

MARKETS, TECHNOLOGIES, COMPANIES, INVESTORS, TRENDS



Developing World Financial Inclusion Industry Landscape Overview 2018

Table of Contents

Financial Inclusion Global Landscape 2018 (Mind Maps)	3
Executive Summary	7
Chapter I: Landscape Overview	12
Chapter II: Regional Overview	21
Chapter III: Industry Overview	
Chapter IV: Digital ID and Bio-identification	51
Chapter V: Financial Inclusion Research Centers	
Chapter VI: Financial Institutions and Regional Banks	65
Chapter VII: Impact Investment in Africa Countries	72
Chapter VIII: Comparative Analysis of the Financial Inclusion	-
FinTech Companies in Developing Countries	81
Conclusions	86
Appendix Profiles	88
Disclaimer	25

Financial Inclusion 180 - Companies Landscape 2018 30 - Research Centers udhaa₹ agrocenta 20) HELL **Companies** cignifi OPPORTUN wala Stanbic IBTC Bank **Specialization** Mifos X ayannah omisego paga cofina kora mpurse **LENDINGKA?T** CONNECT AFRICA PAYMENTS bankbazaar.com cashpinsafe ₹ML **⊗EVEREX** MIRADOR **▲** Sentine stellar **UpGrad** InfoCorp (b) uulala **Payments** Loans ■ Kudi brazil**plus** BlueOrchard BanKo MobiKwik Stripe Sure**Remit** worldremit. (A) match*move* zetra GetBucks 🤏 movilway 🕟 billon **BANK BRI** M-K@PA SOLAR (i) WeLab CreditMantri MSONI Bitsoko pay bKash \ BETTER THAN CASH fsda **Companies** 🚯 ftcash DSS DOMUS SEMO SANCUS ¥ VugaPay CGAP BigWin Infotech IIII Payswiff O GPFI Kredico Lenddo" **Research Centers Finclusion** Transformify SmartPesa 2 rupeek Lendup = CAPITAL Upstart DVARA UNIVERSITY^{OF} BIRMINGHAM MasterCard ...Kreditech fetswallet \$\square\$ Fintec Labs Level One Project **EFInA** CENTER for FINANCIAL LoanAdda **Robocoin** branch INCLUSION wallettec **FinTech4Good** trustingsocial maxicaoh University of BRISTOL paga **Mukürü SO** ncoss **D** fundera cellulant* **11**argdarshak konga AsiaKredit⁷ Mnav McKinsey&Company paydunya A ONELYST ven**ëka** GIIN 🄏 RainFin paystack unitus labs iuntos Soft@ller Coverfox PayFast9 nerdwallet argisin remit coverwallet FairMoney PAYJOY OTC MICTO ATM GuiaBolso PLAID **∠** Ladder LaLa World MICROENSURE STOCKPILE Ante policy bazaar S BIMA CAPWAY nutmeg ELLEVEST **Compare**Asia awamo MAMBU Groundigit oscar Mifos, ** 0101010 **DEEP Savings** Insurance 010101 **KNOWLEDGE FUTURE ANALYTICS**

Financial Inclusion Landscape 2018 Regional Position

Companies - 180







AFRICA
Financial Inclusion
Investors

Institutional Investors

Impact Investors - 100 Investors - 60



Private Equity & Venture Capital Funds

Impact Investors

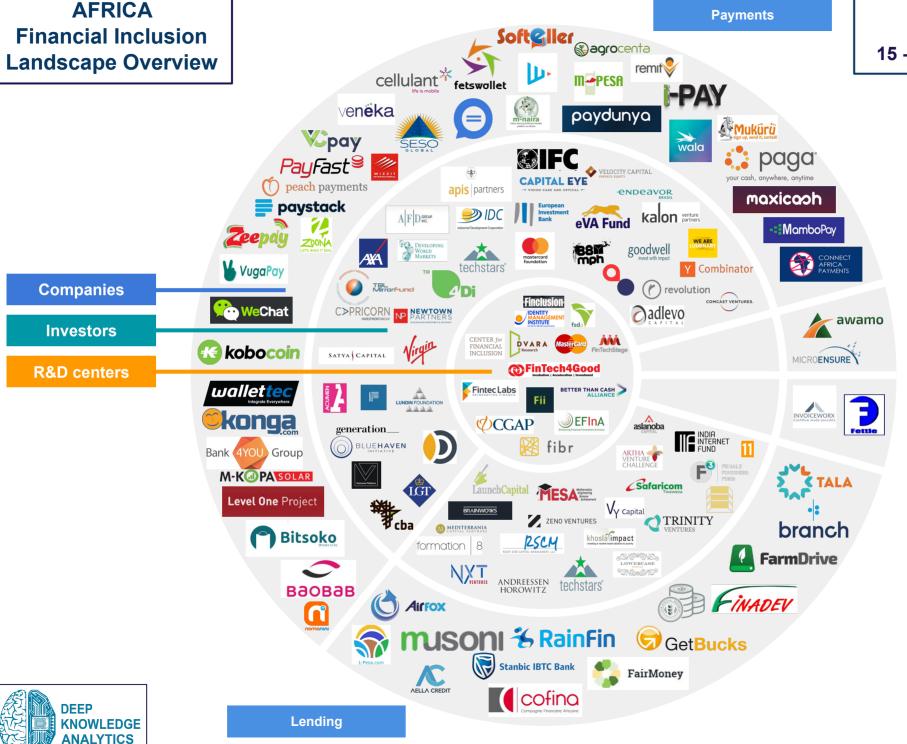
Investors



Private Equity







55 - Companies 60 - Investors 15 - Research Centers

Insurance

Savings





Executive Summary

Throughout the last decade, mobile phone penetration around the world has increased substantially, with mobile penetration rates in some countries of Africa as high as in the United States.

This has motivated many telecom providers to enter these regions. Today, up to 95% of the global population live in areas with mobile network coverage, up to 80% of which have 3G coverage and, as such, access to the internet.

Nonetheless, the level of socioeconomic development of many such regions remains low, creating disproportionate situation in which rural populations who have access to mobile phones and internet still lack basic human amenities, like home electricity, plumbing and clean drinking water.

Access to smartphones serves as a gateway to multiple financial services, tools and technologies. Some rural areas in developing nations don't even have geographic access to banks and financial institutions, and those that do are often unable to access them due to the lack of government issued ID (e.g. passports), which serve as the primary means of proof-of-identity, as required to open accounts at banks.

Emerging FinTech apps and services now serve as the most optimal gateway for rural populations in developing nations to gain access to basic financial services - financial inclusion. Moreover, access to such services also serve as gateways to many other opportunities; access to participation within the global economy, and through this, to further socioeconomic development.

As such, supporting companies and initiatives aiming to foster greater financial inclusion via FinTech mobile apps in developing regions serves as one of the clearest examples of impact investment and ethical way of business, simultaneously providing necessary services to rural populations, and in doing so, the potential for participation in the global economy and local socioeconomic development, ultimate leading to greater opportunities for access to basic human amenities and even human rights.

Today, "FinTech for Social Good", and in 2018, "Blockchain for Social Good", are rising trends that are attracting significant attention from both governments, NGOs, companies and investors alike. It represents more than just financial inclusion; it represents a clear path toward humanitarian good, and towards accelerating the socioeconomic development of underdeveloped countries so as to give them greater opportunities for acquiring basic human amenities and the pathway for the inclusion in the modern world through the financial inclusion.

The aim of this report is to give a detailed overview of global financial inclusion initiatives, as well as major technological trends and the identification and classification of the core technologies enabling the provision of financial services of the 2 Billions unbanked, and above all else, to demonstrate these trends in convergence, and finally, to outline projections and predictions regarding the future of financial inclusion and FinTech for social good in developing regions.

This report begins by charting the landscape of the financial inclusion sphere, listing the top 180 companies and their 400 investors.

Chapter II gives a regional overview of financial inclusion in Africa, Southeast Asia, and Latin America.

Chapter III provides a systemic framework for categorizing the many financial inclusion companies present in developing nations, categorizing them within one of the four following classes: Payments/Transfers, Savings, Loans and Insurance.

It also gives a comprehensive overview of the main roadblocks towards universal financial inclusion in developing countries, stemming from specific discontinuities between banks' modes of operations and the socioeconomic context of the specific developing nations in which financial inclusion is currently at its lowest.

Among these roadblocks are the following factors:

- banks are located far away from the specific geographic locations in which potential clients live;
- banks' services are too expensive for local populations;
- local populations have a general distrust towards financial institutions and banks;
- much of the local population are illiterate, thus providing a fundamental barrier to accessing and using the
 documentation used by banks, and subject to poverty, thus limiting the amount they are able to spend on
 procuring the banks' services.

Chapter IV provides comprehensive analysis of the current situation with the so-called "Identity Gap" in the case of the developing regions. And this one of the main roadblock for efficient financial inclusion. The rapid growth of mobile phone ownership – which has reached 6.5 billion users globally – is a historic opportunity to reduce the "identity gap." Digital identity is a proven solution to many of the challenges surrounding official identification. Sophisticated Bio-identification solutions empowered by AI and Blockchain technologies, which can be used as proof-of-identity mechanisms will be the main drivers to neutralise and leapfrog the "Identity Gap" problem.

Chapter V provides a more specific overview of research centers and non-profit organizations developing and promoting innovative solutions to increasing financial inclusion in developing countries.

Chapter VI dissects the modes of operation employed by financial institutions and region banks in Africa, in order to identify the specific factors that underlie many of the primary causes of the lack of access to financial services faced by many of the countries rural populations, ultimately using it as a case study to landscape some of the core problems faced by many financial institutions in other parts of the world where financial inclusions is currently very low, including Latin America and Southeast Asia.

Chapter VII takes a more focused look at impact investment in African countries, an area where impact investment (i.e., the creation of market-based solutions which address specific socio-economic issues and needs of a population) has one of the greatest potentials to simultaneously address the needs of rural populations, while providing profit to the investors who support such projects.

Chapter VIII provides a comparative analysis of FinTech companies focused on enhancing financial inclusion in developing countries. In performing this analysis, the chapter also identifies core technologies that will serve as the hallmark components for the future of Financial Inclusion initiatives.

These are: Al, Blockchain, ChatBots, Biometric-identification systems, CryptoEconomy and Gamification.

Overall, the report provides a detailed look at the root causes of low financial inclusion in developing nations generally, and in Africa, Southeast Asia and Latin America in particular, stemming both from specific modes of operation used by traditional financial institutions in those countries, as well as specific socioeconomic issues facing rural populations in those regions.

The chapter VII also presents a framework for systematizing and categorizing the multifarious FinTech financial inclusion services and initiatives present in developing countries into one of three categories, based on their inclusion of the above six core technologies:

- 1st generation, which lack all of the above technologies;
- 2nd generation, which employ Blockchain, AI, Biometric-identification systems
- 3rd generation, which employ all six core technologies.

The report concludes with an appendix profiling the top 180 companies in the financial inclusion space.

It landscapes then main players in the space of financial inclusion initiatives, including companies, institutional investors, impact investors, as well as research centers and non-profits.

It concludes by identifying core technologies that serve as the hallmarks for the future of successful financial inclusion solutions and initiatives and outlines forecasts on the matter of Financial Inclusion and FinTech in general for the emerging markets.

The synergetic convergence of the above core technologies will enable increased financial inclusion in the developing regions and will take shape within the next 5 years, and prove to be the most disruptive factors changing the shape of the financial services industry in the developing regions.

More than this, it will prove to be among the most powerful forces for increasing the quality of life for rural populations of developing nations who current lack not just access to basic financial services, but also to basic human amenities and human rights.

All these activities surrounding "FinTech for Social Good" and Financial Inclusion in developing regions represents more than just outstanding business opportunity; it represents a clear path toward humanitarian good, impact investment, ethical business and above all else, towards accelerating the socioeconomic development of emerging countries.



Financial Inclusion / 180 Companies

Aella Credit 1. **AGROCENTA** AirFox ICO 4. **Amber Financial Services** 5. Artawana 6. AsiaKredit **Aspire Singapore** 7. 8. **Atikus** 9. atombank 10. Avante 11. awamo 12. ayannah 13. bank4you.io 14. BankBazaar 15. BanQu 16. Baobab **17**. **Bharat Financial Inclusion** 18. **BigWin Infotech** 19. **Billon Group** 20. BIMA 21. Bitsoko 22. **BKash** 23. blooom 24. BlueOrchard Finance S A **25**. BPI Globe BanKO 26. Branch - Branch International 27. **Brazil Plus** 28. Capital Float 29. CapWay 30. Cellulant

31.	Cignifi
32.	Clix Capital
33.	compareasiagroup
34.	ConnectAfrica
35.	Coverfox Insurance
36.	coverwallet
37.	Cow-Token
38.	creditease
39.	CreditMantri
40.	CredoLab
41.	Dewan Housing Finance
42 .	Dianrong
43.	digit
44.	Domus Semo Sancus
45 .	ellevest
46.	Everex ICO
47.	FARMDRIVE
48.	Fettle Group
49.	Finadev
50.	Financial Software Systems
51.	FlexM
52.	forusall
53.	ftcash
54.	Fundbox
55.	Fundera
56.	Funding Societies
57.	Funds & Electronic Transfer
	Solutions
5 8.	Fuzo Limited
59.	GetBucks
60 .	GoSwiff

Groupe COFINA 61. **62**. quiabolso 63. Hero 64. humaniq 65. i-Pay EFT Payment 66. inclusivity.network 67. InVoiceWorkx 68. ivzico Janalakshmi 69. 70. iuntos **71.** Juvo 72. KASHIO INC 73. Kobocoin 74. Konfio 75. KongaPay **76. KORA** 77. KREDICO **78**. **Kreditech Holding 79**. Kudi 80. L-Pesa Microfinance 81. ladder 82. LALA World 83. Lenddo 84. LENDINGKART 85. LendUp 86. level one project 87. Loanadda 88. lufax 89. m-kopa M-NAIRA 90.

Financial Inclusion / 180 Companies

91.	M-pesa	121.	Oportun	151.	stockpile
92.	MamboPay	122.	OptioAl	152.	stripe
93.	mambu	123.	Oscar Health	153.	sureremit
94.	Margdarshak Financial Services	124.	OTC Payments - Micro ATM	154.	Tala
95.	matchmove	125.	paga	155.	Telcoin
96.	Maxicash	126.	PayDunya	156.	The Digital Reserve
97.	microensure	127.	PayFast	157.	Three Wheels United
98.	MicroMoney	128.	PAYJOY	158.	TOKENOMY
99.	Mifos Initiative	129.	Paystack	159.	TRANSFORMIFY
00.	Mirador	130.	paytm	160.	trulioo
01.	mobikwik	131.	Peach Payments	161.	trustingsocial
02.	MONEYFELLOWS	132.	Pintail	162.	Udhaar
03.	moneyview	133.	plaid	163.	upgrade
04.	Mosaic	134.	policybazaar	164.	upstart
05.	Movilway	135.	Predictus	165.	uulala
06.	Mpurse	136.	Prepaid Online Systems, Corp.	166.	Varo Money
07.	Mukuru		(POLS Corp.)	167.	VCpay
08.	Musoni	137.	producepay	168.	Veneka
09.	Nav Technologies	138.	RainFin	169.	VugaPay
10.	Naya Jeevan Foundation	139.	raisin	170.	wala
11.	Neogrowth	140.	Remit	171.	Wallettec - Wallettec (Pty) Ltd
12.	nerdwallet	141.	remitly	172.	WeCashUp - WeCashUpGv
13.	NIRA	142.	revolut	173.	WeChat Wallet - WeChat
14.	Nivesh.com	143.	Rupeek	174.	welab
15.	Nomanini	144.	Sentinel Chain	175.	wiGroup
16.	nubank	145.	SESO	176.	Wizzit
17.	nutmeg	146.	Shubham Housing Development	177.	worldremit
18.	OHMY Technologies		Finance Company	178.	Zeepay
19.	OmiseGO	147.	SmartPesa	179.	ZestFinance
20.	Onelyst	148.	Softeller	180.	Zoona
	•	149.	Stanbic IBTC Bank		
		150.	stellar		

1.	10x Group	34.	Google Launchpad Accelerator	67.	KCRise Fund
2.	500 Startups	35.	Digital Pioneers	68.	Khosla Impact
3.	ABG Capital	36.	Orange Digital Ventures	69.	Kickstart Seed Fund
4.	ACE & Company	37.	DN Capital	70.	LINE Corporation
5.	Acumen	38.	Dominet Digital	71.	LionBird
6.	Allen & Company	39.	Dorm Room Fund	72.	Lok Capital
7.	Amazon	40.	Draper Nexus Ventures	73.	Lowercase Capital
8.	Start Fund	41.	EASME - EU Executive Agency for	74.	Lightspeed Venture Partners
9.	Apis Partners		SMEs	75.	Lumenary
10.	Arena Ventures	42.	Eight Roads Ventures	76.	Lumia Capital
11.	Artha India Ventures	43.	Female Founders Fund	77.	The MasterCard Foundation
12.	Astia Angels	44.	Fidelity Investments	78.	Mediterrania Capital Partners
13.	Avala Capital	45.	Financial Solutions Lab	79.	NJF Capital
14.	AXA Group	46.	FinSight Ventures	80.	Northwestern Mutual Future
15.	British Business Bank Investments	47.	Fintonia Group		Ventures
16.	Banco Bilbao Vizcaya Argentaria	48.	Flight Ventures	81.	Nordic Eye
17.	BDC Capital Corporation	49.	Formation 8	82.	Northern Arc
18.	Beenos Partners	50.	Fortress Investment Group	83.	One97 Communication
19.	Binomial Ventures	51.	Foundation Capital	84.	Opportunity International
20.	Breyer Capital	52 .	Founder Collective	85.	Point72 Ventures
21.	Bronze Investments	53.	Freestyle Capital	86.	Policybazaar
22.	IFMR Capital	54.	GC Capital	87.	Project 11 Ventures
23.	Vulcan Capital	55.	Gentera	88.	Red Bear Angels
24.	Capitaleye Investments	56.	Gibraltar Ventures	89.	Redpoint
25.	Capricorn Investment Group	57 .	Rakuten	90.	Red Swan Ventures
26.	Catamaran Ventures	58.	Golden Gate Ventures	91.	Rethink Impact
27.	CF	59 .	Goodwell Investments	92.	Ribbit Capital
28.	Compound	60.	Green Bank	93.	Route 66 Ventures
29.	Visa	61.	GSD Capital	94.	Safaricom
30.	Creation Investments Capital	62.	Hack VC	95.	SamsungNEXT Ventures
	Management, LLC	63.	Homebrew	96.	Serious Change
31.	CreditEase	64.	Horizons Ventures	97.	Singularity Investments
32.	DDF	65.	India Quotient	98.	Sistema Asia Fund
33.	Designer Fund	66.	Innovating Capital	99.	SK Ventures
	-			100.	Social Venture Partners
I		1		1	

