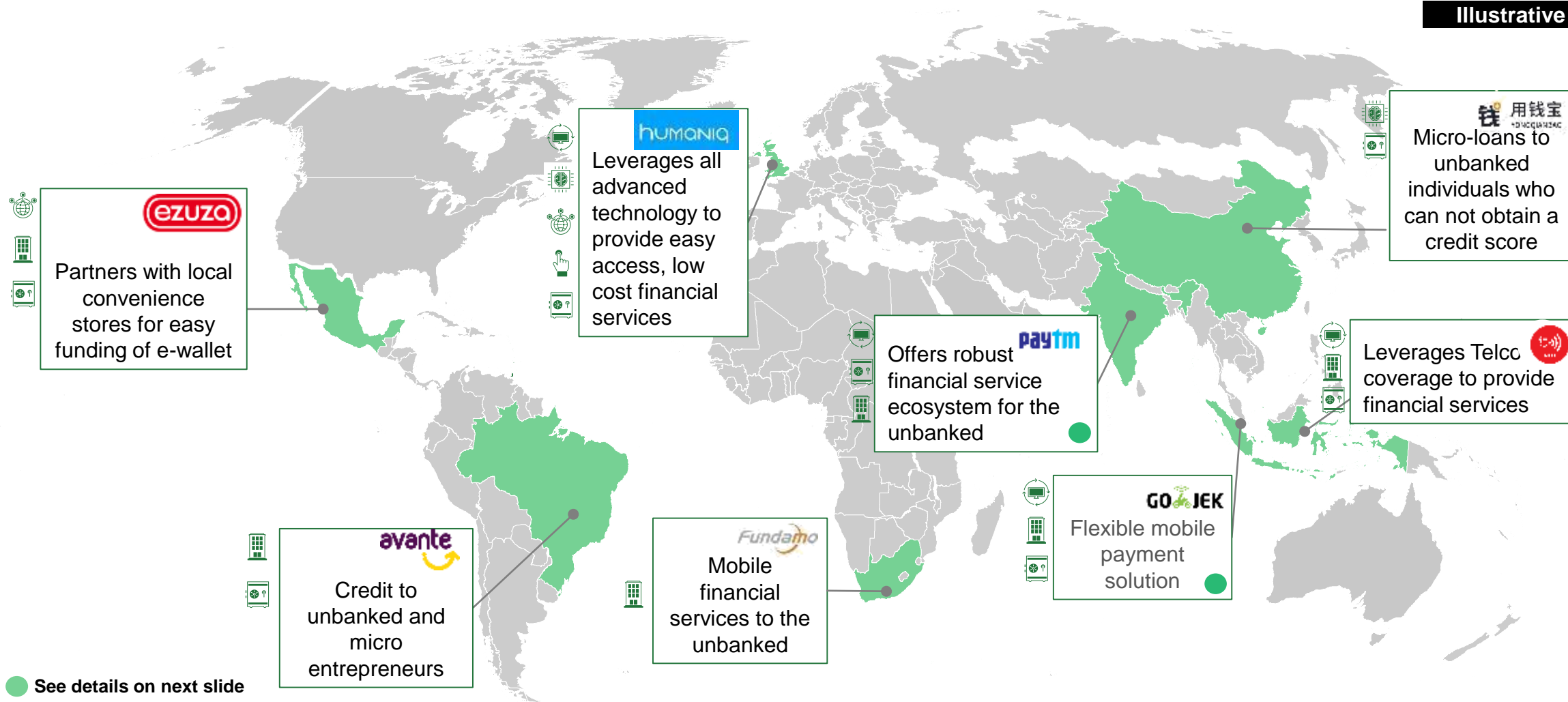


- Authentication
- Identity
- Security



# Global case studies reveal distinct key success factors tailored to local context

Illustrative



Technologies



Biometrics

Themes



Corporate & SME Payments



Digital Banking

# Four key success factors identified throughout all case studies



## Leverage Strategic Partnerships

- Key Distributor Partners
- Client Access Partners
- Funding Partners



## Product/Technology Innovation

- Risk Management ability



## Physical: Digital Mix



## Lower Barriers To Service

- User Interface

# Agenda

Overview and Lessons Learnt from Global FinTech Landscape

**Nigerian FinTech Landscape**

# Key Messages



- The FinTech ecosystem comprises of FinTechs, three stakeholders, four enablers and funding partners. Between 2014 and 2018, equity & grant financing by funding partners grew by 53% to \$87M