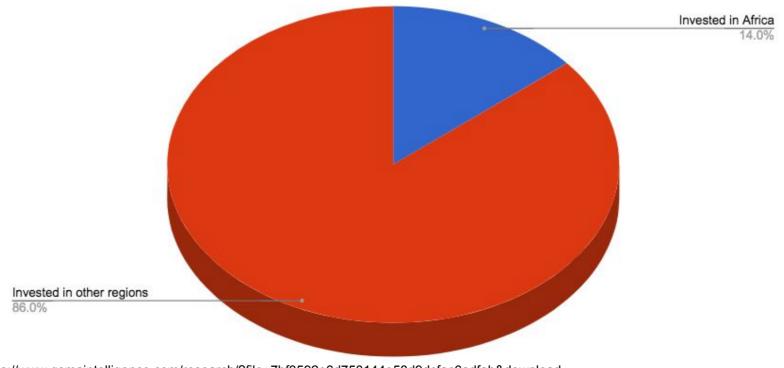
101.	Speedinvest	134.	Allianz Life Insurance	167.	Brainworks Capital Management
102.	Spiral Ventures Pte Ltd.	135.	Allianz Life Ventures	168.	btov Partners
103.	Life.SREDA	136.	Allianz X	169.	The California Endowment
104.	StartX (Stanford-StartX Fund)	137.	Alpha JWC Ventures	170.	Canaan Partners
105.	Steadview Capital	138.	Amadeus Capital Partners	171.	CapitalG
106.	Stripe	139.	American Express Ventures	172.	Carlyle Group
107.	Techstars	140.	Anicut Capital	173.	Caspian Impact Investments
108.	Thrive Capital	141.	Ant Financial	174.	Catalyst Fund
109.	Tree Line Asia	142.	Anthemis Group	175.	Commercial Bank of Africa
110.	Two Sigma Ventures	143.	Arbor Ventures	176.	CDC Group
111.	Ule	144.	Armada Investment AG	177.	CDH Investments
112.	Upside Partnership	145.	Aslanoba Capital	178.	Center for Financial Services
113.	Urizen Ventures I	146.	Aspada .		Innovation (CFSI)
114.	Värde Partners	147.	Aspect Ventures	179.	CICC
115.	Velocity Capital Private Equity	148.	Alumni Ventures Group	180.	Cisco Investments
116.	Ventures Platform	149.	Axiata Digital Innovation Fund	181.	Clocktower Technology Ventures
117.	Verily	150.	Baidu	182.	China Minsheng Bank
118.	Wavemaker Partners	151.	Bajaj Auto Finance	183.	Collaborative Fund
119.	Wellington Management	152.	Balderton Capital	184.	Comcast Ventures
120.	Wing Venture Capital	153.	Bamboo Capital Partners	185.	Commerce Ventures
121.	Woodford Investment Management	154.	Baseline Ventures	186.	CommerzVentures GmbH
122.	121WATT	155.	BDC Venture Capital	187.	Contour Venture Partners
123.	1864 Accelerator	156.	BEENEXT	188.	Core Innovation Capital
124.	212	157.	Bezos Expeditions	189.	CoVenture
125.	4Di Capital	158.	Bertelsmann India Investments	190.	Credit Suisse
126.	88mph.ac	159.	BlackRock	191.	CreditEase Fintech Investment Fund
127.	8VC	160.	Blue Compass Investments	192.	Crosslink Capital
128.	Andreessen Horowitz	161.	Blue Haven Initiative	193.	Crowdcube
129.	Accel Partners	162.	Blue Ivy Ventures	194.	CRV
130.	Accion	163.	BlueOrchard Finance S A	195.	CITIC Securities
131.	Acton Capital Partners	164.	Blumberg Capital	196.	CSC Upshot
132.	Adlevo Capital	165.	Bohai Leasing	197.	DAG Ventures
133.	AFD Group	166.	BoxGroup	198.	Data Collective
	1	167.	BlackPine Private Equity Partners	199.	Digicel

201.	Draper Associates	234.	Global Founders Capital	267.	Intel Capital
202.	Draper Esprit	235.	GMO Venture Partners	268.	Intercept Ventures
203.	DST Systems	236.	Goldman Sachs	269.	Inventus Capital Partners
204.	Dubai Angel Investors	237.	Gray Ghost Ventures	270.	Investopad
205.	Developing World Markets	238.	Green D Ventures	271.	ITOCHU Corporation
206.	DZ BANK	239.	GREE Ventures	272.	IVP (Institutional Venture Partners)
207.	e.Bricks Ventures	240.	Greylock Partners	273.	IvyCap Ventures
208.	EG Capital Advisors	241.	Guotai Junan Securities	274.	Jaguar Ventures
209.	European Investment Bank (EIB)	242.	GV	275.	Jardine Matheson Group
210.	eLab Accelerator	243.	Guangdong Technology Financial	276.	Jacob Ballas Capital India
211.	Elevar Equity		Group	277.	Jump Capital
212.	Endeavor Catalyst	244.	Hashed	278.	Kalon Venture Partners
213.	US Department of Energy	245.	Hatchd Digital	279.	Kaszek Ventures
214.	Alibaba Entrepreneurs Fund	246.	Highland Capital Partners	280.	Kensington Capital Partners Limited
215.	Entree Capital	247.	Helion Venture Partners	281.	Khazanah Nasional
216.	eVentures Africa Fund	248.	HitFox Group	282.	Khosla Ventures
217.	Expansion Venture Capital	249.	Holley Group	283.	Kickstart Ventures
218.	Experian	250.	HPE Growth Capital	284.	Kima Ventures
219.	Felicis Ventures	251.	H&Q Asia Pacific	285.	Kinnevik AB
220.	Fenway Summer Ventures	252.	Hyde Park Venture Partners	286.	KIZOO
221.	FirstMark	253.	Industrial Development Corporation	287.	Kleiner Perkins Caufield & Byers
222.	First Round Capital	254.	IDG Capital Partners	288.	Kreos Capital
223.	FJ Labs	255.	IDG Ventures India	289.	Lakestar
224.	Flybridge Capital Partners	256.	International Finance Corporation	290.	LaunchCapital
225.	Forté Ventures	257.	IFC Asset Management Company	291.	LeapFrog Investments
226.	FORUM	258.	IFU	292.	Lerer Hippeau
227.	Founders' Co-op	259.	iGlobe Partners	293.	LGT Venture Philanthropy
228.	Founders Fund	260.	Index Ventures	294.	LocalGlobe
229.	Fullerton Financial Holdings	261.	IIFL	295.	Lundin Foundation
230.	GAWA Capital	262.	India Internet Fund	296.	Matchmove
231.	General Catalyst	263.	Industry Ventures	297.	Matrix Partners
232.	Generation Investment Management	264.	Info Edge	298.	Max Giant Capital
233.	GIC	265.	ING Group	299.	Mayfield Fund
		266.	iNovia Capital	300.	MediaTek

301.	Menlo Ventures	334.	Ping An Ventures	368.	Softbank Ventures Korea
302.	Mesa Ventures	335.	Plug and Play	369.	Soma Capital
303.	Millicom Systems	336.	Point Nine Capital	370.	Sound Ventures
304.	MindWorks Ventures	337.	Polar Capital Holdings	371.	Spark Capital
305.	MissionOG	338.	Portfolia	372.	Spring Ventures
306.	Mistral Venture Partners	339.	Project A	373.	Sprints Capital
307.	Moonshots Capital	340.	PSP Growth	374.	Square Peg Capital
308.	Morgan Stanley	341.	QueensBridge Venture Partners	375.	C.V. Starr & Co
309 .	Morningstar	342.	QED Investors	376.	Starr Companies
310.	Motilal Oswal Venture Capital	343.	Qualgro VC	377.	Startupbootcamp
	Advisors	344.	Quona Capital	378.	Startup Spaze
311.	Michael & Susan Dell Foundation	345.	Radicle Impact	379.	Stripes Group
312.	Nationwide Ventures	346.	Revolution	380.	Susa Ventures
313.	New Enterprise Associates	347.	Richmond Global Ventures	381.	SV Angel
314.	Net1	348.	Right Side Capital Management	382.	Silicon Valley Bank
315.	Newid capital	349.	RRE Ventures	383.	SVB Capital
316.	Newtown Partners	350.	Runa Capital	384.	Taurus Ventures
317.	Northern Light Venture Capital	351.	Saama Capital	385.	TBL Mirror Fund
318.	Northgate Capital	352.	Credit Saison	386.	Barclays Accelerator (Powered by
319.	Nova Founders Capital	353.	Salesforce Ventures		Techstars)
320 .	NXTP Labs	354.	Satya Capital	387.	Tekton Ventures
321.	NXT Ventures	355.	SAIF Partners	388.	Telenor
322.	Nyca Partners	356.	SBI Group	389.	Temasek Holdings
323.	Oakhouse Partners	357.	Standard Chartered Bank	390.	The Perkins Fund
324.	Obvious Ventures	358.	Schroders Plc	391.	The Rise Fund
325.	Omidyar Network	359.	Seedcamp	392.	Think +
326.	Omidyar Technology Ventures	360.	Sequoia Capital	393.	Third Point Ventures
327.	ORIX Asia Capital Ltd	361.	Susquehanna Growth Equity	394.	Thomvest Ventures
328.	Paua Ventures	362.	Sun Hung Kai Properties	395.	Tokyo Founders Fund
329.	PayPal	363.	SignalFire	396.	TOM Group Limited
330.	PayU	364.	Simone Investment Managers	397.	TomorrowVentures
331.	Peak Ventures	365.	Santander InnoVentures	398.	Toscafund Asset Management
332.	Pentech Ventures	366.	Social Leverage	399.	TPG
333.	Grand Corporation Osaka	367.	SoftBank	400.	Transamerica Ventures

Investments in Africa

According to our findings, only 18% of investors which invested in 180 companies presented in this report, have invested in companies which are based in Africa countries or focused on Africa. This can be explained by various institutional, economic and political risks. However, situation is changing, and according to latest reports, for instance, the number of mobile broadband connections will reach half a billion by 2020, more than double the number at the end of 2016, and will account for nearly two thirds of total connections in the region. Thus, in a next several years Africa market will became a great opportunity for investment.



60 Investors in Financial Inclusion Companies in Africa

- 1. 4Di Capital
- 2. 88mph.ac
- 3. Acumen
- 4. Adlevo Capital
- 5. AFD Group
- Andreessen Horowitz
- 7. Apis Partners
- 8. Artha India Ventures
- 9. Aslanoba Capital
- 10. AXA Group
- 11. Barclays Accelerator (Powered by Techstars)
- 12. Blue Haven Initiative
- 13. Brainworks Capital Management
- 14. Capitaleye Investments
- 15. Capricorn Investment Group
- 16. Comcast Ventures
- 17. Commercial Bank of Africa
- 18. DDF
- 19. Developing World Markets
- 20. Endeavor Catalyst
- 21. European Investment Bank (EIB)
- 22. eVentures Africa Fund
- 23. Expansion Venture Capital
- 24. Female Founders Fund
- 25. Formation 8
- 26. Generation Investment Management
- 27. Goodwell Investments
- 28. IFC Asset Management Company
- 29. India Internet Fund
- 30. Industrial Development Corporation

- Kalon Venture Partners
- 2. Khosla Impact
- 3. LaunchCapital
- 4. LGT Venture Philanthropy
- 5. LocalGlobe
- 6. Lowercase Capital
- 7. Lumenary
- 8. Lundin Foundation
- 9. Mediterrania Capital Partners
- 10. Mesa Ventures
- 11. Newtown Partners
- 12. NXT Ventures
- 13. Opportunity International
- 14. Project 11 Ventures
- 15. Revolution
- 16. Right Side Capital Management
- 17. Safaricom
- 18. Satya Capital
- 19. TBL Mirror Fund
- 20. Techstars
- 21. Telenor
- 22. The MasterCard Foundation
- 23. Tokyo Founders Fund
- 24. Trinity Ventures
- 25. Velocity Capital Private Equity
- 26. Ventures Platform
- 27. Virgin Group
- 28. Vy Capital
- 29. Y Combinator
- 30. Zeno Ventures



Financial inclusion in Developing Countries (Africa)

The main barrier to financial inclusion is basic lack of money. The "Review of Development Finance", Volume 6 issue 1 written by Alexandra Zins and Laurent Weill presented that:

"The Africa continent is at a leading position concerning mobile money banking, especially in East Africa where more than 73% of Kenyans are mobile money customers. In sub-Saharan Africa (SSA), 36 countries out of 54 have mobile banking services. 2.5 billion people in lower to-middle income countries have no access to banking services.

Saving habits are different on the Africa continent in comparison to the world. The main motivations of saving in Africa are "for education" (21.3%) and "for farm or business" (19.6%). While 23.9% of individuals worldwide and 40% of individuals of high-income economies save for old age, which is their main saving motivation, only 10.3% of Africa individuals do so.

The main source of credit in Africa is "family and friends" (37.5%). The second source of credit in Africa is "a store" (7.9%), in line with the global trend (7.9%). Borrowing formally (6.7%) and borrowing from another private lender (4.7%) are less common in Africa. 41% of Africa individuals reported having borrowed from an informal source. 51.4% of Africa individuals declared having borrowed from any source in the past 12 months, a figure which is higher than the 42.4 global percent".

Mthuli Ncube, the current Managing Director and Head of Quantum Global Research Lab mentioned in the article "Digital Financial Services and Financial Inclusion in Africa" that:

"Kenya shows the highest level of financial inclusion at 67% rate and followed by Nigeria at 60%. Cameroon is at 47% inclusion rate, while the rest of the countries in the sample are all below 30% inclusion rate. The lowest rate is recorded in Mozambique at 13% inclusion rate".

Sources: https://www.sciencedirect.com/science/article/pii/S1879933716300549
https://www.sciencedirect.com/science/article/pii/S1879933716300549
https://www.sciencedirect.com/science/article/pii/S1879933716300549
https://www.sciencedirect.com/science/article/pii/S1879933716300549
https://www.sciencedirect.com/science/article/pii/S1879933716300549
https://www.sciencedirect.com/science/article/pii/S1879933716300549
<a href="https://www.sciencedirect.com/

Financial inclusion in Developing Countries (Asia)

In an article entitled "Singapore plans Blockchain push to boost Financial Inclusion" written by Wolfie Zhao, the author wrote that:

"The Singapore government is looking to boost blockchain development in an effort to improve financial inclusion for Southeast Asian countries. The neighboring nation of Malaysia is also moving to utilize blockchain technology to advance banking services across the region. Similarly, Thailand's Siam Commercial Bank is building out a Ripple-based blockchain remittance platform for cross border payments".

Such thinking evidences the fact that Southeast Asian government officials are seriously considering blockchain-based solutions to the issue of a lack of financial inclusion for large portions of their peoples. This is an increasingly evident trend, as evidenced by, for instance research conducted by Oliver Wyman's, who states in a recent article that:

"Digital financial solutions could play a significant part in closing gaps in financial inclusion. They could address about 40% of the volume of unmet demand for payments services and 20% of the unmet credit needs in the BoP and MSME segments. Digital finance alone cannot entirely close the gaps in financial inclusion. But it is estimated that the cumulative effect of digitally driven acceleration in financial inclusion could boost GDP by 2% to 3% in markets like Indonesia and the Philippines, and 6% in Cambodia. For the population earning less than \$2 a day, that would translate to a 10% increase in income in Indonesia and the Philippines, and an increase of around 30% in Cambodia. 99% of Indian adults with an account at a financial institution have a bank account. Kenya's extreme poverty is ranking 187 in per-capita GDP, of the country's 47 million people, seven in 10 adults (69%) have financial accounts. The percentage of Bangladeshis with formal financial services accounts almost doubled from 20% to 34% between 2013 and 2016. In 2016, only one in 10 adults (13%) had a registered account. Many Beninese adults are financially active, with 47 percent report having saved in some manner and 20 percent reporting have borrowed. Mobile money awareness is high, as is access to mobile phones."

Sources: https://www.coindesk.com/singapore-plans-blockchain-push-to-boost-asean-financial-inclusion/
https://www.coindesk.com/singapore-plans-blockchain-push-to-boost-asean-financial-inclusion/
https://www.adb.org/sites/default/files/publication/222061/financial-inclusion-se-asia.pdf

Financial inclusion in Developing Countries (Latin America)

Amanda Jacobson Manager of Latin America, Village Capital, wrote in a recent report titled "What does "financial inclusion" really mean, and how can entrepreneurs make the difference?" that

"Low-income unbanked and underbanked people, both from big cities and small towns, often have to struggle to work a half dozen jobs with little certainty of their cash flows. Entrepreneurs across Latin America are emerging quickly to address problems in financial inclusion".

The authors of "Financial Inclusion in Latin America: Facts, Obstacles and Central Banks' Policy Issues" also indicate that:

"Latin American countries do not look good relative to their comparators. Among the region, Peru, Honduras, Guatemala and Nicaragua are among the countries with the lowest quality of institutions and a low value for financial inclusion. In contrast, Chile is the only country in the region where the indicator representing institutional quality is closer to those in high-income countries. Modern Latin America is home to over 600 million people across 20 nations. The percentage of the Latin American population with a bank account has gone from 39% to over 50% in just the last five years. Online sales don't make up as large a portion of total GDP as regions like Europe (2.5%, \$523bn) or North America (2.6%, \$562bn), but Latin America still has around 300 million internet users — 135 million of whom shop online. Over 400 million people in Latin America now own a mobile phone, and there has been significant regional investment in 3G services".

Sources: https://vilcap.com/wp-content/uploads/2017/06/Latin-America%E2%80%99s-3-greatest-financial-inclusion-challenges.pdf https://www.paymenteye.com/2017/03/23/financial-inclusion-in-latin-america-what-does-it-mean-for-e-commerce/

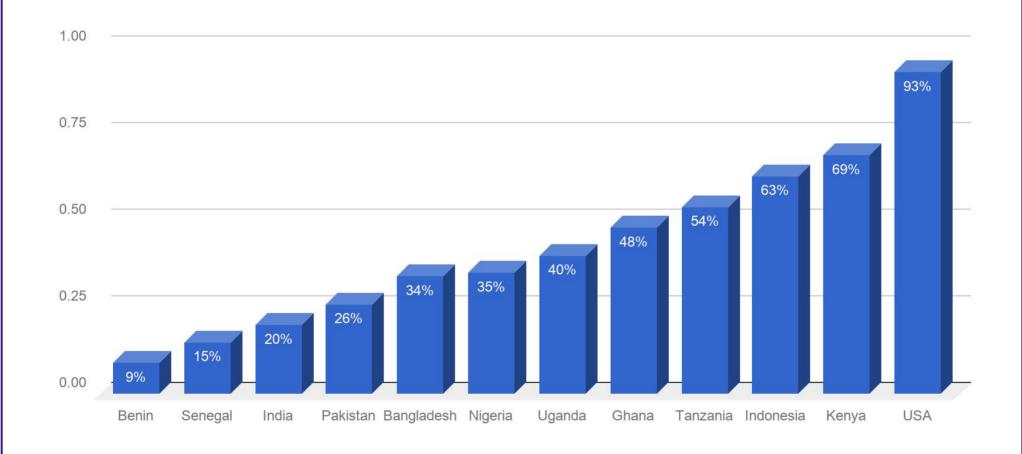
Main trends

A report titled "The mobile economy Sub-Saharan Africa 2017" published by GSMA notes the following trends:

- 1. At the end of 2016, there were 420 million unique mobile subscribers in Sub-Saharan Africa. The region will have more than half a billion unique mobile subscribers by 2020, by which time around half the population will subscribe to a mobile service.
- 2. 3G will remain the dominant mobile broadband technology for the foreseeable future, but 4G adoption is rising rapidly following increasing network rollout. Smartphone connections in Sub-Saharan Africa have doubled over the past two years to nearly 200 million. Key factors supporting the growth of smartphone adoption in the region include the increasing affordability of new devices and a growing market for second-hand devices. This trend, along with the uptake of mobile broadband services, is driving demand for digital content and, consequently, an increase in mobile data traffic.
- 3. Mobile's contribution to GDP is expected to rise to \$142 billion, equivalent to 8.6% of GDP, by 2020 as countries benefit from improvements in productivity and efficiency brought about by increased take-up of mobile services. The mobile ecosystem also supported approximately 3.5 million jobs in Sub-Saharan Africa in 2016.
- 4. Mobile internet penetration in Sub-Saharan Africa doubled over the past three years to 26% by the end of 2016, with 120 million new mobile internet subscribers added over the period. Mobile technology is the only available platform for the majority of the population to get online; mobile networks cover a wider area than any other technology in the region.
- 5. Over the next four years, an additional 155 million people are expected to subscribe to a mobile internet service, bringing the total to 411 million and a penetration rate of around 38% by the end of 2020.

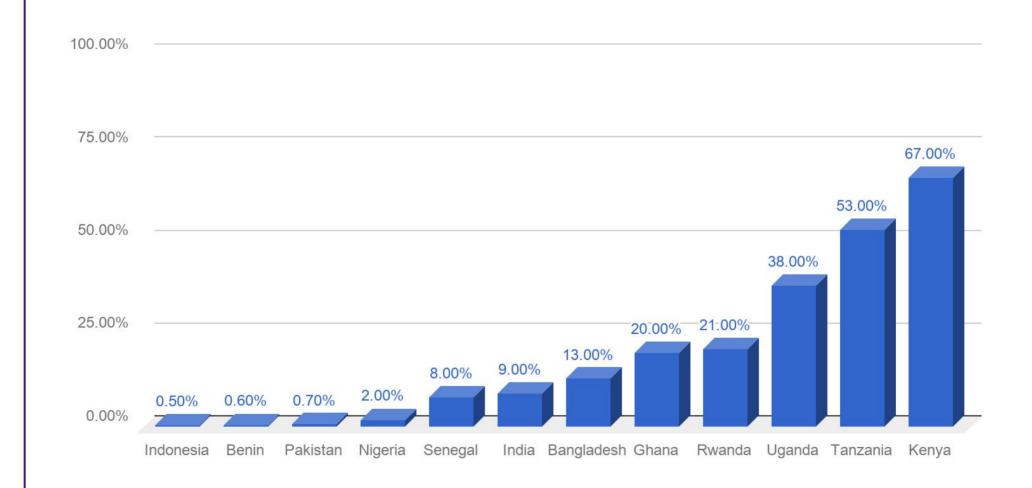
Source: https://www.gsma.com/mobileeconomy/sub-saharan-africa-2017/

Finance inclusion in Developing Countries / USA



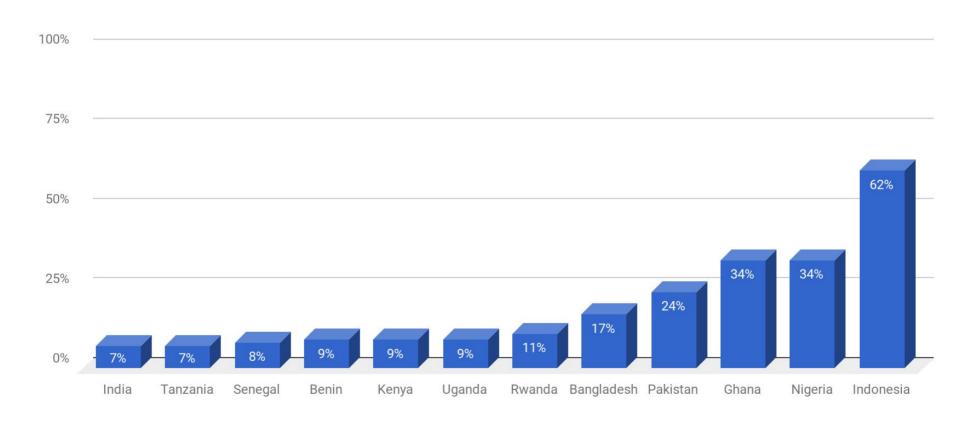
Source: InterMedia's Financial Inclusion Insights

Registered mobile money accounts in Developing Countries



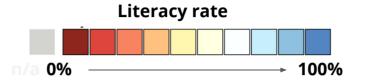
Source: InterMedia's Financial Inclusion Insights

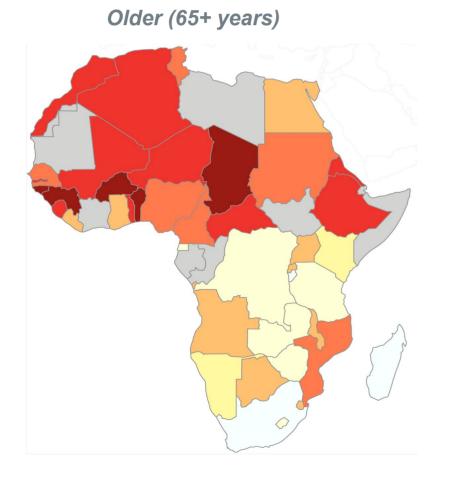
Full service bank accounts in Developing Countries

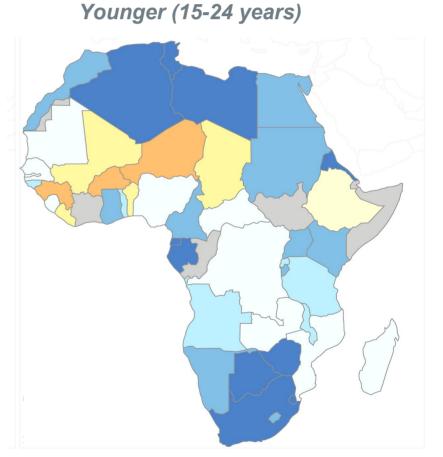


Source: InterMedia's Financial Inclusion Insights

The young generation in Africa is much better educated than before



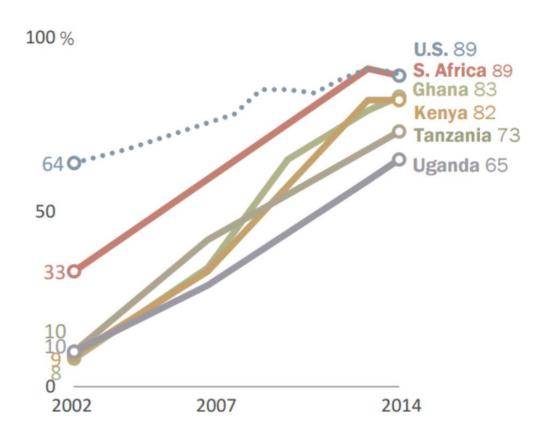




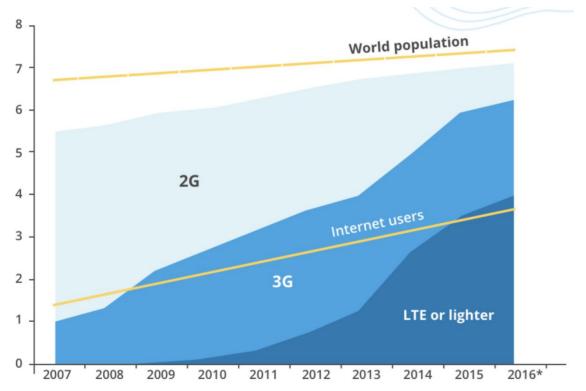
Mobile penetration in some Africa countries is as high as in the United States

Sub-Saharan Africa remains the region with the highest growth rate in mobile subscriptions globally

In 2002 roughly one-in-ten owned a mobile phone in Tanzania, Uganda, Kenya and Ghana followed by exponential growth



The Mobile Network is a gateway to the Global Economy



95% of the global population Live in areas with mobile network coverage

Mobile phones enable Humaniq to reach the unbanked population and provide financial inclusion

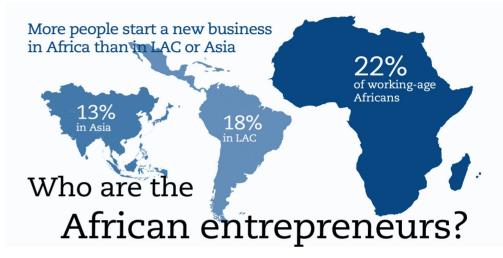
Source: ITU

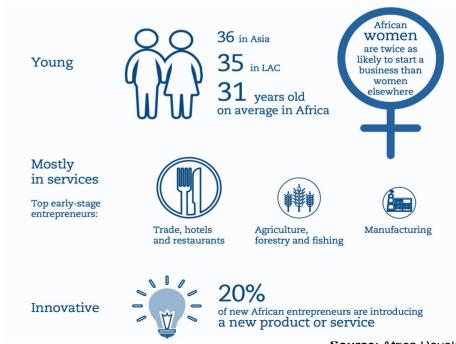
Entrepreneurial activity in Africa is higher than in Asia and Latin America

Entrepreneurship levels in Africa are the highest in the world

22% of Africas are starting new businesses

Loan providers need to increase their lending by at least \$135 billion to meet demand by Africa SMEs





The Financial and Digital Inclusion Project

The Financial and Digital Inclusion Project (FDIP) team has published an annual report that evaluates the progress that various developing countries are making toward broader and more inclusive financial inclusion.

The 2017 Brookings Financial and Digital Inclusion Project (FDIP) report was written by Robin J. Lewis, John D. Villasenor, and Darrell M. West, and evaluates access to and usage of affordable financial services by underserved people across 26 geographically, politically, and economically diverse countries.

The 2017 report "assesses these countries' financial inclusion ecosystems based on four dimensions of financial inclusion: country commitment, mobile capacity, regulatory environment, and adoption of selected traditional and digital financial services".

"For the third year in a row, Kenya ranked at the top of the FDIP scorecard, driven by its robust commitment to advancing financial inclusion, widespread adoption of mobile money services among traditionally underserved groups, an increasingly broad range of mobile money services (including insurance and loan products), and an enabling regulatory environment for digital financial services. In addition to Kenya, the other top-scoring countries were distributed across Latin America and Sub-Saharan Africa: Brazil and Mexico tied for second place, and Colombia, South Africa, and Uganda tied for third.

Countries in Asia were also represented near the top of the scorecard, with the Philippines scoring only two percentage points behind Colombia, South Africa, and Uganda. Examples of countries that have improved their country commitment scores since 2016 include Egypt, the Dominican Republic, and Mexico".

Source: https://www.brookings.edu/wp-content/uploads/2017/08/fdip 20170831 project report.pdf

3591534446083₁₈₀₂72₁8₅3₅1937₂10058 84024 7524666665113¹3₇40611³33205 188851926 7773139873154909₇602⁰6341₁2394 001271638₄4 7273974617017703772234182488883 4500127 1445 615 160 5 48 1 109 0 818 29 97 Chapter III

Chapter III Industry Overview

Introduction

This report profiles 180 companies operating in the field of financial inclusion, or which propose services that help assist in helping communities in developing nations to participate in the global economy. This chapter is dedicated to presenting a general industry overview and focuses on:

Developing a framework of 4 main categories, which can be used as a framework for classifying the companies operating in this space:

- Payments/Transfers
- Savings
- Loans
- Insurance

The problems financial inclusion companies are facing on the ground, including:

- Banks which are too far away from the places that citizens are living;
- The bank services are too expensive;
- Lack of documentation and thus, inability to pass KYC and/or open a bank account;
- The problem of trust towards institutions and banks. The lack of trust makes impossible to increase the level of financial inclusion among researched countries;
- Highly illiterate population, which makes economic and social developed impossible, the lack of money
 makes unnecessary to be engaged in financial life. In some cases it is enough that one family member has
 an account;

A detailed overview several technologies which serve as the hallmarks of successful financial inclusion technologies and services:

- Artificial Intelligence which, for instance, is widely used by lending companies in order to choose clients.
- Bio-identification mechanisms which can be used in order to integrate those who do not have a government issued IDs.
- Blockchain technologies makes transaction secured and proved.
- Gamification
- ChatBots

Payments/Transfers

A Gallup, Inc. survey of 11 countries in Sub-Saharan Africa found that more than 80 percent of adults make bill payments or remittances using cash.

Given the lack of digital-payment penetration, governments, consumers, and financial providers in all developing region are still bearing the high cost of cash payments.

"In some Africa countries, only 10% of the people have a bank account, but 60% have a mobile phone. The mobile phone is therefore the only way for them to collect their wages, pay an invoice, save money or get a loan. Orange Money was launched in 2008 in Côte d'Ivoire to simplify money transfers. In 2016, transactions carried out amounted to nearly € 2 billion per month. A success that shows how technology, when accessible to all, improves daily life.

While cash transfers are already widely accepted as a tool for "social protection" (e.g., alleviating present suffering, hunger, etc.), they are also one of the few interventions that have been shown to have positive impacts years after delivery. Studies in Uganda and Sri Lanka, for example, have found earnings increases of \$0.40 to \$0.80 per \$1 delivered after 4–5 years.

The latest World Bank report mentions how remittances to developing countries only saw marginal growth in 2015. The most well-known system, M-PESA, started in Kenya and is now operational in six countries; it has 20 million users who transferred \$500 million a month during 2011 and are served by more than 28,000 agents.

Payment in the shops can be made by using the mobile phone of merchant, while the payment on websites are made by using web services.

Source: https://www.mckinsey.com/industries/financial-services/our-insights/sub-saharan-africa-a-major-potential-revenue-opportunity-for-digital-payments
https://www.mckinsey.com/industries/financial-services/our-insights/sub-saharan-africa-a-major-potential-revenue-opportunity-for-digital-payments
https://www.orange.com/en/Group/Activities/Orange-Financial-Services/Folder/Orange-Money

Savings

A report made by the Africa Capacity Building Foundation has shown that:

"The savings rate throughout Africa is considerably lower than in more developed countries, but surprisingly even significantly lower than the savings rate in China, where around 50% of income is saved. Sub-Saharan Africa has the lowest savings rate which is continuing on a declining path compared to East Asia, Pacific, Latin America and South Asia".

The Global Development Horizons (GDH) report supported by The World Bank, written by Maurizio Bussolo, have outlined that:

"In less than a generation, global saving and investment will be dominated by the developing world. By 2030, half the global stock of capital, totaling \$158 trillion will reside in the developing world, compared to less than one-third today, with countries in East Asia and Latin America accounting for the largest shares of this stock which explores patterns of investment, saving and capital flows as they are likely to evolve over the next two decades. Developing countries' employment in services will account for more than 60 percent of their total employment by 2030 and they will account for more than 50 percent of global trade. Aging populations in East Asia, Eastern Europe and Central Asia, will see the largest reductions in private saving rates. In contrast, Sub-Saharan Africa, with its relatively young and rapidly growing population as well as robust economic growth, will be the only region not experiencing a decline in its saving rate."

Loans

In the article "Alternative Data Is Making (Credit) History in Sub-Saharan Africa" written by Mipe Okunseinde, it is mentioned that:

"In developing markets, conducting the due diligence needed to assess a borrower's credit risk is a challenge for two main reasons: geographic inaccessibility and little to no information as to the person's credit history. Considering that Africa is home to the world's fastest growing middle class, this is a significant missed opportunity. Cignifi uses mobile phone usage to assess not only a person's credit risk but also the probability that a person will use a particular financial service or product. First Access analyzes additional financial information (such as the individual's water, utilities and educational payments history) to assess a person's credit risk. Lenddo offers loans and free financial education to individuals based on their LenddoScore, a creditworthiness rating that the company generates through analysis of the prospective borrower's social media activity and related data sources".

In the article "Digital Credit in Africa: Are Nano Loans Safe for Consumers?" posted by Nadia van de Walle, she wrote that:

"Digital credit is growing fast in developing markets, particularly in Sub-Saharan Africa. Lenders such as M-Shwari, Jumo, M-Pawa, Eazzy Loan, Branch, EcoCashLoan, Timiza, KCG M-Pesa and others are attracting interest and investment. They are seen as having the potential to improve financial access and to make banking with poor clients more feasible and sustainable through technology that reduces underwriting and infrastructure costs. They offer small or nano loans starting as low as \$5 or \$10 dollars, make use of simple mobile user interfaces, and provide funds in real-time".

Source: https://cfi-blog.org/2016/09/22/digital-credit-in-africa-are-nano-loans-safe-for-consumers/

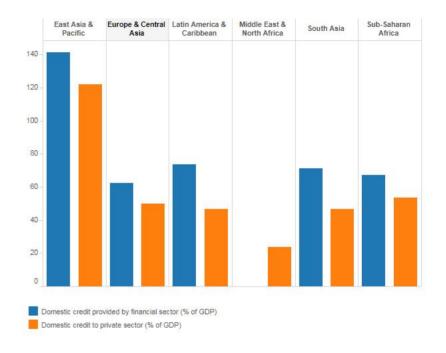
Loans

Loan companies are the most popular in our list: 37.5% of companies out of 200 are lending money to individuals or business in developing or developed countries.

In developing markets, credit risk is a challenge for two main reasons: geographic inaccessibility and little to no information as to the person's credit history.

In comparison with other regions, the East Asia and Pacific region has provided the most domestic credit to the economy and private sector, at 141% and 122%, respectively, of its GDP.

The number of active credit consumers in South Africa has grown strongly in recent years.



In the "Credit Markets in South Africa – The Consumer Experience" published by Eighty20, it was mentioned that:

"According to the NCR, in 2016 there were over 24 million credit active consumers, representing almost two thirds of the total adult population (18+) in South Africa. This is up from 17.5 million credit active consumers in 2008".