- 80% of the FinTech market is made up of Digital Retail Payment (36%), Lending (25%) and Payment Infrastructure (19%) firms.
- API is the dominant technology in the market



- Current market trends include: increases in lending and savings players, partnerships with banks, competition from Telcos, and improving technological innovation

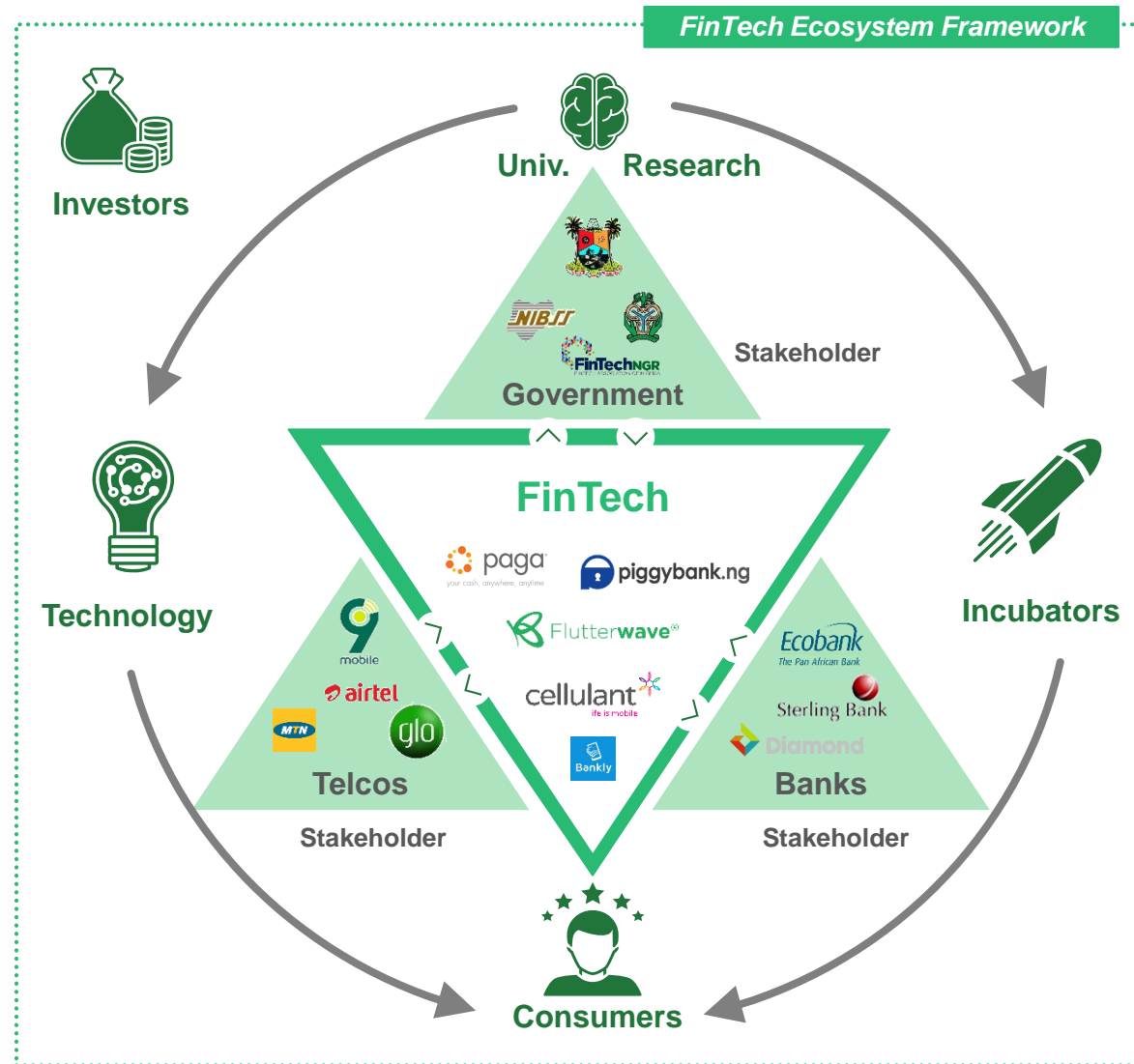