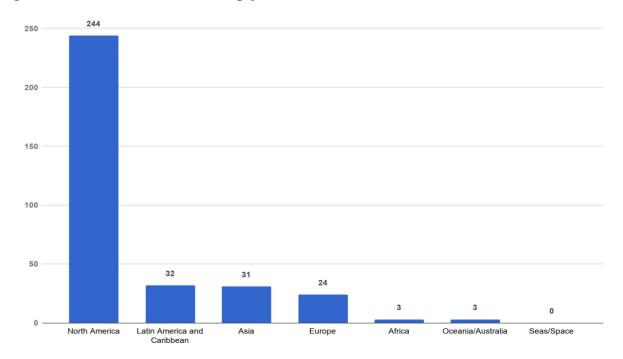
Source: <a href="https://www.covafrica.com/2015/02/alternative-data-is-making-credit-history-in-sub-saharan-africa/https://blogs.worldbank.org/opendata/africacan/data-show-rise-domestic-credit-developing-countries

Insurance

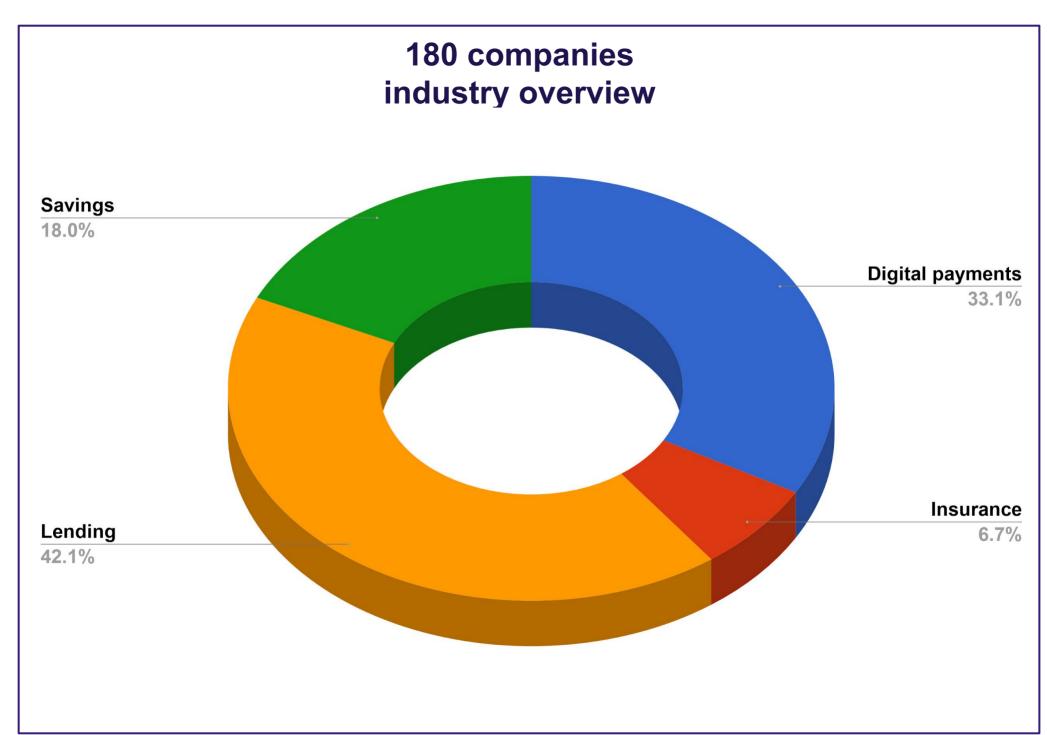
In the research "Sub-Saharan Africa becomes increasingly attractive to insurers" conducted by EY, a global leader in assurance, tax, transaction and advisory services expected that:

"8.5% annual growth for Ghana's insurance market between 2014 and 2018, expanding from US\$400m to \$600m. Just one in 10 Ghanaians own any kind of insurance, though the country has been the focus of foreign investors who have harnessed competition among mobile phone providers to offer free insurance as a market differentiator. Kenya is the most mature market among the seven countries included in the report, which forecasts that its insurance market will grow to \$2.2bn by 2018 from \$1.8bn in 2014. Respondents from Kenya view regulatory changes and mobile underwriting platforms as potential growth drivers in the coming years".

In 2016, the insured catastrophe losses for the Latin American region amounted to around 1.4 billion dollars. Currently around 135 million, or 5%, of low income people in developing countries are using microinsurance products. Africa's insurance market is growing, and the Financial Times refers to this market as going through a "giant waking up."



Source: https://www.statista.com/statistics/281033/catastrophe-losses-of-insurance-companies-worldwide/



Barriers to financial inclusion, which must be addressed

Both regions, Asia and Africa, obtain similar problems on the way of the financial inclusion process. Modern companies which are operating on the ground and want to succeed need to find a proper solution in their resolving. Among these problems are:

- Banks are too far away from the palse person is living;
- The bank services are too expensive;
- Lack of documentation and thus, inability to pass KYC and/or open a bank account;
- The problem of trust towards institutions and banks. The lack of trust makes impossible to increase the level of financial inclusion among researched countries;
- Highly illiterate population, which makes economic and social developed impossible, the lack of money
 makes unnecessary to be engaged in financial life. In some cases it is enough that one family member has
 an account;
- Cultural and religious reasons are another barrier for financial inclusion in the regions.
- Institutional regulations and adoption is important for startups based on cryptoassests.

The weaker sections of the society are generally ignored by the formal financial institutions in the race of making huge profits. If customer is financially educated, he or her will make better financial choices. Access to financial services at an affordable cost will improve life of the poor.

Most of the issues mentioned above can be resolved by using modern technologies and some of the companies successfully addressing these issues. Recent development has shown that technology plays an important role in improving financial inclusion because:

- It helps to reduce cost of the product.
- Reduces transaction cost.
- Improves quality of the product.
- Helps in increasing choices and flexibility to customer.

Source: https://www.coinstaker.com/trouble-cryptocurrency-africa-truth-behind-hypes/
https://www.researchgate.net/publication/309194840
Financial_Inclusion_Issues_and_Challenges

Security of transfers Blockchain and Crypto

One of the problem of inability to increase the level of financial inclusion is the lack of trust towards institutions and banks. It makes impossible to increase the level of financial inclusion among researched countries. frouds and money laundering are the main problem of the Africa and Asian regions. Economically undeveloped countries tends to have such problems.

Blockchain technologies are preventing from these crymes and can provide users with the secure transfers of money. For now, there are only few companies which are using blockchain technologies for secure transfers.

In the "Cryptocurrencies can boost financial inclusion experts agree" article by Angeline Mbogo, it is mentioned that:

"Globally, two billion working-age adults are excluded from formal financial services while only 34 percent adults in Sub-Saharan Africa had an account in 2014 as indicated by World Bank data. According to industry experts, financial exclusion is caused by lack of trust, high costs, and inaccessible formal financial institutions. To increase financial inclusion, the G20 Global Partnership for Financial Inclusion (GPFI) developed high-level principles that will help governments promote financial inclusion digitally."



"The reason a lot of these systems are broken here is [that] consumers do not trust them. There is a lot of corruption [and] there is a lot of fraud. You always have a middleman monitoring and managing everything. One has to trust [that] a bank is actually going to take care of my money and not take it away."

Wala CEO, Tricia Martinez.

Source: http://bitcoinafrica.io/2018/03/20/cryptocurrencies-can-boost-financial-inclusion/

Blockchain & Crypto (Africa)

According to "The trouble with cryptocurrency in Africa – the truth behind the hypes" by Saibu Baba:

"Though many governments like South Africa, Nigeria, Kenya, and Zimbabwe are making big strides towards finding out how to regulate the sector, a lot needs to be done on a continent-wide scale. Some start-ups are operating blindly without support or any regulation. Institutions find the cryptocurrency market to be too risky to invest. Some governments don't even know of anything called cryptocurrencies. Some religious-oriented people see cryptocurrencies to be the end of the world. That is Africa and cryptocurrencies."

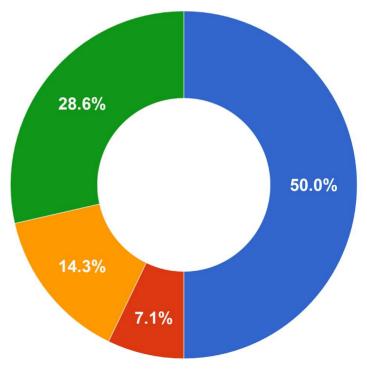
- Botswana, Tanzania, Rwanda, South Africa, Nigeria, Uganda
- Kenya, Zimbabwe
- Ethiopia, Sierra Leone
- Ghana, Egypt, Morocco, Morocco











Source: https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2017-global-cryptocurrency-benchmarking-study.pdf
https://www.coinstaker.com/trouble-cryptocurrency-africa-truth-behind-hypes/

Blockchain & Crypto Economy (Asia)

In the "Banks and the Crypto Industry: Asia" by Christina Georgacopoulos, it is indicated that:

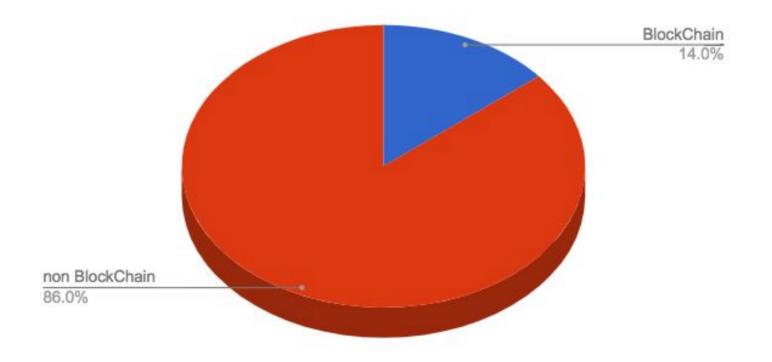
"Over 90 central banks across the globe are engaging in research and development of the technology. Blockchain networks could eliminate high structural costs of financial services, provide a shared ledger that minimizes risk for banks, and strengthen regulatory reporting of banking activity. Tax authorities, securities and exchange agencies, creditors, and national governments all have a stake in the unregulated crypto market, whether voluntarily or not.

Taiwanese financial authorities are open to experimentation with Blockchain tech for internal uses. The central bank plans to incorporate the technology with services in the capital city, Taipei, to create a 'smart city.'Thailand's Finance Ministry plans to collect a 15 percent capital gain tax on cryptocurrency profits, which was proposed in early March 2018. The government does not plan to further restrict or ban the crypto industry in Thailand. India's largest private bank, HDFC, banned the purchase of cryptocurrency via debit or credit card in order to "protect customers" from market fluctuations in March 2018. India is one of the top global tech leaders, but there is a little understanding of the crypto market in the country, although people have taken an interest in the underlying Blockchain technology. The ban sparked controversy within the domestic crypto industry that fears the strict regulation will cause "brain drain" and underdevelopment of Blockchain tech in the country. Crypto exchanges in Malaysia are now required to identify traders after the government enacted AML legislation in February 2018. Regulators emphasized the need to restrict the criminal use of the virtual marketplace. Malaysia has one of the most progressive plans for regulation of Blockchain and virtual currency and has already enacted legislation which sets standards for virtual exchanges."

Source: https://cointelegraph.com/news/banks-and-the-crypto-industry-asia

Blockchain & Crypto Technologies vs Traditional FinTech

Only 14% companies from our list has blockchain technologies.

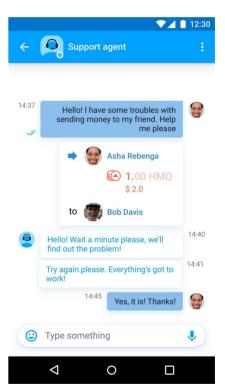


ChatBots and Al

Chatbots are increasingly gain popularity among developers and, concerning the targeted regions, they can be very useful as well. The issues related to cultural specifics and religious reasons are another barrier for financial inclusion in some of the regions.

Humaniq case is one of a relevant examples on this matter:

"The team will help users with any issues they may have regarding the obtainment of HMQ coins, passing the bio-ID process, P2P transactions, resetting passwords, or anything else. The new Humaniq support will be integrated automatically in the App chats along with the Humaniq helper, the bot assistant which educates customers how to earn up to \$20 equivalent in HMQ in the App by referring friends and undertaking microtasks, while also helping users to navigate in the app".

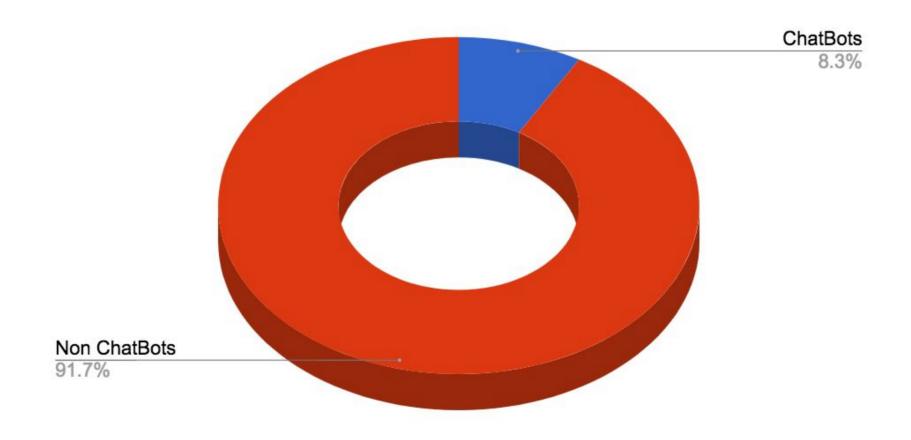


ChatBot has one more important role - education of population about their possibilities by being financially included in the economic life of their country.

Source: https://www.prnewswire.com/news-releases/humaniq-launches-live-support-chat-in-its-mobile-app-in-africa-300617438.html

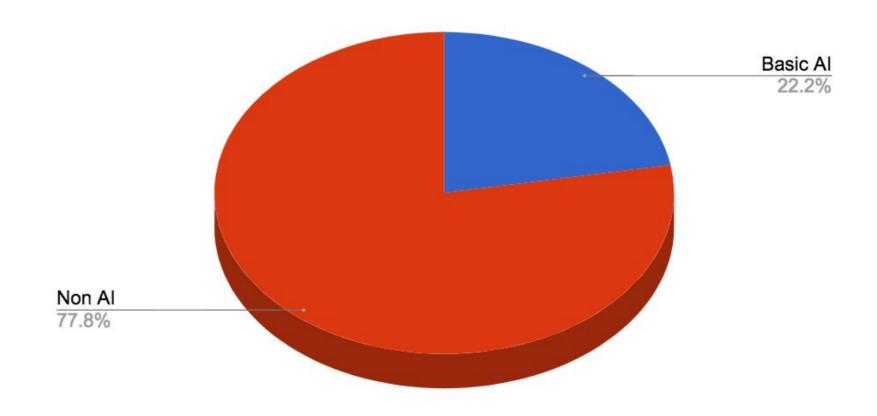
ChatBots and Al

Only 8% of companies from our list of 180 Financial Inclusion companies has ChatBots and 24% has Machine Learning Algorithms.



ChatBots and Al

Only 8% of companies from the list has ChatBots and 24% has Machine Learning Algorithms.

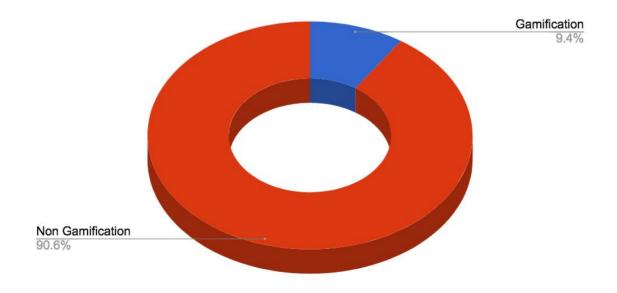


Engagement and Gamification

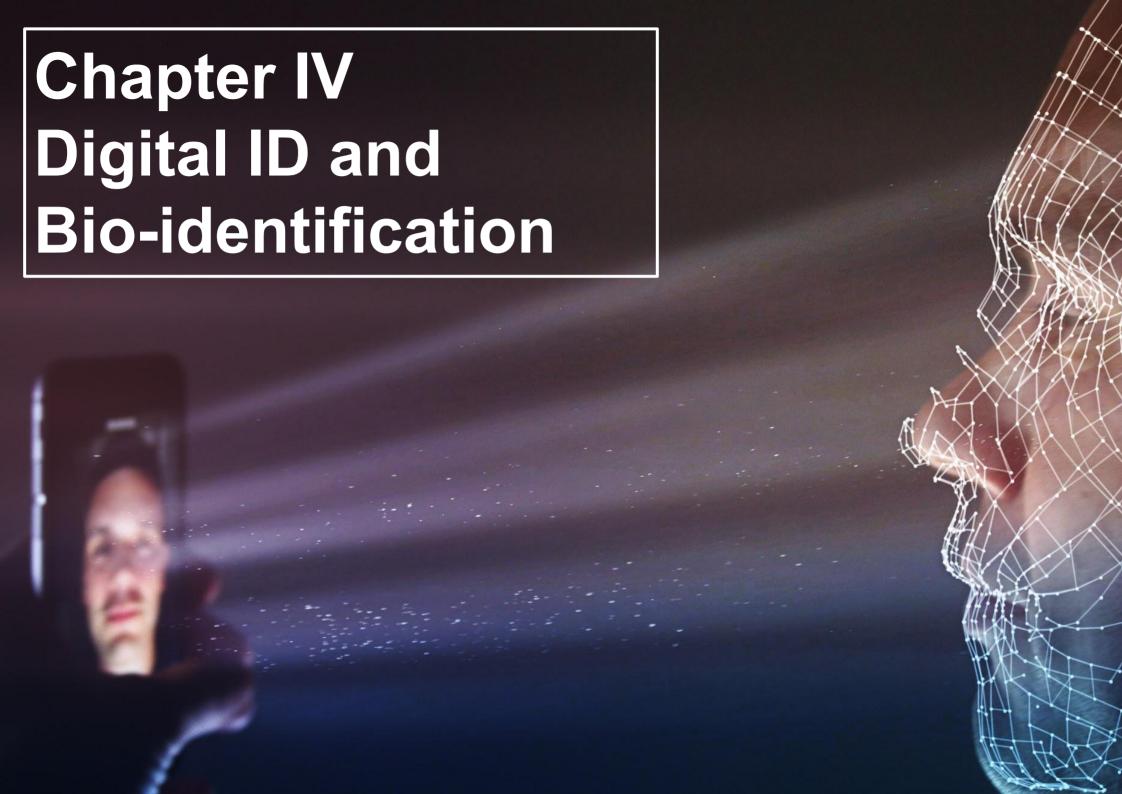
Gamification is the use of engagement elements and game design techniques in a non-game context, and it can be a very useful tool for financial education purposes. Gamification is all about improving the user experience, engagement, loyalty and satisfaction. Gamified applications only incorporate some elements of game design and are not full-fledged games. However, they are more than just a one-time promotion with a prize that may lead a customer to undertake a single action, such as opening an account.

The elements of games can potentially increase the involvement in usage of application.

Only 9.4% of companies we analyzed has gamification elements.



Source: http://www.cgap.org/blog/how-use-games-financial-education



Lack of Passports and ID documents in Developing countries

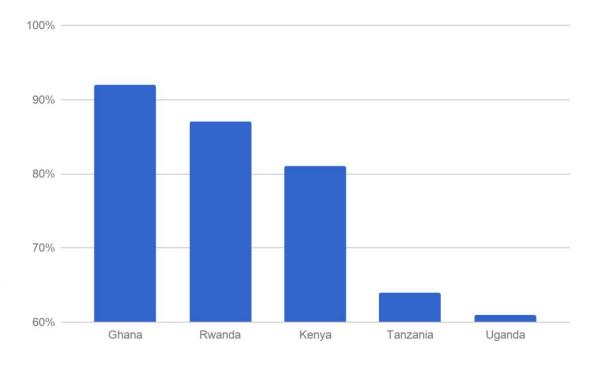
Lack of issued by Government IDs preclude people from opening bank accounts and access to banking system. However, there is one opportunity to include those people in financial life - using recent advancements in "Bio-identification" technology sphere.

An estimated 1.1 billion people globally lack of officially recognized form any identification. Without an identity, individuals are often invisible - unable to vote, access healthcare, open a bank account, or receive an education. Without accurate population data, public and private organizations struggle to broadly and accurately deliver the human most basic services.

As can be seen from the chart, Ghana is a leading country in Africa on the amount people who can open bank account or pass KYC, Ghana has less than 10% of population without IDs.