- Key gaps exist in: access to funding, appropriate regulation, adequate information, establishing strategic partnerships, corporate governance limitations and intellectual property rights



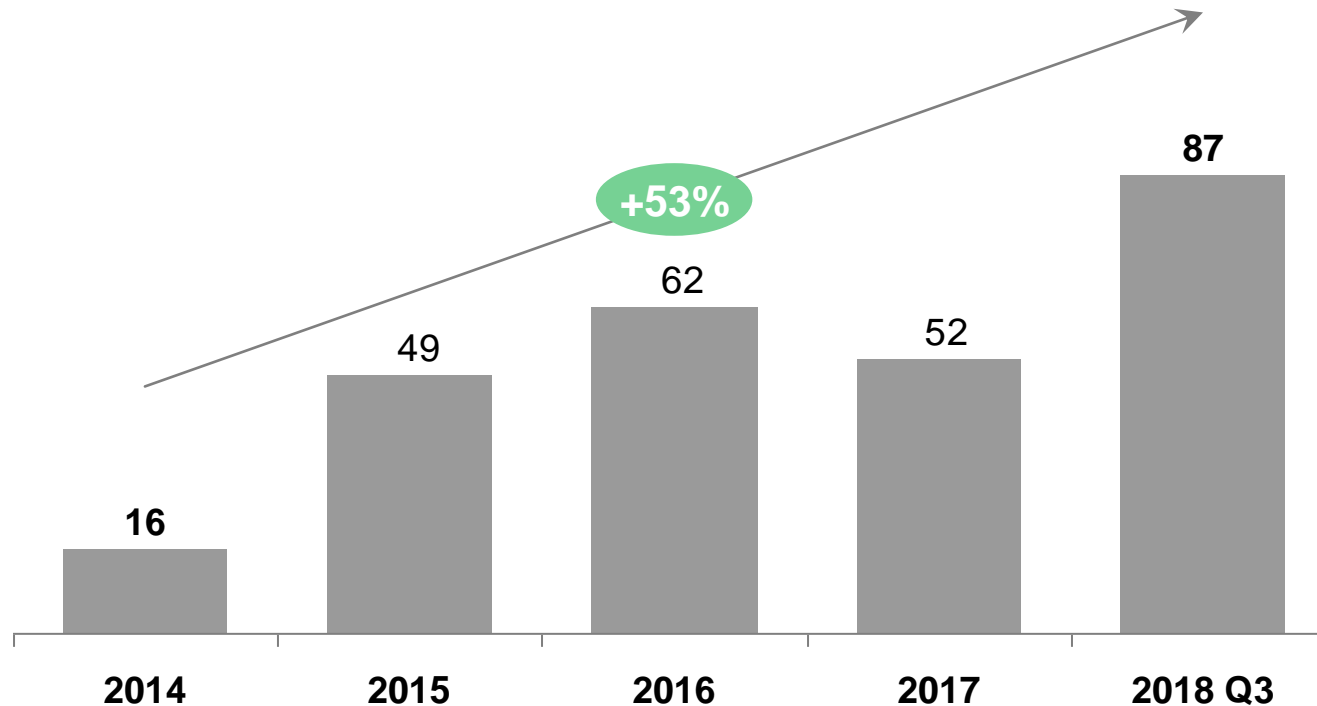
- 4 ways identified to improve FI1 through the FinTech space: More involvement from banks, increasing micro-credit access, enacting effective regulation and more innovative yet simple solutions

# In order to serve the consumer, Nigerian FinTech ecosystem is shaped by: three stakeholders, three enablers and funders



# Cumulative FinTech funding has surpassed \$250m in Nigeria over the last 5 years

## Total Fintech investments in Nigeria, USDm














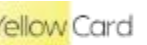
















## Key drivers of growth

- Financial Inclusion drive with the financial inclusion target set by CBN of 80% by 2020
- Increasing smartphone penetration, with smartphone penetration rate of 20%<sup>1</sup>
- Surge in e-commerce activity in Nigeria
- Government intervention establishing innovation hubs across Nigeria
- Regulatory impact from the introduction of the Payment Services initiative



# Cellulant absorbed ~20% of total funding in Nigeria in 2018, while API is the dominant technology among top 8 funded FinTech firms

	Top 8 funded firms	Cluster	Cumulative eq. funding <sup>1</sup>	Investor	Technology	Value Proposition	Competitors
1		Payment Infrastructure	\$47.5M	Rise Fund, Endeavour	API	Digitizes payments for banked and underbanked	  
2		Lending	\$13.0M	Singularity investments	AI	Develops credit rating system for financial institutions	 
3		Digital Retail Payments	\$10.0M	Global Innovation Fund	API	Delivers innovative and universal access to financial services	  
4		Payment Infrastructure	\$8.0M	Stripe	API	Provides online payment facilities to merchants via APIs	  
5		Lending	\$6.9M	Omyidar network	AI	Enables SMEs through provision of working capital loans	  
6		Saving	\$1.1M	Leadpath Nigeria	API	Combines discipline and flexibility for individuals to grow savings	 
7		Insurtech	\$0.2M	Conneticut's Global VC	API	Provides core part of insurance value chain on one platform	 
8		Lending	\$0.1M	MEST	API	Supports SMEs gain access to working capital loans in order	 

Q3 2018 cumulative equity funding  
Source: Techpoint ng, BCG analysis

 Applied for payment service bank license

## 2 types of funding are leveraged by Nigerian FinTechs

### Funding by equity

Dominated by international investors

Invest large sums of money (~\$86.7m in 2018<sup>1</sup>)