On the contrary, Uganda has about 39% of population which can not pass KYC and can not open bank account.

The percentage of people who obtain necessary IDs for registering a formal financial account in Africa countries



Source: https://www.sciencedirect.com/science/article/pii/S1879933716300549 https://www.biometricupdate.com/201707/biometrics-in-the-developing-world

Digital Identity - a Global Call

On the official website of ID2020, an alliance committed to improving lives through digital identity, provides us with the following information:

"In 2017, ID2020 established an alliance to bring together governments, public and private sector organizations, including Accenture, Microsoft, Mercy Corps, Hyperledger, and UNICC. The alliance model enables a synchronized approach to digital identity initiatives by enabling diverse stakeholders to work collaboratively and by coordinating funding to support high-impact projects. ID2020's mission supports the UN Sustainable Development Goal Target 16.9. which aims to provide legal identity for all, including birth registration, by 2030. As proof of one's identity is a prerequisite to social and economic inclusion in the modern world, an identity must be broadly recognized by both the publicand private-sector organizations with which an individual may interact. ID2020 principles for identity focus on protecting the individual and giving the individual control over their own identity and associated data".

As well, "ID4D brings global knowledge and expertise across sectors to help countries realize the transformational potential of digital identification systems. It operates across the World Bank Group with global practices and units working on digital development, social protection, health, financial inclusion, governance, and legal issues. World Bank ID4D set a goal of providing everyone on the planet with a legal ID by 2030".

According to the report: "Brief on Digital Identity" published by World Bank Group:

"The rapid growth of mobile phone ownership – which has reached 6.5 billion users globally – is a historic opportunity to reduce the "identity gap." Digital identity is a proven solution to many of the challenges surrounding official identification. The benefits of Digital ID are already being realized in many countries in Sub-Saharan Africa. In Botswana, for example, biometric enrollment of pensions and social grants resulted in 25 percent savings by identifying and cutting numbers that were inflated by duplicate records and deceased beneficiaries. Similarly, in Nigeria, biometric audits reduced the federal pension roll by an impressive 40 percent".

Sources: https://id2020.org/

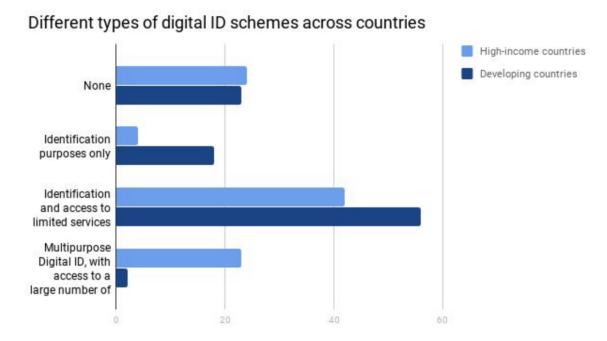
http://pubdocs.worldbank.org/en/413731434485267151/BriefonDigitalIdentity.pdf

http://id4d.worldbank.org/

Digital Identity in developing countries

Accordingly to the World development report from 2016 of the World Bank:

"18% percent of developing countries have a scheme that is used for identification purposes only; 55% have digital IDs that are used for specific functions and services like voting, cash transfers, or health; and only 3% have foundational ID schemes that can be used to access an array of online and offline services. 24% of developing countries have no digital ID system.



Low-income countries, often lack robust civil registration systems and physical IDs and are building their ID systems on a digital basis, leapfrogging the more traditional physically based system. In middle-income countries, digital ID is strengthening and progressively replacing physical identity services while supporting the emergence of some e-services.

Thus, the problem of the lack of IDs in developing countries is real and the national governments are trying to address it and technologies can help them with this task".

Source: http://documents.worldbank.org/curated/en/896971468194972881/310436360 20160263021000/additional/102725-PUB-Replacement-PUBLIC.pdf

https://www.gemalto.com/govt/identity/digital-identity-trends

Bio-identification

In the article "Biometrics in the developing world", Chris Burt states that:

"The recognition that insufficient identity systems are not just a symptom but actually a factor contributing to underdevelopment, access to investment in identity schemes and biometrics has increased in the developing world. The number of people globally without a legal identity is decreasing rapidly, from 1.5 billion in 2016 to 1.1 billion in 2017, according to World Bank estimates, as electronic identification (eID) systems backed by biometrics are implemented in developing nations, most notably India's Aadhaar program. The last billion people to be registered in legal identity schemes, however, will be the most challenging".

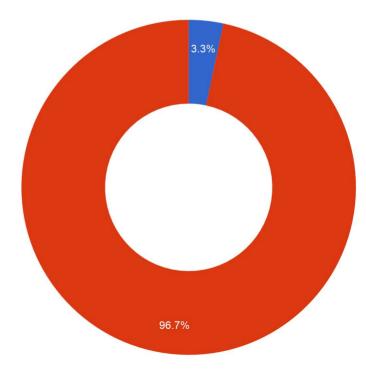
However, in Africa countries this process, due to various social and political reasons, is going slower than in Asia and other developing regions.

The symbiosis of financial services and bio-identification tools can guarantee the ability of a citizens to obtain the access to various necessary social and economic services.

As can be seen on the chart, only 3% of the companies from our list has bio-identification tools.



Non bio-identification



Source: https://www.biometricupdate.com/201707/biometrics-in-the-developing-world

Bio-identification Case of Humaniq

HUMANIQ HOW TO USE



DOWNLOAD APP

Download the mobile application from HUMANIQ.co



BIOMETRIC IDENTIFICATION

Identifiy yourself through our facial and voice recognition system



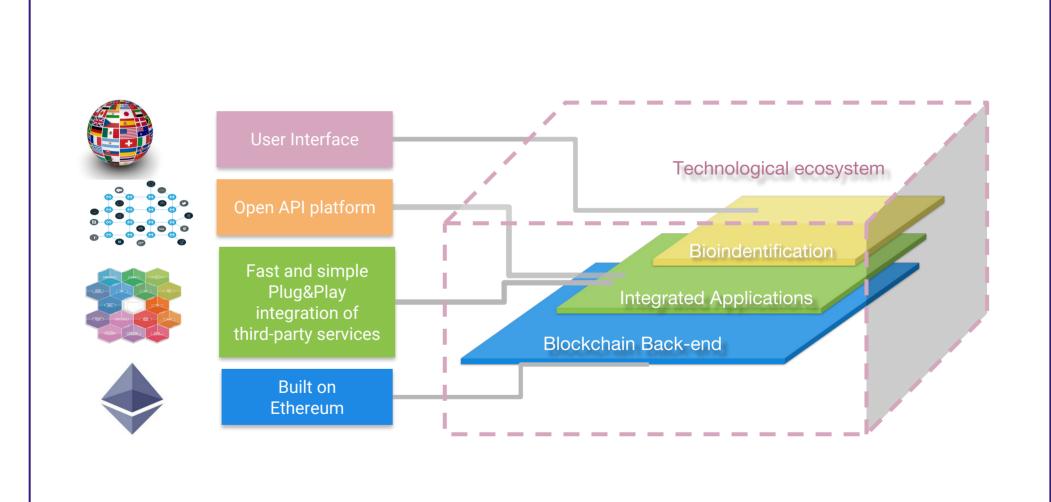
GET MONEY

Humaniq system release additional tokens as rewards for different tasks

Humaniq adopted the dio-identification in order to avoid the problem of lack of ID in Africa countries.



Layers of ecosystem Case of Humaniq





Introduction

This Chapter V lists organizations related to research of financial inclusion process in developing countries, namely access (making financial services available and affordable to users), usage (making customers use financial services frequently and regularly) and quality (making financial services tailored to clients' needs).

As it was mentioned several times above, financial inclusion is necessary to ensure that economic growth performance is inclusive and sustained.

The importance of the research in the area of financial inclusion is extra important for the national governments of developing countries as well as international organizations, and local companies providing services to the population. One of the problems institutions are facing on the ground are cultural and religions specifics which precludes people from obtaining IDs and banking accounts, the first step which must be made in order to address this problem is sociological research, which in turn will provide with necessary information and help government to elaborate policy initiatives.

Another important issue, which is addressed in this chapter is promotion of knowledges about possibilities of integration into economical and social live of the country.

Thus, research organizations provides financial institutions with relevant information about the state of financial inclusion process as well as promoting ideas of financial education and financial inclusion on the ground.

30 Research Centers and Organizations Promoting Financial Inclusion

- Bank Rakyat Indonesia (BRI)
- 2. Better Than Cash
- 3. Bharat Financial Inclusion
- 4. Consultative Group to Assist the Poor
- 5. EFInA
- EPPI Centre
- 7. EY building a better working world
- 8. FIBR
- 9. Financial Inclusion Commission
- 10. Financial Inclusion Insights
- 11. FINCCLUDE Incorporated
- 12. Finclusion Mexico
- 13. Fintec Labs' OptiCollect Fintec Labs
- 14. FinTech4Good
- 15. FinTechStage

http://www.ir-bri.com/

https://www.betterthancash.org/

http://www.bfil.co.in/ http://www.cgap.org/

http://www.efina.org.ng/

http://eppi.ioe.ac.uk

http://www.ey.com/

http://www.fibrproject.org/

www.financialinclusioncommission.org.uk

http://finclusion.org/

http://www.fincclude.org

http://www.finclusion.com/

http://www.finteclabs.com/

https://www.fintech4good.co/

https://www.fintechstage.com/

30 Research Centers and Organizations Promoting Financial Inclusion

16.	FSD Africa	http://www.fsdafrica.org/
17.	Global Impact Investing Network (GIIN)	https://thegiin.org/
18.	GPFI	http://www.gpfi.org
19.	IFMR Holdings	http://www.ifmr.co.in/
20.	International Monetary Fund	http://www.imf.org
21.	ITU	www.itu.int
22.	Mastercard Labs for Financial Inclusion	https://www.mastercard.com
23.	MCKinsey & Company	https://www.mckinsey.com/
24.	MIX	www.Themix.org
25.	NSW Council of Social Service	www.ncoss.org.au
26.	The Center for Financial Inclusion	http://www.centerforfinancialinclusion.org
27.	The Identity Institute	http://www.identitymanagementinstitute.org
28.	Unitus	http://unituslabs.org/
29.	University of Birmingham	www.birmingham.ac.uk
30.	University of Bristol	http://bristol.ac.uk/

Examples of Financial inclusion Research Organizations

The Partnership for Financial Inclusion is a \$37.4 million joint initiative of IFC and the Mastercard Foundation to expand microfinance and advance digital financial services in Sub-Saharan Africa. It is also supported by the Bill & Melinda Gates Foundation and the Development Bank of Austria, OeEB. IFC is a sister organization of the World Bank and a member of the World Bank Group, is the largest global development institution focused on the private sector in emerging markets. The Mastercard Foundation seeks a world where everyone has the opportunity to learn and prosper. The Foundation's work is guided by its mission to advance learning and promote financial inclusion for people living in poverty. One of the largest foundations in the world, it works almost exclusively in Africa.



Philippe Le Houerou



Reeta Roy

IFC's Chief Executive Officer Philippe Le Houerou and Mastercard Foundation President and Chief Executive Officer Reeta Roy stated:

"Financial inclusion is one of Africa's great success stories of this decade. Mobile money solutions and agent banking now offer affordable, instant, and reliable transactions, savings, credit, and even insurance opportunities in rural villages and urban neighborhoods where no bank had ever established a branch".

Over nearly six decades, IFC has invested more than \$25 billion in Africa businesses and financial institutions. IFC is a leading provider of advice to promote a sustainable private sector and mobilize capital from other investors who invest alongside IFC in critical sectors for Africa's future. Riadh Naouar, the head of IFC's Financial Institutions Group Advisory in Sub-Saharan Africa, said:

"Looking ahead, we can see some interesting trends for the future. While East Africa has long been the star performer in terms of the evolution of digital financial services, West Africa is the new growth market. Not only in terms of reach, but also for innovation."



Riadh Naouar

Examples of Financial inclusion Research Organizations

Cenfri is an independent, not-for-profit think-tank and supports financial inclusion and financial-sector development through facilitating better regulation and market provision of financial services. Cenfri does this by conducting research, providing advice and developing capacity-building programmes for regulators, donors, financial service providers (FSPs) and other parties that operate in the low-income market.

Barry Cooper, Technical Director of the Centre for Financial Regulation and Inclusion (Cenfri)



Barry Cooper

"You need legal certainty around an identifier, and many of the jurisdictions don't have that. Some of them don't even have population registration legislation, so there's a big gap, so nobody really knows, and it causes a lot of confusion, a lot of court cases, so I would say that it needs to be underpinned at the legislative level."

Northern Arc Capital is a Non-Banking Finance Company that provides access to debt for under-banked individuals and businesses in India. Through a combination of capital, products and partnerships, Northern Arc have created a platform that connects millions of borrowers to mainstream debt investors.

Kshama Fernandes, Managing Director & CEO of Northern Arc Capital:

"There is a lot more we can do in these domains. The number of new institutions and clients we are working with has increased significantly over the last quarter. That gives a sense of opportunities that exist. We want to go deeper in these existing sectors. We believe there are other opportunities as well. We have been looking closely at corporate finance."



Kshama Fernandes

15 Research Centers and Organizations Promoting Financial Inclusion

- 1. Better Than Cash
- **2.** Consultative Group to Assist the Poorest (CGAP)
- 3. FSD Africa
- 4. EFInA
- **5.** FIBR
- **6.** FINCCLUDE Incorporated
- 7. Finclusion Mexico
- **8.** Fintec Labs' OptiCollect Fintec Labs
- 9. FinTech4Good
- **10.** FinTechStage
- **11.** IFMR Holdings
- **12.** Mastercard Labs for Financial Inclusion
- **13.** The Center for Financial Inclusion
- **14.** The Identity Institute
- **15.** Financial Inclusion Insights

Many organizations and research centers are working on issues of financial inclusion around the world, we chose 15 regional and influencing ones.

"Better Than Cash" alliance is a partnership of governments, companies, and international organizations that accelerates the transition from cash to digital payments in order to reduce poverty and drive inclusive growth. Based at the UN, the Alliance has 60 members, collaborates closely with other global organizations, and is an implementing partner for the G20 Global Partnership for Financial Inclusion. CGAP is a microfinance program housed within the World Bank, is a multi-donor effort designed to reduce poverty by increasing access to financial services for very poor households through financially sustainable institutions. The Center for Financial Inclusion at Accion (CFI) is an action-oriented think tank dedicated to enabling 3 billion people who are left out of or poorly served by – the financial sector to improve their lives. The Mastercard Foundation is guided by its mission to advance learning and promote financial inclusion for people living in poverty. One of the largest foundations in the world, it works almost exclusively in Africa. IFMR Holdings invests in, and operates financial institutions in India with the mission of ensuring that every individual and every enterprise has complete access to financial services.



The Banking System in Africa

In "The Banking System in Africa: Main Facts and Challenges" by Eugene Bempong Nyantakyi and Mouhamadou Sy, it is stated that:

"The Banking system in developing countries is the main engine for financial inclusion in the regions. Since the mid 1980s, many Africa countries have implemented financial sector reforms. Africa's banking industry is as competitive as those in Latin America & Caribbean and not very different from the competitive environment existing in high-income OECD countries. Despite the fact that many Africa banks have moved from manual banking systems to front office digital services and spent the last decade investing in banking infrastructure including online banking and electronic transactions systems, this step did not bring to a strength of banking system. Due the fact that economic growth in sub-Saharan Africa for 2016 slowed to its lowest rate in 20 years. The slow economic growth in much of Africa in recent years has produced an increase in nonperforming loans and weakened the banking industry in some countries".

According to a report published by McKinsey:

"In 2017 banks in Africa had a return on equity, a measure of profitability of nearly 15%, second only to banks in Latin America and more than double that achieved by similar institutions in developed markets in Asia, Europe and the U.S. Further, Africa's banking industry is also expected to grow at a faster annual rate over the next five years compared to its counterparts in developed markets: 8.5% in Africa vs. about 4.5% for banks in advanced countries".

McKinsey estimates that: "there are 100 million active mobile financial services customers in Africa dealing in transactions worth \$2.1 billion and mobile money is the key to growing Africa's banking sector".

Sources: https://www.usatoday.com/story/money/2018/02/27/africas-banks-doing-what-u-s-banks-arent-winning/376033002/
https://www.usatoday.com/story/money/2018/02/27/africas-banks-doing-what-u-s-banks-arent-winning/376033002/
https://www.usatoday.com/story/money/2018/02/27/africas-banks-doing-what-u-s-banks-arent-winning/376033002/
https://www.usatoday.com/story/money-is-key-to-growing-banks-in-africa/

Tendencies

In the "Africa retail banking's next growth frontier" report of the Mckinsey & Company, written by Mutsa Chironga, Luis Cunha, Hilary De Grandis, and Mayowa Kuyoro, states that:

"Africa's banking sector provides a refreshing contrast. Its markets are fast growing and nearly twice as profitable as the global average. Africa's retail-banking penetration stands at just 38 percent of GDP, which is half the global average for emerging markets. Africa's banks face challenges as: low income levels in many countries, widespread use of cash in most economies, and poor coverage of credit bureaus. But some banks are already tapping the opportunities inherent in these challenges. For example, they are harnessing Africa's widespread mobile-phone coverage to create low-price offerings and innovative distribution models. Driven by such innovation, Africa retail banking revenue growth could accelerate significantly in the next five years. Africa today has the second-fastest-growing banking market—taking retail and wholesale banking together—in the world. Between 2012 and 2017, Africa banking-revenue pools grew at a compound annual growth rate of 11 percent in constant 2017 exchange rates. Africa is also the global banking industry's second-most profitable region: the ROE of its banks in 2017 stood at 14.9 percent, second only to Latin America and comparable to other regions such as emerging Asia and the Middle East. The projected growth for Africa's banking-revenue pools of 8.5 percent a year between 2017 and 2022 will bring the continent's total banking revenues to \$129 billion".

On the Africa Development Bank Group website is mentioned that:

"Africa's lack of industries is largely responsible for its low standing in global development. Africa industry generates an average of US \$700 of GDP per capita, barely one-fifth of East Asia's US \$3,400, which probably explains why it continues to depend for most needs on industrialized economies despite its own strong economic growth for almost two decades. Low-tech unprocessed natural resources comprise the bulk of Africa exports, representing more than 80% of exports from Algeria, Angola or Nigeria".

Sources:

https://www.mckinsey.com/~/media/McKinsey/Industries/Financial%20Services/Our%20Insights/Africa%20retail%20bankings%20next%20growth %20frontier/Roaring-to-life-growth-and-innovation-in-Africa-retail-banking-web-final.ashx

https://www.afdb.org/en/news-and-events/2018-annual-meetings-focus-on-accelerating-africas-industrialization-18108/

The Future of Africa Banking: Perspectives

Industrialized Africa is one of the Bank's High 5 priorities to speed up the continent's development. As Bank President, **Akinwumi Adesina** states:

"The secret of the wealth of nations is clear: developed nations add value to everything they produce, while poor nations export raw materials. Africa must quit being at the bottom of the global value chains and move rapidly to industrialize, with value addition to everything that it produces."