Target investments at few early traction and growth stage FinTechs



### Funding by grant

Dominated by local investors and state governments

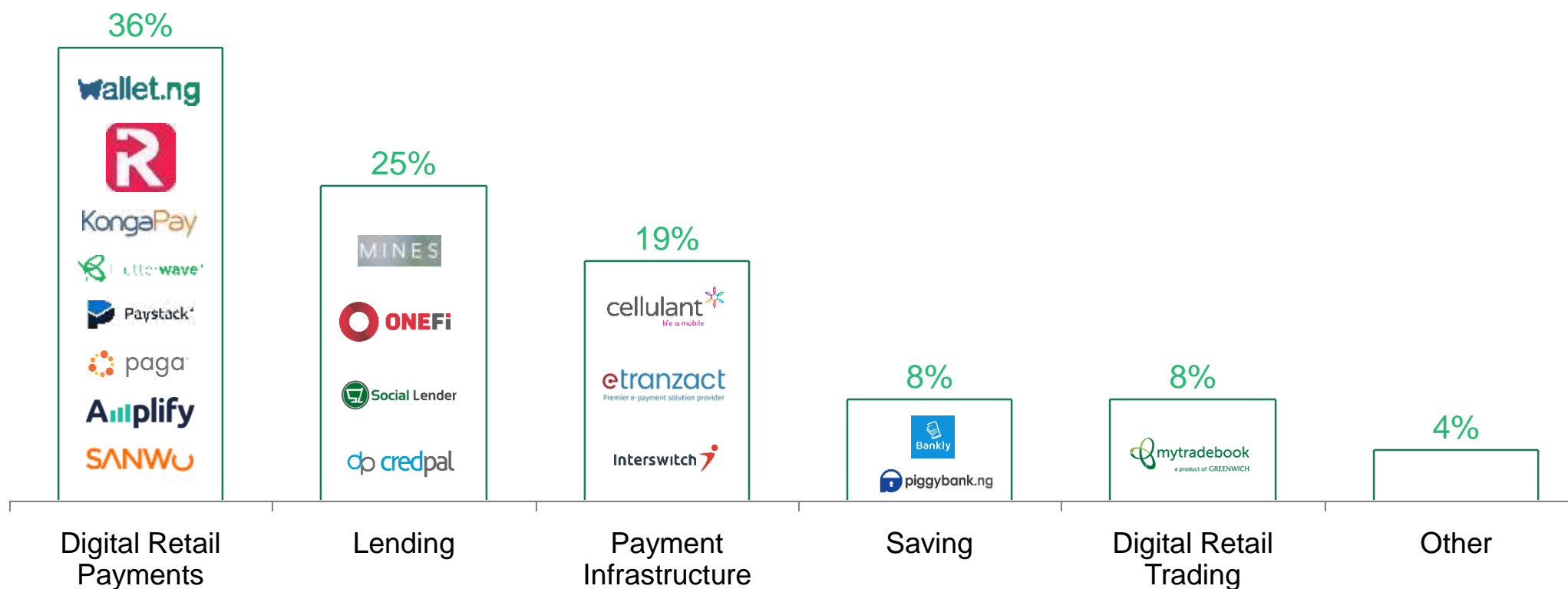
Invest small sums of money (~\$0.2m in 2018<sup>1</sup>)

Target investments at proof of concept and early traction FinTechs

# Nigeria is currently home to 210-250 FinTech companies. ~60% address payments and lending clusters

Illustrative company names

## FinTechs by cluster in Nigeria



1. Other includes Insurtech, Corporate & SME

Note: See list of 206 identified companies in appendix

Source: BCG Analysis

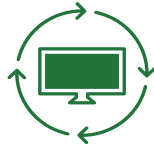
# API is dominant tech. followed by AI, DLT & Biometrics in terms of funding and number of FinTechs in Nigeria

Based on RFP9 applications

Number of firms/  
Cumulative equity  
and funding  
(Based on  
applicant funding)

Example FinTechs  
leveraging the  
tech

Top use cases

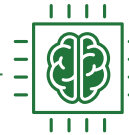


APIs

Firms  
~98  
\$56M



- Aggregation of financial functionalities
- Banking platforms
- Trading infrastructure



Artificial  
intelligence

Firms  
~38  
\$28M



- Personalization
- Credit scoring
- Risk assessment



Distributed  
ledgers

Firms  
~26  
\$25M



- Digital retail payments
- Investment
- Trading infrastructure







































Biometrics

Firms  
~21  
\$18M



- Authentication
- Identity
- Security

# Three types of accelerators play significant role in Nigerian FinTech ecosystem growing startups via strategic partners

	Focus	Alumni FinTechs		Strategic partners
<b>1</b> <b>Independent accelerator, e.g.</b> 	Payments, Lending, Cryptocurrency, Payment infrastructure, Trading	   	  	      
<b>2</b> <b>Corporate accelerator, e.g.</b> <b>Ecobank Fintech Challenge 2018</b>	Payments, Lending, Security, Cryptocurrency, Big Data, Trading	  	  	   
<b>3</b> <b>Entrepreneur hub, e.g.</b> 	Smart Infrastructure, Governance, Health and Well-Being, Digital Security, Educating	  	  	   

# Universities need to complement efforts of specialized training centers to close widening skills gap

## Specialized training centers



- MEST1 offers a 12-month, full time training program in software development, business & communication



- ALC is designed to train both beginners and intermediate android developers with guided mentorship from experts



- TD4PAI<sup>2</sup> teaches a curriculum on Embedded Systems, Software App Development and Web Development

## Universities

Nigerian universities need to support tech entrepreneurs more to close skills gap. Global best practices show universities:

### Organize innovation competitions...

...to incentivize creativity and collaboration e.g. University of Cape Town, in conjunction with MTN, offers entrepreneurs scholarships & funding to

### Build or partner incubators...

...to train and mentor students e.g. C4DLab incubator at University of Nairobi, Stellenbosch University's Launch Lab in partnership with Nedbank and Attacq



# Five key trends observed in the Nigerian FinTech market



## Surge in lending and savings players

- An increase in number of players offering lending and saving solutions
- Recent entries include Kenyan based digital lenders Tala and Branch



## Increasing partnerships with banks

- Banks are becoming more receptive to fintechs and partnering with them
  - For example, FCMB is looking to partner a fintech to develop a payroll systems for SMEs



## Competition from telco providers

- Recent regulation by CBN regarding payment/remittance players under payment services bank license
  - Anticipation that major telco providers such as MTN might enter the space creating new competition for smaller fintechs



## Technological Innovation

- More innovative solutions are being introduced
- For example, Opera is planning to launch a lending solution (Okash) that will rely mostly on customer data from its other platforms to find target clientele



## Widening skills gap

- Market is losing technical specialists and experts to more mature/ developed markets thus widening the existing skills gap

# Currently, Nigerian FinTech ecosystem faces six key limitations



## Appropriate Regulation

Need for a regulatory framework that allows innovation and flexibility specific to Nigerian context



## Access to Funding

Limited funding sources available especially for start up FinTechs who have to rely on family and friends for initial funding



## Information Inadequacy

Lack of established database to leverage and provide supplementary information



## Corporate Governance Limitations

Excessive focus on innovation with little attention paid to management aspect of running a successful company



## Intellectual Property Rights

Intellectual property law complications to establish rights and patents



## Strategic Partnerships

Difficulty in forming strategic partnerships especially by early stage FinTechs

## Some key players in Nigerian FinTech market advocate financial inclusion & focus business on solving core issue

“ ... we are enabling the banks to reach a larger customer base by opening up our API's and it allows transactions through social media. We're also enabling people to get loans, because financial inclusion is not just opening an account, but also serving the underbanked



“ Financial inclusion is what we are doing ... Our company and other fintech's are looking at how best to actually get people credit. A lot of people are less concerned about bank account or insurance. What they really wants is credit/loan to operate business



“ By providing alternative banking, alternative lending and alternative credit scoring



“ IFIS subset of our company is focused on financial inclusion. It has about 16,000 agents providing services in places without banks or ATM machines

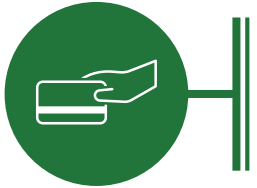


# Going forward, FinTechs could support financial inclusion through 4 main axis in Nigeria



## More involvement from Telcos and Banks

- Telecommunication companies vast coverage and infrastructure could help fintechs scale rapidly
- Banking robust infrastructure to provide Fintechs much needed foundation for solutions



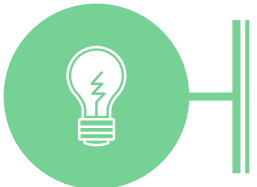
## Increasing micro-credit access

- Easy access to affordable credit is a key metric of financial inclusion measurement
- Increasing access to the financial excluded will have a positive effect on the market



## Enacting regulation

- Push from the regulators to support the Fintech ecosystem through introduction of regulation for payment service banks will allow more fintechs emerge
- Enactment of requisite regulation will bring more stability on the business environment



## More innovative but simple solutions

- Increasing smartphone penetration, forecasted to be 23% by 2019 allows reach to more users
- Innovation around USSD based Fintech solutions is bound to increase usage and thus grow financial inclusion

Thank You