The authors of McKinsey's report mentioned that:

"Global media reports are more likely to highlight Africa's social and political problems than its rise as a business market. Yet the reality is that the continent is in the midst of a historic acceleration that is lifting millions out of poverty, creating an emerging consumer class and propelling rapid economic growth in many economies,"

Mutsa Chironga, a partner in McKinsey's office in Johannesburg said:

"Africa banks are innovating the banking business model in much more fundamental ways than banks from some developed countries,"

Africa banks are benefiting from their expansion on the continent: earnings are steadily growing, and franchises are being built across Africa.



Sources: https://www.afdb.org/en/news-and-events/2018-annual-meetings-focus-on-accelerating-africas-industrialization-18108/ https://www.afdb.org/en/news-and-events/2018-annual-meetings-focus-on-accelerating-africas-industrialization-18108/ https://www.usatoday.com/story/money/2018/02/27/africas-banks-doing-what-u-s-banks-arent-winning/376033002/

35 Banks active in Africa / 2017

- 1. Afriland First Bank
- 2. Attijariwafa Bank
- **3.** Banco de Fomento Angola (BFA)
- 4. Banco Millennium Atlantico
- **5.** Banque Internationale Arabe de Tunisie
- 6. Bank of Africa
- 7. Bank of Africa Madagascar
- 8. Barclays Bank Zambia
- 9. BCIMR
- 10. CBZ Bank
- 11. Commercial Bank of Ethiopia
- 12. CRDB Bank
- 13. Ecobank Burkina Faso
- 14. Ecobank Cameroon
- 15. Ecobank Gambia
- 16. Ecobank Togo
- **17.** Equity Bank
- 18. First Bank of Nigeria
- 19. First National Bank of Namibia

- 20. GCB Bank
- 21. I&M Bank Rwanda
- **22.** Millennium bim
- 23. National Bank of Malawi
- 24. Societe Generale Algeria
- **25.** Societe Generale Benin
- **26.** Societe Generale de Banques en Côte d'Ivoire (SGBCI)
- **27.** Societe Generale de Banques en Guinée
- **28.** Societe Generale de Banques au Senegal
- 29. Stanbic Bank Uganda
- **30.** Standard Bank
- 31. Standard Bank Mauritius
- 32. Stanbic Bank Botswana
- **33.** Rawbank
- **34.** Zenith Bank
- 35. Zenith Bank Ghana

Top 10 Most Active Banks In Africa





















Top 10 Most Active Banks In Africa

These banks were included in the Top 10 best banks in Africa because of their strong financial performance and their influence across the continent.

Standard Bank is Africa's largest lender by assets and has a presence in 20 countries on the continent. The bank raised more than \$7 billion of debt for Africa clients, including corporations, from global markets in 2017. French bank Societe Generale has major pan-Africa banking presence with operations in 19 countries on the continent. Ecobank is the best bank in Burkina Faso, Gambia and Togo, Equity Group Holdings doubled its profit growth in 2017 with big gains in foreign exchange and trade finance. Banque Internationale Arabe de Tunisie is the country's largest private-sector bank and now has a network of 203 branches across Tunisia. Millennium bim is the best bank in Mozambique due to its return on average equity of 23.9% in 2017. Bank of Africa was chosen as country winner in Madagascar and Mali. Barclays Bank is the best bank in Zambia because of its 61% increase in headline earnings in 2017 and has been rapidly introducing new digital initiatives in recent years. Zenith Bank is the best bank in Ghana and Sierra Leone.

- 1. Standard Bank
- 2. Societe Generale
- 3. Ecobank
- 4. Equity Bank
- **5.** Banque Internationale Arabe de Tunisie
- **6.** Commercial Bank of Ethiopia
- 7. Millennium bim
- 8. Bank of Africa Group
- 9. Barclays Bank
- 10. Zenith Bank



Introduction

Over the last decade, private financial flows to Africa have risen substantially, growing from 63 percent of total external resources in 2002- 2006 to over 70 percent in 2010-2014.

Impact investment has the potential to complement public spending and ODA, by crowding-in private sector capital and skills to reduce Africa economies' vulnerability to external shocks, providing a market-based solution to address socio-economic needs, and allowing ODA inflows and public spending to focus on addressing social needs for which there is at present no viable market-based solution.

Impact investment today constitutes one of the more proactive and promising approaches on the responsible investment continuum, representing a huge opportunity to contribute to the implementation of the Sustainable Development Goals (SDGs), as well as the funding of inclusive and green businesses.

Impact investors looking to make investments in Africa should be cognisant of some specific factors that characterise enterprises and entrepreneurs in the region. The main characteristics that investors in Africa should be familiar with are the large informal sector, lack of standardised practices and a strong affiliation with the local communities of the enterprise.

Source: http://www.undp.org/content/dam/undp/library/corporate/Partnerships/Private%20Sector/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa/Impact%20Investment%

Who are Impact Investors

"Impact investments are investments made in companies, organizations and funds with the intention of generating measurable social and environmental impact in addition to financial return. Impact investments can be made in both emerging and developed markets, and target a range of returns from below market to market rate, depending upon the circumstances". According to UKAID: "Impact investments can be made across asset classes, including but not limited to cash equivalents, fixed income, venture capital and private equity."

Impact investors aim to finance ventures that will result in a positive social and/or environmental impact in addition to their positive financial return. The term "Impact Investing" was coined in 2007 in an initiative led by the Rockefeller Foundation - giving a name to various social investment methodologies that had been developing and in use, in some instances, for decades. In an initial effort to help coordinate and standardize the sector and to address the ambiguity and potential confusion stemming from such varying definitions of impact investing, the Rockefeller Foundation established the GIIN in 2009. In 2011, the GIIN further developed their definition of impact investing to include the following three criteria:

1.Intentionality	Impact investors aim to address a social and/or environmental challenge. This motivates them to support businesses they believe can tackle challenges, such as poverty, water, sanitation, primary education, health, land degradation habitat loss and others.
2. Investment with return expectations	Impact investments have financial return expectations. Depending on the investors, different levels of financial returns – from capital preservation to market-rate – are acceptable.
3. Impact measurement	Impact investments have financial return expectations. Depending on the investors, different levels of financial returns – from capital preservation to market-rate – are acceptable.

Source: http://www.undp.org/content/dam/undp/library/corporate/Partnerships/Private%20Sector/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20Africa_Trends,%20Constraints%20and%20Opportunities.pdf
http://www.theimpactprogramme.org.uk/what-is-impact-investment/

Types of Impact Investors

Today, Development Finance Institutions (DFIs) are the main impact investors in Africa in terms of proportion of capital. Other investors include Funds, Private Foundations, high net-worth individuals and Institutional Investors such as Diversified Financial Institutions (commercial banks), Pension Funds, Insurance Companies and others. Investors can either be categorised as wealth holders or wealth managers.

For instance, DFIs mainly act as wealth holders, and are classified into a sustainable social enterprise and/or deploy capital into funds that then invest into enterprises. Funds are also categorised as investors even though they are wealth managers and invest the capital of wealth holders into enterprises.

Investor Types	Typical Financial Products	Typical Sector Focus in Africa	Average Deal Size Range (\$)
Development Finance Institutions	Equity, debt, mezzanine, quasi- equity, guarantees and grants.	Infrastructure, financial services, agriculture, energy	\$5 million – over \$50 million
Fund Managers	Grants, equity, debt, quasi equity, inventory finance.	Infrastructure projects, agriculture, telecommunica tion, retail, financial services.	Early stage finance: less than \$50,000. Venture capital & private equity \$500,00 - \$1million.
Foundations & Private Foundations	Equity, debt, grants, quasi- equity for seed stage.	Access to basic services, social/ human development	\$500,000 - \$5 million
Institutional Investors	Providing co-investments Through debt (banks) or invest in funds.	Projects (i.e. agriculture, energy, water, transportation).	

Directions of Investments

According to the "Impact Investment in Africa: Trends, Constraints and Opportunities" report published by UNDP:

"Improved service provision in the areas of education, health, agriculture and food security, energy access, affordable housing, financial inclusion and infrastructure would contribute to reductions in inequality, gains in human development and improvements in resilience and protection against vulnerability to shocks. The examples below provide an indication of the potential of sustainable social enterprises and collaborative public private partnerships projects to emerge and absorb impact investment capital for the achievement of broad based human development goals".

Education



"Access to education remains a substantial challenge in Africa. In 2012, 56 million sub-Saharan Africas aged 15 to 24 (equal to one third of the population), had not completed their primary school education. The consequences of low levels of access to education are significant as education plays an important role in determining future employment prospects, and represents one of the main paths to escaping poverty and contributors to human development gains".

Healthcare, Water and Sanitation



population has low or no access to basic health care services. In addition, more than 800 million Africas do not have adequate sanitation services and almost 300 million live without access to clean and safe water, with devastating effects on their health and quality of life. Therefore, a solution to this disease burden would help to address fundamental health challenges".

"The World Health Organization (WHO) estimates that approximately 47% of the Africa

Agriculture and Food Security



"Approximately 21% of Africa's population is malnourished. Hunger and poor food security lead to undernutrition, with dire consequences on health, well-being, and economic capacity and growth. Africa contains 60% of the world's uncultivated arable land, approximately 70% of the population is directly employed in the sector, and it accounts for approximately 30% of the region's GDP".

Source: http://www.undp.org/content/dam/undp/library/corporate/Partnerships/Private%20Sector/Impact%20Investment%20in%20Africa/Impact%20Investment%20Inves

Directions of Investments

Energy Access



"More than 700 million people (two-thirds of the population) in Africa live without access to electricity. Access to energy for cooking, lighting and heating therefore remains a key challenge for many Africa households with many relying on the traditional use of solid biomass - firewood and charcoal and dried animal dung - for cooking. For households living off the grid, kerosene lamps are the primary lighting source—an expensive technology that is also unsafe, because kerosene is flammable as well as poisonous when inhaled or ingested".

Infrastructure



"Infrastructure development is critical to economic growth and development on the Africa continent, and remains one of the main obstacles to productivity. The Africa Development Bank (AfDB) estimates that Africa spends an average of \$45 billion a year on infrastructure and that most of the capital funding this investment is from external or foreign sources. Therefore, in order for the continent to continue its infrastructure development, a sustained level of investment is necessary".

Financial Services



"Despite the recent financial sector growth in Africa over the past decades, many individuals and firms are still excluded from access to financial services in Africa countries. According to the Africa Development Bank, less than one in four Africas have a bank account at a formal financial institution.available Africa financial services lag behind other developing economies in terms of cost-structure, distance to bank, and documentation requirements, which are all important obstacles to increasing access to financial services".

Access to Affordable Housing



"Urbanization is a strong component of Africa's economic growth. With an annual urbanization rate of 3.5 percent over the past two decades, Africa cities are the fastest growing in the developing world. One of the central challenges created by Africa's rapid urbanization is poor-quality housing units, or "urban slums", in some of the continent's cities. The Africa slum population is estimated at 400 million people representing 40.2 percent of its population".

Source: http://www.undp.org/content/dam/undp/library/corporate/Partnerships/Private%20Sector/Impact%20Investment%20in%20Africa/Impact%20Investment%20in%20 Africa Trends,%20Constraints%20and%20Opportunities.pdf

Case Study

DFIs have been instrumental in developing private sector activity in West Africa, not only through direct investments made into enterprises, but also by investing in private equity, venture capital, and microfinance investment vehicles, providing technical assistance and advisory services and providing lines of credit and guarantee services for commercial banks to encourage local lending and investment.



"One of our key objectives is to mobilise other sources of private finance, so we try to encourage other domestic institutional investors to invest alongside us."

DFI in Senegal

The last decade has seen a rise in Africa philanthropic institutions and philanthropic activities founded by high net worth individuals such as ex-presidents, musicians, athletes, and successful businessmen. These new Africa foundations are rising up next to the more established international foundations working to address some of Africa's social and environmental problems through their grant-making activities.

"We provide smaller amounts of money than a bank and take more risks."

Foundation in Nigeria



Source: https://assets.rockefellerfoundation.org/app/uploads/20150610104900/Impact-Investing-in-West-Africa.pdf

Case Study

Since formal philanthropic institutions are new to Africa, especially West Africa, most philanthropic activity takes the form of Africans investing in their own communities, or Africans living abroad sending money home. Though many of these individuals are investing their wealth to solve social challenges, since it is done informally, it is impossible to measure.



"Angel investing is happening in Ghana but you would never hear about it publicly."

SME support organisation in Ghana

GroFin recognises that every business is different, and does not use a standard interest rate to lend to entrepreneurs. Instead, it takes into consideration the development stage of the business, the projected cash flow and profitability, the risk involved, the entrepreneurs' capital contribution and any collateral they provide. It then works with the entrepreneur to develop their business and managerial skills



Source: https://assets.rockefellerfoundation.org/app/uploads/20150610104900/Impact-Investing-in-West-Africa.pdf

Top 100 Impact Investors in Africa Countries

1.	Actis Africa Agribusiness Fund	34.	DEG	67.	Investment Fund for Health in Africa
2.	Acumen Fund	35.	Développement international Desjardins	68.	JP Morgan
3.	Adlevo Capital	36.	Ebankese Venture Fund	69.	ManoCap Soros Fund
4.	Africa Enterprise Challenge Fund	37.	ECHOVC PARTNERS	70.	National Investment Bank
5.	Africa Finance Corporation	38.	Ecobank	71.	Nigeria International Bank (Citigroup)
6.	Africa Infrastructure Investment Fund II	39.	Energy Access Ventures	72.	Norfund
7.	Africa Development Bank	40.	Equity Bank	73.	Novastar Ventures
8.	Africa Development Partners I, LLC	41.	eVentures Africa Fund	74.	OeEB
9.	AfricInvest Financial Sector	42.	Export Capital	75.	Omidyar Network
10.	AfricInvest I	43.	Fanisi	76.	OPIC
11.	Amalgamated Capital Fund Ltd	44.	Fidelity Equity Fund I	77.	Pan-Africa Investment Partners II
12.	Aspire Nigeria	45.	Fidelity Equity Fund II	78.	Proparco
13.	Atlantic Coast Regional Fund	46.	FinnFund	79.	Root Capital
14.	Aureos West Africa Fund	47.	First City Monument Bank	80.	Savannah Fund
15.	Aventura Rural Enterprise Fund	48.	FMO	81.	SGSSB
16.	AXA Assurances	49.	Fonds Gari	82.	Shell Foundation
17.	Bank of Africa	50.	Gatsby Charitable Foundation	83.	SIC Insurance Company Ltd
18.	Banque Atlantique de Côte d'Ivoire	51.	Ghana Commercial Bank	84.	Sierra Investment Fund
19.	Banque de Developpement du Mali	52.	Ghana Union Assurance	85.	SIFEM
20.	Banque Togolaise de Developpement	53.	Goodwell West Africa Microfinance	86.	SIMEST
21.	Bedrock Venture Capital Finance		Development Company	87.	Skye Bank
	Limited	54.	Government Employees Pension Fund	88.	Sonibank
22.	Bill & Melinda Gates Foundation		of South Africa	89.	SOVEC Fund
23.	BIO	55.	Grassroots Business Fund	90.	SSNIT
24.	BOAD	56.	Gray Matters Capital	91.	Swedfund
25.	Caisse Nationale de Securite Sociale	57.	GroFin Africa Fund	92.	The Africa Private Equity and Venture
26.	Cauris Croissance	58.	Heirs Holdings		Capital Association
27.	Cauris Investissements	59.	Helios Investors II	93.	The Entrepreneur's Empowerment Fund
28.	CBAO	60.	HFC Bank	94.	TIAA CREF
29.	CDC Group	61.	I&P Investment Company	95.	Tony Elumelu Foundation
30.	China Africa Development Fund	62.	IBTC Chartered Bank Ltd	96.	Universities Entrepreneurial Fund
31.	Cofides	63.	ICF – Debt Pool	97.	West Africa Agricultural Investment Fund
32.	Cordiant Capital Canada Investment	64.	IFC	98.	West Africa SME Growth Fund
	Fund for Africa	65.	IFU	99.	West Africa Venture Fund
33.	Cordiant Emerging Loan Fund III	66.	InfraCo Africa	100.	Zenith Bank
		I		1	



3 Technological Generation of FinTech companies

What Distinguishes 1st Generation of FinTech Apps from 2nd and 3rd Generations of FinTech Apps?

Organizations involved in Financial Inclusion initiatives in developing countries can be divided into 3 generations:

1st Generation initiatives can be classified initiatives that mainly use ink and paper to serve their clients. Basic technologies are involved.

2nd Generation initiatives use mobile applications incorporating data analysis and basic algorithms for various tasks, such as data encryption or client profile analysis.

3d Generation initiatives use advanced technologies, which reduce operation costs. Moreover, these organizations are using gamification methods in order to educate customers about possible services, as well as help people without government-issued IDs to gain access to financial services via Bio-identification systems.

	Technologies	Gamification	Crypto Economy	Biometric identification systems	ChatBots	Blockchain	AI
19XX - 2016	1st Generation	-	-	-	-	-	-
2017 - 2018	2nd Generation	-	+	+	-	-	+
2018 - 2019	3d Generation	+	+	+	+	+	+

Comparative Analysis of FinTech companies involved in Financial Inclusion in developing countries

Project name	Blockchain	ChatBot	Biometric identification systems	Gamification	Machine Learning // Algorithms	Budget	Downloads
	+	+	+	+	+	\$5,200,000	200,000+
	+	-	+	+	+	\$2,600,000	N/A
	+	-	+	-	+	\$125,800,000	1,500,000 clients
		+	-	+	+	\$1,200,000	10,000
	-	-	+	+	+	\$2,300,000	N/A
	-	+	-	+	+	\$30,000,000	N/A
	+	-	-	+	+	\$509,000,000	230,000,000+
	-	+	-	-	+	\$110,600,000	1,000,000+
	-	-	-	-	-	N/A	1,100,000+
	+	-	-	+	+	N/A	N/A

Comparative Analysis of FinTech companies involved in Financial Inclusion

Comparative Analysis of FinTech companies involved in Financial Inclusion



Emerging FinTech apps and services now serve as the most optimal gateway for populations of the developing nations to gain access to basic financial services. Moreover, access to such services also serve as gateways to many other opportunities; it also means access to participation within the global economy, and through this, to further socioeconomic development.

In this report, we have identified a specific set of emerging technologies that can help to overcome the roadblocks in terms of facilitating greater financial inclusion. These include:

- Artificial Intelligence
- Bio-identification, which can be used as proof-of-identity mechanisms for clients who do not possess the necessary forms of government-issued ID that banks traditionally require when opening accounts;
- Blockchain-enabled infrastructures which allow transactions to occur in a secured and provable manner,
- Chatbots, which can serve to overcome the illiteracy barrier that makes many segments of rural populations unable to interact with banks via text-based interfaces and statements;
- Gamification (the use of game elements and game design techniques in a non-game context), which can be
 used as a tool for educating clients on the use of financial service interfaces, and ultimately serve as a tool for
 enhancing user experience, satisfaction and, above all else, user engagement.

The synergetic convergence of the above core technologies will enable increased financial inclusion in the developing regions and will take shape within the next 5 years, and prove to be the most disruptive factors changing the shape of the financial services industry in the developing regions.

More than this, it will prove to be among the most powerful forces for increasing the quality of life for rural populations of developing nations who current lack not just access to basic financial services, but also to basic human amenities and human rights.

All these activities surrounding "FinTech for Social Good" and Financial Inclusion in developing regions represents more than just than just outstanding business opportunity; it represents a clear path toward humanitarian good, impact investment, ethical business and above all else, towards accelerating the socioeconomic development of emerging countries.

Appendix Profiles

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
1. Aella Credit	Aella Credit provides instant credit solutions to Africas.	2015	11-50	United States	https://www.ae llacredit.com/	\$150,000	12513
2. Agrocena	AgroCenta is an online platform that connects smallholder farmers directly to a market to trade fairly.	2016	11-50	Ghana	https://agrocen ta.com/	\$500,000	N/A
3. AirFox ICO AirFox	Airfox provides mobile financial services to the unbanked & those not served well by traditional banks in emerging markets using blockchain.	2016	11-50	United States	https://airtoke n.com/	\$16,200,000	521
4. Amber Financial Services	Amber Financial offers financing for your home renovation personal purchase in addition to any other financial need	2015	11-50	Richmond, British Columbia, Canada	https://amberfi nancial.com/	\$5,000,000	N/A
5. Artawana artawana	Artawana is a marketplace for highly secured loan products for everyone.	2016	N/A	Jakarta, Jakarta Raya, Indonesia	https://www.art awana.com	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
6. AsiaKredit AsiaKredit	AsiaKredit (asiakredit.com) provides a fast and convenient consumer loan product through a mobile app to Southeast Asia's unbanked.	2017	11-50	Singapore Asia-Pacific (APAC)	http://www.asi akredit.com/	\$675,000	N/A
7. Aspire Singapore	Aspire is a lending platform providing loans to small businesses in South East Asia.	2018	1-10	Singapore Asia-Pacific (APAC)	https://aspire-c ap.com	\$120,000	N/A
8. Atikus	Atikus seeks to improve financial inclusion for micro, small and medium enterprises.	2013	1-10	United States	https://atik.us/	\$50,000	N/A
9. Atombank	Atom Bank is a mobile banking application that offers a range of personal and business banking products.	2014	11-50	United Kingdom	https://www.at ombank.co.uk/	\$440,000,00 0	N/A
10. Avante	Avante empowers micro-entrepreneurs in financial-inclusion markets, by leveraging technology to humanize financial services	2012	101-250	Brazil Latin America	http://www.ava nte.com.vc	\$18800000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
11. Awamo	Mobile, biometric banking app for microfinance	2015	11-50	Germany European Union (EU)	http://awamo.c om	\$2300000	N/A
12. Ayannah ayannah	Ayannah provides digital commerce and payment services to the unbanked in emerging markets and the unbanked migrants in OECD countries.	2010	11-50	Philippines Asia-Pacific (APAC),	http://www.aya nnah.com/	\$7,900,000	110
13. Bank4you.io	Bank4YOU Group, an international consortium of fin-tech service companies.	2013	N/A	United Kingdom	https://bank4y ou.io/	\$2,000,000	1000
14. BankBazaar	BankBazaar.com is a neutral online marketplace that gives instant customized rate quotes on loans and insurance products.	2008	1001-5000	India Asia-Pacific (APAC)	https://www.ba nkbazaar.com/	\$109,000,00 0	28828
15. BanQu Dignity Through	BanQu seeks to provide financial inclusion for the un/underbanked of the world using blockchain technology	2015	1-10	Minneapolis, Minnesota, United States	http://www.ban quapp.com/	\$2600000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
16. Baobab Baobab	Baobab is a digital finance company focusing on financial inclusion in Africa and China.	2005	1001-5000	France European Union (EU)	https://www.ba obab.bz/	125800000	N/A
17. Bharat Financial Inclusion	Bharat Financial Inclusion is a non-banking financial company-micro finance institution (NBFC-MFI).	1997	10001+	India Asia-Pacific (APAC)	http://www.bfil. co.in/	\$61,600,000	N/A
18. BigWin Infotech BigWin Infotech Innovate Transform Grow	Indian Fintech Startup, operates as Peer-to-Peer Lending through its MarketPlace www.PaisaDukan.com enabling Financial Inclusion.	2017	11-50	India Asia-Pacific (APAC)	http://www.big wininfotech.co m/	N/A	N/A
19. Billon Group billon	Billon Group is a tech company that uses blockchain to create next-gen solutions that reimagine the flow of regulated money and data.	2012	51-100	United Kingdom	http://www.bill ongroup.com	\$12,600,000	N/A
20. BIMA	BIMA is an insurance tech player that uses mobile technology to disrupt the global insurance industry and fuel financial inclusion.	2010	1001-5000	Stockholm, Stockholms Lan, Sweden	http://bimamob ile.com	\$110,600,00 0	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
21. Bitsoko	Bitsoko is a mobile payment platform that uses blockchain technology	2015	11-50	Africa	https://bitsoko. co.ke/	N/A	N/A
22. BKash bKash	BKash Limited (a subsidiary of BRAC Bank Limited) is dedicated to providing Mobile Financial Services in Bangladesh.	2011	501-1000	Bangladesh Asia-Pacific (APAC)	http://www.bka sh.com/	N/A	500000
23. Blooom	blooom is a online investment advisor that manages employer sponsored retirement accounts (401k, 403b, TSP) for individual clients.	2013	11-50	United States	https://www.bl ooom.com/	\$13,200,000	N/A
24. BlueOrchard Finance S A	BlueOrchard Finance is a impact investment manager.	2001	51-100	Geneva, Switzerland	http://www.blu eorchard.com	N/A	N/A
25. BPI Globe BanKO	BPI Globe BanKO is the Philippine's first mobile phone-based, microfinance-focused savings bank.	2009	51-100	Philippines Asia-Pacific (APAC)	http://banko.co m.ph	N/A	1695

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
26. Branch International branch	Branch is a new way to access credit over a smartphone in emerging markets.	2015	51-100	United States	https://www.br anch.co/	\$81,200,000	34493
27. Brazil Plus	Brazil Plus advances financial inclusion for small and medium-sized companies in Brazil.	2008	1-10	Brazil Latin America	http://www.bra zilplus.com/	\$2,000,000	N/A
28. Capital Float	Capital Float is an online platform that provides working capital finance to SMEs in India.	2013	51-100	India Asia-Pacific (APAC)	https://www.ca pitalfloat.com/	\$117,700,00 0	967
29. CapWay	CapWay is a mobile application company that serves the unbanked and under-banked through specialized financial services and products	2016	N/A	N/A	http://capway.c o/#!/	N/A	N/A
30. Cellulant	Cellulant is a leading multinational payments company in Africa on a mission to digitise payments for Africa's largest economies.	2004	251-500	Kenya Africa	http://www.cell ulant.com/	\$54,500,000	1246

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
31. Cignifi	Cignifi uses mobile behavior data in emerging markets to deliver credit scores and marketing tools to telecom and financial companies.	2010	11-50	United States	https://cignifi.c om/	\$7,700,000	N/A
32. Clix Capital	Clix Capital is a financial services platform engaged in commercial lending business.	2016	101-250	India Asia-Pacific (APAC)	http://www.clix. capital/	N/A	N/A
33. Compareasiagr oup	CompareAsiaGroup is a personal finance management platform committed to help people across Asia to save time and money.	2013	101-250	China	http://www.co mpareasiagrou p.com/	\$96,000,000	N/A
34. ConnectAfrica	ConnectAfrica is a B2B technology solution connecting various payment networks together.	2016	N/A	Kenya	http://www.ca- payment.com/	N/A	N/A
35. Coverfox Insurance	Coverfox Insurance Broking provides insurance brokerage services	2013	51-100	India Asia-Pacific (APAC)	https://www.co verfox.com/	\$41,500,000	2220

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
36. Coverwallet	Insurance management for your business, all online.	2015	11-50	United States	https://www.co verwallet.com/	\$28,300,000	1000
37. Cow-Token	is a fintech company serving the under-served, by using crypto-assets to unlock value in their illiquid assets.	N/A	N/A	Southeast Asia	https://infocorp .io/	N/A	N/A
38. Creditease 宜信 CreditEase	CreditEase is a business consulting firm that offers wealth management services.	2006	10001+	China	http://english.c reditease.cn/	\$20,000,000	5775
39. CreditMantri Credit Mantri	We help you take charge of your Credit Health.Get Free Credit Score online. Get Free Credit Health Analysis of your Credit & Equifax® report	2012	51-100	India Asia-Pacific (APAC)	https://www.cr editmantri.com /	\$10,200,000	100000
40. CredoLab	CredoLab (www.credolab.com) provides revolutionary smartphone-based credit scoring solutions to banks, consumer lenders and retailers.	2016	11-50	Singapore Asia-Pacific (APAC)	http://www.cre dolab.com	\$2,100,000	29496

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
41. Dewan Housing Finance	DHFL, one of India's leading housing finance company	N/A	5001-10000	India Asia-Pacific (APAC)	http://www.dhfl .com/	N/A	N/A
42. Dianrong	Dianrong is an online marketplace lending company that uses technology to transform the way China is financed to help enrich people's lives.	2012	1001-5000	China	http://en.dianro ng.com/	\$509,000,00 0	1000
43. Digit	Digit checks your spending habits and removes a few dollars from your checking account if you can afford it.	2013	1-10	United States	https://digit.co/	\$36,300,000	100000
44. Domus Semo Sancus DSS DOMUS SEMO SANCUS	Domus Semo Sancus a financial technology that is building tools to encourage financial inclusion & bridge e-commerce divide.	2014	N/A	United States	http://semosan cus.com/	N/A	N/A
45. Ellevest	Ellevest offers digital investment advice for women.	2014	11-50	United States	https://www.ell evest.com/	\$44,600,000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
46. Everex ICO	Everex is a young technology startup .	2016	1-10	Singapore Asia-Pacific (APAC)	https://www.ev erex.io/	\$26,500,000	5000
47. Farmdrive	FarmDrive is a Kenyan-based social enterprise that connects unbanked and underserved smallholder farmers to credit.	2014	1-10	Kenya Africa	https://www.far mdrive.co.ke/	N/A	21
48. Fettle Group Fettle	Health Coverage through Financial Inclusion	2015	N/A	Africa	https://www.fet tlegroup.com	N/A	N/A
49. Finadev	Finadev is a microfinance investment vehicle that provides financial services, in particular loans, primarily to the informal sector.	N/A	N/A	Edo, Nigeria	http://finadev-g roupe.com	N/A	N/A
50. Financial Software Systems FSS POWERING PAYMENTS	Financial Software and Systems (FSS) is a leading global payment systems company offering business value in the areas of electronic payment.	1991	1001-5000	India Asia-Pacific (APAC)	http://www.fsst ech.com/	\$99,500,000	11574

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
51. FlexM	FlexM is a financial service provider, offering state-of-the-art electronic payment solutions in Asia for consumers and corporates	2014	1-10	Singapore Asia-Pacific (APAC)	https://flexm.c om	\$664,000	N/A
52. Forusall	ForUsAll fixes retirement plans for millions of small and medium sized businesses.	2014	11-50	United States	https://www.for usall.com/	\$33,800,000	N/A
53. Ftcash	ftcash empowers the underserved micro-merchanrs through financial inclusion using digital payments and loans.	2015	101-250	India Asia-Pacific (APAC)	http://www.ftca sh.com/	\$3,000,000	N/A
54. Fundbox	Leverages deep data analytics to accelerate cash flow and clear invoices for small businesses	2012	51-100	United States	https://fundbox .com/	\$107,500,00 0	N/A
55. Fundera	Small Business Owner's Best Friend	2013	51-100	United States	https://www.fu ndera.com/	\$18,900,000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
56. Funding Societies	Funding Societies is an online peer-to-peer lending marketplace for SMEs to acquire loans and fuel their growth through investor funding.	2015	101-250	Singapore Asia-Pacific (APAC)	https://funding societies.com	\$32600000	6309
57. Funds & Electronic Transfer Solutions fetswalle	The company is a Central Bank of Nigeria (CBN) licensed mobile money operator, our strength is drawn from an internal team of professionals with strong background in Banking, E-Commerce, and Information and Communication Technology.	N/A	N/A	Nigeria	https://www.fet swallet.com/ho me/base#/inde X	N/A	N/A
58. Fuzo Limited Fuzo	Financial Inclusion As a Service - Open Transaction & Identity Platform for Mobiles	2014	1-10	Victoria, Australia	http://fuzo.com	N/A	N/A
59. GetBucks	GetBucks is a fintech company that embraces technology as a means to provide financial products and services to its customers.	2010	N/A	Gauteng, South Africa	https://za.getb ucks.com	N/A	1900
60. GoSwiff	Mobile Commerce Leader Offering integrated payment gateways and mobile applications for online, mobile and in-store payments	2010	51-100	Singapore Asia-Pacific (APAC)	http://www.gos wiff.com	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
61. Groupe COFINA	Groupe COFINA is an Africa financial institution dedicated to mesofinance.	2013	N/A	Abidjan, Lagunes, Côte d'Ivoire	http://www.gro upecofina.com	N/A	N/A
62. Guiabolso GuiaBolso	GuiaBolso is Brazil's leading personal finance platform, with over 4M users of its #1 Finance app and consumer credit marketplace.	2012	101-250	Brazil Latin America	https://www.gu iabolso.com.br	\$74,000,000	120674
63. Hero	Hero's mission is to make credit more readily available and affordable for the unbanked or underbanked, starting in Southeast Asia.	N/A	N/A	Southeast Asia	<u>herotoken.io</u>	N/A	N/A
64. Humaniq	Humaniq is a London-based Fintech firm that provides next generation financial services using its Blockchain-based mobile application.	2016	10-50	United Kingdom	https://humani q.com/	\$5,200,000	200000+
65. i-Pay EFT Payment	I-Pay is an instant EFT payment service in South Africa that allows your customer to make secure online payments directly into your bank.	2014	1-10	South Africa	http://instanteft .i-pay.co.za/	\$800,000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
66. Inclusivity.netw ork	Banking without Banks and Telecommunication companies : Banking as a Right, "BaaR"	2017	10-50	N/A	http://inclusivit y.network/en/	N/A	N/A
67. InVoiceWorkx INVOICEWORX CASh flow made possible	Invoiceworx is working capital financing platform that provides access to inventory and purchase order financing for small businesses.	2015	N/A	Gauteng, South Africa	https://www.in voiceworx.co.z a/	N/A	N/A
68. lyzico	iyzico is a payment receipt system management platform that offers ePayment solutions.	2012	11-50	Turkey Europe	https://www.iyz ico.com/	\$24,000,000	2928
69. Janalakshmi	Janalakshmi Financial Services is a for-profit NBFC serving the urban underserved.	2006	10001+	India Asia-Pacific (APAC)	http://janalaks hmi.com	\$594,000,00 0	N/A
70. Juntos	Juntos was founded in 2010 out of the Stanford d.school with a mission to build digital mobile tools.	2010	51-100	United States	http://juntosglo bal.com/	\$7,400,000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
71. Juvo	Juvo establishes financial identities for the billions of people worldwide who are creditworthy, yet financially excluded.	2014	11-50	United States	https://juvo.co m/	\$54,000,000	100
72. Kashio INC	KashIO is a real Cash Alternative for all people and businesses in the digital world.	2017	1-10	N/A	https://www.ka shio.net	N/A	N/A
73. Kobocoin Kobocoin	Kobocoin is a digital currency and payment system similar to Bitcoin, with an African heritage.	N/A	1-10	Africa	http://kobocoin .com/	N/A	N/A
74. Konfio <i> ≪ konfio</i>	Konfio is an online lending platform for small business loans	2013	101-250	Mexico Latin America	https://konfio. mx/	\$18,100,000	5000
75. KongaPay	Konga.com is Nigeria's largest online mall. We launched in July 2012 and our mission is to become the engine of commerce and trade in Africa.	2012	N/A	Nigeria	https://www.ko nga.com/kong apay/	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
76. Kora	Kora provides an infrastructure that addresses all of an emerging market's needs.	2017	N/A	N/A	https://kora.net work/	N/A	N/A
77. Kredico	Kredico is an online credit scoring service for personal and corporate clients.	2015	1-10	Turkey Europe	http://www.kre dico.com/	\$205,000	N/A
78. Kreditech Holding	Kreditech uses machine-learning technologies to provide access to better credit for the underbanked	2012	251-500	Germany European Union (EU)	https://www.kr editech.com/	\$497,300,00 0	N/A
79. Kudi	Kudi is a financial service provider that focuses on providing access to electronic banking and financial services.	2016	1-10	Lagos, Lagos, Nigeria	https://kudi.ai/	N/A	1329
80. L-Pesa Microfinance	L-pesa is a financial services company which is presently providing its financial solutions in Tanzania.	2015	N/A	Africa Tanzania.	https://www.l-p esa.com	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
81. Ladder	Life insurance built to be instant, simple, and smart	2015	11-50	United States	https://www.la dderlife.com/	\$44,000,000	N/A
82. Lala World	LALA World is building a Global Digital Decentralized Financial Ecosystem to support the inclusion of the Unbanked, Undocumented, Micro-entrepreneurs, Students and everyone else.	2017	11-50	Singapore Asia-Pacific (APAC)	https://lalaworl d.io/	\$2,000,000	1000
83. Lenddo	Lenndo is a technology company that uses non-traditional data to provide credit scoring and verification.	2011	51-100	Hong Kong, Asia	www.lenddo.c om	\$14,000,000	N/A
84. Lendingkart LENDINGKA T This Cast. This Lendingus Grad	Lendingkart is an online financing company	2014	101-250	India Asia-Pacific (APAC)	https://www.le ndingkart.com/	\$156,100,00 0	50000
85. LendUp	LendUp is a socially responsible lender for the 56% of Americans shut out of mainstream banking due to low credit or volatile income	2011	101-250	United States	https://www.le ndup.com/	\$361,500,00 0	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
86. Level one project Level One Project	"At the heart of the Level One Project Guide is a national digital financial services system, enabled by shared, open, standards-based components"	2015	N/A	N/A	https://levelon eproject.org/	N/A	N/A
87. Loanadda	LoanAdda is a fintech company delivering custom-tailored financial services with focus on under-banked customers coalescing technology.	2015	11-50	India Asia-Pacific (APAC)	https://www.lo anadda.com	N/A	N/A
88. Lufax Lufax.com	Shanghai Lujiazui International Financial Asset Exchange ("Lufax") is an online marketplace for trading of financial assets.	2011	501-1000	China	https://www.lu. com/	\$1,700,000,0 00	20498
89. m-kopa M-K@PASOLAR	To make life-changing energy solutions affordable to low income customers.	2011	251-500	Kenya Africa	http://www.m-k opa.com/	\$161,800,00 0	419
90. M-NAIRA	BeepTool is a mobile micro-payments, messaging and voice app used by thousands of customers across the Africa continent.	2014	1-10	Nigeria	https://www.be eptool.com/mn aira/	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
91. M-pesa m-pesa	M-Pesa is a fast, secure and convenient way to transact on mobile brought to you by Vodafone.	N/A	N/A	Kenya	https://www.m pesa.in/	N/A	34636
92. MamboPay	MAMBOPAY is a payment gateway focused on driving accountability and financial inclusion through purpose-bound digital coupons and cards.	2015	N/A	Uganda	http://mambop ay.net/	N/A	N/A
93. Mambu MAMBU	Mambu is the leading SaaS banking engine powering innovative lending and deposits.	2011	101-250	Germany European Union (EU)	https://www.m ambu.com/	\$13,100,000	130
94. Margdarshak Financial Services	A holistic bouquet of financial products and services Company.	2007	501-1000	India Asia-Pacific (APAC)	http://www.mar gdarshak.org.i n/	\$3,000,000	N/A
95. Matchmove	MatchMove is a financial technology company that provides businesses the ability to offer a fully branded mobile wallet and payments system.	2009	101-250	Singapore Asia-Pacific (APAC)	atchmove.com	\$30,000,000	1000

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
96. Maxicash	Maxicash is a Fintech company & developer of a mobile app that helps Africa financially support their loved ones back home.	2015	1-10	South Africa	http://maxicas happ.com/	N/A	2024
97. Microensure	MicroEnsure is a specialist provider of insurance to the low and middle-income market with more than four million active clients in 13	2005	51-100	South Africa	https://microen sure.com/	\$10,400,000	N/A
98. MicroMoney	We provide a multi-purpose digital identity and opportunities to build creditworthiness and reputation for 2.5 bln unbanked people.	2015	51-100	Singapore Asia-Pacific (APAC)	https://www.mi cromoney.io/	\$6,800,000	100000
99. Mifos Initiative Mifos Initiative	The Mifos Initiative is an open source foundation that stewards the development of the Mifos Platform for Financial Inclusion	2012	1-10	Edmonds, Washington, United States	http://www.mif os.org	N/A	N/A
100. Mirador MIRADOR	Mirador is the leading front-end small business lending platform supporting established lenders with application through underwriting.	2014	11-50	United States	https://www.mi radortech.com/	\$9,700,000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
101. Mobikwik	MobiKwik is a popular mobile wallet app in India. Millions of Indians use it for shopping, P2P money transfer, & bill payments.	2009	101-250	India Asia-Pacific (APAC)	https://www.m obikwik.com/	\$162,200,00 0	208482
102. Moneyfellows MoneyFellows	MoneyFellows gives individuals access to interest free credit and better saving achievements, powered by just their social network.	2014	1-10	United Kingdom	https://moneyf ellows.com/	\$616,300	2629
103. Moneyview	Money View is a user-friendly Android app that uses information from SMSes sent from banks, merchants.	2014	11-50	India Asia-Pacific (APAC)	https://moneyv iew.in/	\$10,100,000	10000000
104. Mosaic	Mosaic is the nation's leading residential solar lending platform, enabling thousands of people to profit from the benefits of clean energy.	2011	101-250	United States	https://joinmos aic.com/	\$487,200,00 0	N/A
105. Movilway	Movilway is the leading service network, mobile recharge coverage and electronic payments in Latin America.	2010	501-1000	Latin America.	http://movilway .com	N/A	1303

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
106. Mpurse	Mpurse wallet offers a secure and easy way for consumers to pay on the move.	2012	N/A	India Asia-Pacific (APAC)	http://mpurses ervices.com/	N/A	N/A
107. Mukuru	Mukuru.com is an online remittance company.	2006	51-100	Malawi	https://www.m ukuru.com/ho me	N/A	6382
108. Musoni	Musoni BV is a social enterprise that establishes best-practice microfinance institutions.	2009	1-10	The Netherlands European Union (EU)	http://musoni.c o.ke/	N/A	N/A
109. Nav Technologies	Nav is the only place you can see your personal and business credit scores side by side. Check your reports to discover where your credit needs work and what to do next (and yes, it's absolutely free).	2012	51-100	United States	https://www.na v.com/	\$49,300,000	N/A
110. Naya Jeevan Fou Ynayajeevan	Naya Jeevan Foundation is a hybrid social enterprise dedicated to rejuvenating the lives of low-income families.	2007	1-10	Pakistan Asia-Pacific (APAC)	http://www.njfk .org/	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
111. Neogrowth	NeoGrowth Credit Pvt Ltd is a non-deposit taking NBFC registered with RBI, providing short term business loans to Indian merchants for	2010	101-250	India Asia-Pacific (APAC)	https://www.ne ogrowth.in/	\$90,800,000	N/A
112. Nerdwallet	Tailored advice. Expert content. Helpful tools. NerdWallet makes it easy to know you're getting more from your money.	2009	251-500	United States	https://www.ne rdwallet.com/	\$105,000,00 0	10529
113. Nira	NIRA promotes financial inclusion by creating simple, transparent products that empower individuals to live a life of choice and freedom.	2017	N/A	India Asia-Pacific (APAC)	https://www.nir afinance.com/	N/A	N/A
114. Nivesh.com	Nivesh.com is a mass market mutual funds investment platform.	N/A	11-50	India Asia-Pacific (APAC)	http://www.niv esh.com	N/A	N/A
115. Nomanini	Nomanini supports entrepreneurs serving their local communities.	2010	11-50	South Africa	http://nomanini .com/	\$1,100,000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
116. Nubank	Nubank provides financial services in Brazil.	2013	101-250	Brazil Latin America	https://www.nu bank.com.br/	\$527,600,00 0	180328
117. Nutmeg	Nutmeg is an online investment service that specializes in investments, ISAs, and pensions.	2010	11-50	United Kingdom	https://www.nu tmeg.com/	\$89,600,000	2922
118. Ohmy Technologies	OHMY Technologies is peer to peer (p2p) lending platform.	N/A	N/A	India Asia-Pacific (APAC)	https://www.o mlp2p.com	N/A	N/A
119. OmiseGO	OmiseGO enables financial inclusion and interoperability through the public, decentralized OMG network.	N/A	N/A	Singapore Asia-Pacific (APAC)	https://omiseg o.network	N/A	N/A
120. Onelyst	Onelyst is a consumer lending marketplace	2015	1-10	Singapore Asia-Pacific (APAC)	nttps://www.on	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
121. Oportun	Oportun provides affordable loans that help people with little or no credit history establish credit and build a better future	2005	1001-5000	United States	https://new.op ortun.com/en/	\$250,300,00 0	N/A
122. OptioAl OptioAl	Personal Finance Assistant Powered by Al	2016	1-10	Tbilisi, Georgia	http://www.opti o.ai/	\$80,600	N/A
123. Oscar Health	Oscar is a health insurance company that employs technology, design, and data to humanize health care.	2013	251-500	United States	https://www.hi oscar.com/ny	\$892,500,00 0	3191
124. OTC Payments - Micro ATM	OTC Payments - Micro ATM: a mobile application that allows its user to withdraw cash from their bank or wallet account without visiting atm	2017	1-10	India Asia-Pacific (APAC)	http://www.otc payments.in/	N/A	N/A
125. Paga paga pagar	Paga is a financial institution that allows to send money, pay bills and receive payments easily from your mobile.	2009	11-50	Nigeria	https://www.m ypaga.com/	\$13,000,000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
126. PayDunya	One only API to accept payments anywhere in the world from all Africa mobile money wallets (80%of people) and credit/debit cards	2015	11-50	Senegal	https://paydun ya.com/	N/A	N/A
127. PayFast	PayFast processes Instant EFT with Absa, FNB, Nedbank and Standardbank Visa and Mastercard credit.	2007	11-50	South Africa	https://www.pa yfast.co.za/	N/A	N/A
128. PAYJOY	PayJoy provides smartphone-enabled consumer financing solutions.	2015	51-100	United States	https://www.pa yjoy.com/	\$33,200,000	148
129. Paystack	Paystack lets businesses accept payments via credit card, debit card, money transfer and mobile money on their websites or mobile apps.	2015	11-50	Nigeria	https://paystac k.com/	\$1,500,000	N/A
130. Paytm	Paytm is an Indian electronic payment and e-commerce brand based out of Delhi NCR.	2010	501-1000	India Asia-Pacific (APAC)	https://paytm.c om/	\$32,500,000	100000000

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
131. Peach Payments	Peach Payments provides payment solutions to online and mobile businesses.	2012	1-10	South Africa	http://www.pea chpayments.c om/	\$59,000	N/A
132. Pintail pintail	Pintail is a Swiss Fintech that is developing a fully licensed challenger bank targeted at poorly served communities and their migrants.	2015	11-50	Zurich, Switzerland	http://pintailve ntures.net	\$13,800,000	N/A
133. Plaid	Plaid is an API to power developers of financial services applications and help them connect with user bank accounts.	2012	101-250	United States	https://plaid.co m/	\$59,300,000	N/A
134. Policybazaar policybazaar compare Buy-Save.	Policybazaar is India's largest and leading insurance aggregator website.	2008	1001-5000		https://www.po licybazaar.com /	\$346,600,00 0	17494
135. Predictus	Predictus is developing an advanced credit scoring solution based on social and alternative data to underwrite loans in emerging countries.	2017	1-10	Lagos, Lagos, Nigeria	http://www.fair money.com.ng	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
136. Prepaid Online Systems, Corp. (POLS Corp.)	eMarketplace & online alternative payments system for emerging markets.	2014	N/A	United States	https://www.ca shpinsafe.com	N/A	N/A
137. Producepay	ProducePay provides a wide array of payment solutions to the fresh-produce industry and its agents	2014	11-50	United States	https://produce pay.com/	\$80,900,000	N/A
138. RainFin	RainFin is an online lending marketplace that links Borrowers with Lenders.	2012	11-50	South Africa	https://www.rai nfin.com/	N/A	N/A
139. Raisin	Raisin is an online marketplace for savings products across Europe	2013	51-100	Germany European Union (EU)	https://www.rai sin.com/	\$68,600,000	N/A
140. Remit	Remit is a mobile payments service that allows people to make real time money transfers from debit or credit card to mobile-money from all over the world to registered mobile-money users in Uganda, Kenya and Rwanda.	N/A	1-10	Africa	https://useremi t.com/	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
141. Remitly	Remitly is a mobile payments service that enables users to make person-to-person international money transfers from the United States	2011	251-500	United States	https://www.re mitly.com/us/e n/	\$200,000,00 0	100000
142. Revolut	Revolut is an app-based banking alternative designed for a global lifestyle.	2015	11-50	United Kingdom	https://www.re volut.com/md/	\$336,400,00 0	303578
143. Rupeek	Rupeek is an asset backed online lending platform currently operating in the space of Gold loans.	2015	51-100	India Asia-Pacific (APAC)	https://rupeek. com/	\$8,800,000	N/A
144. Sentinel Chain ▲ Sentinel	Sentinel Chain is a B2B marketplace specifically designed to provide affordable and secure financial services to the unbanked.	2017	10-50	N/A	https://sentin el-chain.org/	N/A	N/A
145. Seso	Seso utilizes Blockchain technology to solve the inability of secured lending and land ownership in emerging economies.	N/A	N/A	Africa	http://seso.glo bal/	N/A	

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
146. Shubham Housing Development Finance Company	SHDFC Is an affordable housing lender headquartered in New Delhi targeting low-income, self-employed families in urban and semi-urban India.	2010	251-500	India Asia-Pacific (APAC)	https://www.sh ubham.co/	\$111,000,00 0	N/A
147. SmartPesa SmartPesa Rowseng Broat Harvaches	Omnichannel payments and agency banking solutions provider, incorporating mPOS, card and non-card based payments	2014	1-10	Singapore, Central Region, Singapore	http://smartpes a.com	\$675,000	1840
148. Softeller SoftSiler	Softeller is an online service that uses the advantage of low local money transfer rates in Cameroon to allow people leaving abroad send money back home at rates far cheaper than those offered by multi-internationals like: Western Union, Moneygram, amongst others.	N/A	N/A	Cameroun	http://www.soft eller.com/	N/A	N/A
149. Stanbic IBTC Bank	Stanbic IBTC Bank is a leading provider of integrated financial services, pensions and wealth management products.	2012	1001-5000	Nigeria	http://www.sta nbicibtcbank.c om/	N/A	N/A
150. Stellar	Stellar enables you to send money to anyone in the world, for free, instantly, in any currency.	2014	11-50	United States	https://www.st ellar.org/	\$3,000,000	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
151. Stockpile	Stockpile is the easiest way for beginners, including kids and millennials, to learn about stock, invest in stocks or to gift stocks.	2010	11-50	United States	https://www.st ockpile.com/	\$45,000,000	100000
152. Stripe	Stripe provides a set of unified APIs and tools that instantly enable businesses to accept and manage online payments	2010	501-1000	United States	https://stripe.c om/	\$478,700,00 0	20495
153. Sureremit	SureRemit is an ecosystem for global non-cash remittances.	2017	1-10	United States	https://surerem it.co/	\$7,000,000	500
154. Tala	Tala is mobile technology and data science company that is revolutionizing financial services in emerging markets.	2011	11-50	United States	https://tala.co/	\$109,400,00 0	2010000
155. Telcoin	Telcoin is focused on connecting with mobile networks globally, enabling easy conversion between telecom mobile money, prepaid credit and postpaid billing platforms.	2017	1-10	Japan Asia-Pacific (APAC)	https://www.t elco.in/	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
156. The Digital Reserve	Decentralized Financial Solutions focused on financial inclusion and innovative financial products that make doing good profitable.	2017	1-10	United States	http://www.the digitalreserve. org	N/A	N/A
157. Three Wheels United	TWU is a Bangalore; India based social enterprise working on issues in the auto rickshaw ecosystem.	N/A	1-10		http://www.thre ewheelsunited. com/	N/A	N/A
158. Tokenomy	Tokenomy is a value creation and distribution network through blockchain tokens. It is a one-stop tokenization platform that allows individuals or corporations to generate, distribute, and exchange their tokens. Tokenomy also provides a marketplace for other valuable tokens to be listed and traded on the crypto-only exchange	2018	1-10	Southeast Asia	https://www.to kenomy.com/	N/A	N/A
159. Transformify	CSR recruitment platform - hire great candidates and diversify your workforce in "one go"	2015	11-50	United Kingdom	https://www.tra nsformify.org/	\$112,600	N/A
160. Trulioo	Trulioo, an online identity verification company, enables trust and safety online by powering fraud and compliance systems worldwide.	2011	11-50	Canada	https://www.tru lioo.com/	\$23,300,000	N/A

Source: https://www.crunchbase.com/

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
161. Trustingsocial	Trusting Social builds the next generation of credit score based on social data, to make lending faster, cheaper and friendlier.	2013	11-50	United States	https://trusting social.com/	N/A	20408
162. Udhaar	Credit scoring, ν-lending for Financial Inclusion, Consumer & Product Insights	2015	1-10	India Asia-Pacific (APAC)	http://udhaar.c o	N/A	N/A
163. Upgrade	Upgrade is an online lending company that offers personal loans and credit monitoring.	2016	251-500	United States	https://www.up grade.com/	\$60,000,000	N/A
164. Upstart Opstart	Upstart is the first lending platform to leverage machine learning to price credit and automate the borrowing process.	2012	101-250	United States	https://www.up start.com/	\$85,700,000	N/A
165. Uulala	Uulala is a FinTech platform that empowers the under-banked communities of the world	2017	1-10	United States	https://tokensa le.uulala.io/	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
166. Varo Money	Varo Money is a mobile banking business that helps customers cover their expenses, pay their bills, and build their wealth over time.	2015	51-100	United States	https://www.va romoney.com/	\$78,400,000	27388
167. VCpay	VCpay is the anywhere, anytime Mobile Virtual MasterCard	2015	N/A	South Africa	http://www.vcp ay.co.za/	N/A	N/A
168. Veneka	Veneka provides tailored payment technology solutions, with a focus on the African continent. Our products and services are targeted at Financial Services, and enable Card, Mobile and e-Banking business solutions.	N/A	N/A	South Africa	http://www.ven eka.com/	N/A	N/A
169. VugaPay	VugaPay is a fast and safer way to send and receive mobile money payments online without sharing your financial information.	2016	N/A	South Africa	https://www.vu gapay.com/ho me	N/A	N/A
170. Wala	Wala is built a community-driven and gamified personal financial management tool for cash-based consumers in emerging markets.	2015	1-10	United Kingdom	https://getwala .com/	\$1,200,000	10000

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
171. Wallettec	Wallettec is a SaaS platform that enables retailers to accept any type of mobile transaction or currency type at their Point of Sale.	2013	1-10	South Africa	http://www.wall ettec.com/	N/A	N/A
172. WeCashUp	WeCashUP is a Universal Payment Platform that enables e-merchants to accept Cash, Mobile Money, Cards and Crypto payments via 1 single API.	2015	11-50	France European Union (EU)	https://www.w	N/A	N/A
173. WeChat	WeChat provides mobile text and voice messaging communication services.	2012	N/A	China Asia-Pacific (APAC)	https://www.w echat.co.za/wa llet/	N/A	9599128
174. Welab	WeLab analyzes unstructured mobile big data within seconds to make credit decisions for individual borrowers.	2013	251-500	Hong Kong Asia-Pacific (APAC)	https://www.w elab.co/en	\$425,000,00 0	N/A
175. wiGroup	wiGroup develops mobile transaction solutions that focus on providing businesses and consumers with a secure platform to do transactions.	2007	51-100	South Africa	https://www.wi groupinternatio nal.com/	N/A	N/A

Company	Description	Year Founded	Number of Employees	Location	Website	Funds Raised in US\$	Apps Downloads
176. Wizzit WIZZIT INTERNATIONAL	WIZZIT is a mobile banking solution provider that assists partner financial institutions and service providers in promoting financial inclusion.	2004	N/A	South Africa	http://www.wiz zit.co.za/	N/A	N/A
177. Worldremit	WorldRemit is a money transfer service that helps migrants send money to their loved ones all over the world	2010	251-500	United Kingdom	https://www.w orldremit.com/	' ' '	N/A
178. Zeepay	Zeepay Ghana Limited is a wholly Ghanaian owned Mobile FinancialServices company	2014	11-50	Ghana	http://www.my zeepay.com/	\$200,000	37
179. ZestFinance	ZestFinance is committed to making fair and transparent credit available to everyone. Los Angeles, California, United States.	2009	51-100	United States	zestfinance.co <u>m</u>	\$67,000,000	N/A
180. Zoona Zoona Let's Make IT REAL	Zoona is a mobile technology company developing products such as money transfers, electronic voucher payments, and agent payments.	2009	101-250	South Africa	http://www.ilov ezoona.com/	\$20,000,000	N/A



Deep Knowledge Analytics (DKA) and Future FinTech (FF) Disclaimer.

The information and opinions in this report were prepared by Deep Knowledge Analytics and Future Fintech. The information herein is believed by DKA and FF to be reliable but it makes no representation as to the accuracy or completeness of such information. There is no guarantee that the views and opinions expressed in this communication will come to pass. DKA and FF may provide, may have provided or may seek to provide advisory services to one or more companies mentioned herein. In addition, employees of DKA and FF may have purchased or may purchase securities in one or more companies mentioned in this report. Opinions, estimates and analyses in this report constitute the current judgment of the author as of the date of this report. They do not necessarily reflect the opinions of DKA and FF and are subject to change without notice. DKA and FF has no obligation to update, modify or amend this report or to otherwise notify a reader thereof in the event that any matter stated herein, or any opinion, estimate, forecast or analysis set forth herein, changes or subsequently becomes inaccurate. This report is provided for informational purposes only. It is not to be construed as an offer to buy or sell or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy in any jurisdiction.