

ANALYTICAL REPORT SAMPLE



Financial Inclusion Developing World

LANDSCAPE OVERVIEW



**MARKETS, TECHNOLOGIES,
COMPANIES, INVESTORS, TRENDS**

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**FUTURE
FINTECH**

Developing World Financial Inclusion Industry Landscape Overview 2018

Table of Contents

Financial Inclusion Global Landscape 2018 (<i>Mind Maps</i>).....	3
Executive Summary.....	7
Chapter I: Landscape Overview.....	12
Chapter II: Regional Overview	21
Chapter III: Industry Overview	34
Chapter IV: Digital ID and Bio-identification	51
Chapter V: Financial Inclusion Research Centers.....	58
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 the developing countries.....	81
Conclusions.....	86
Appendix Profiles.....	88
Disclaimer	125

Financial Inclusion Landscape 2018

Companies

180 - Companies
15 - Research Centers
Specialization

Loans

Payments

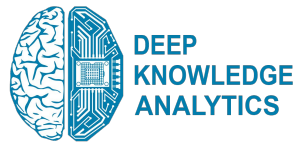
Companies

Research Centers



Savings

Insurance



Financial Inclusion Landscape 2018 Companies

Companies - 180
Regional Position

Latin America

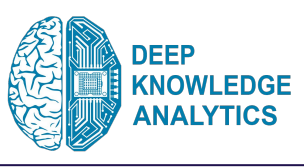
Africa



Western World

Asia

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FUTURE FINTECH



AFRICA Financial Inclusion Investors

Impact Investors - 100
Investors - 60

Institutional Investors

Impact Investors

Investors

Private Equity &
Venture Capital Funds



AFRICA Financial Inclusion Landscape Overview

55 - Companies
60 - Investors
15 - Research Centers

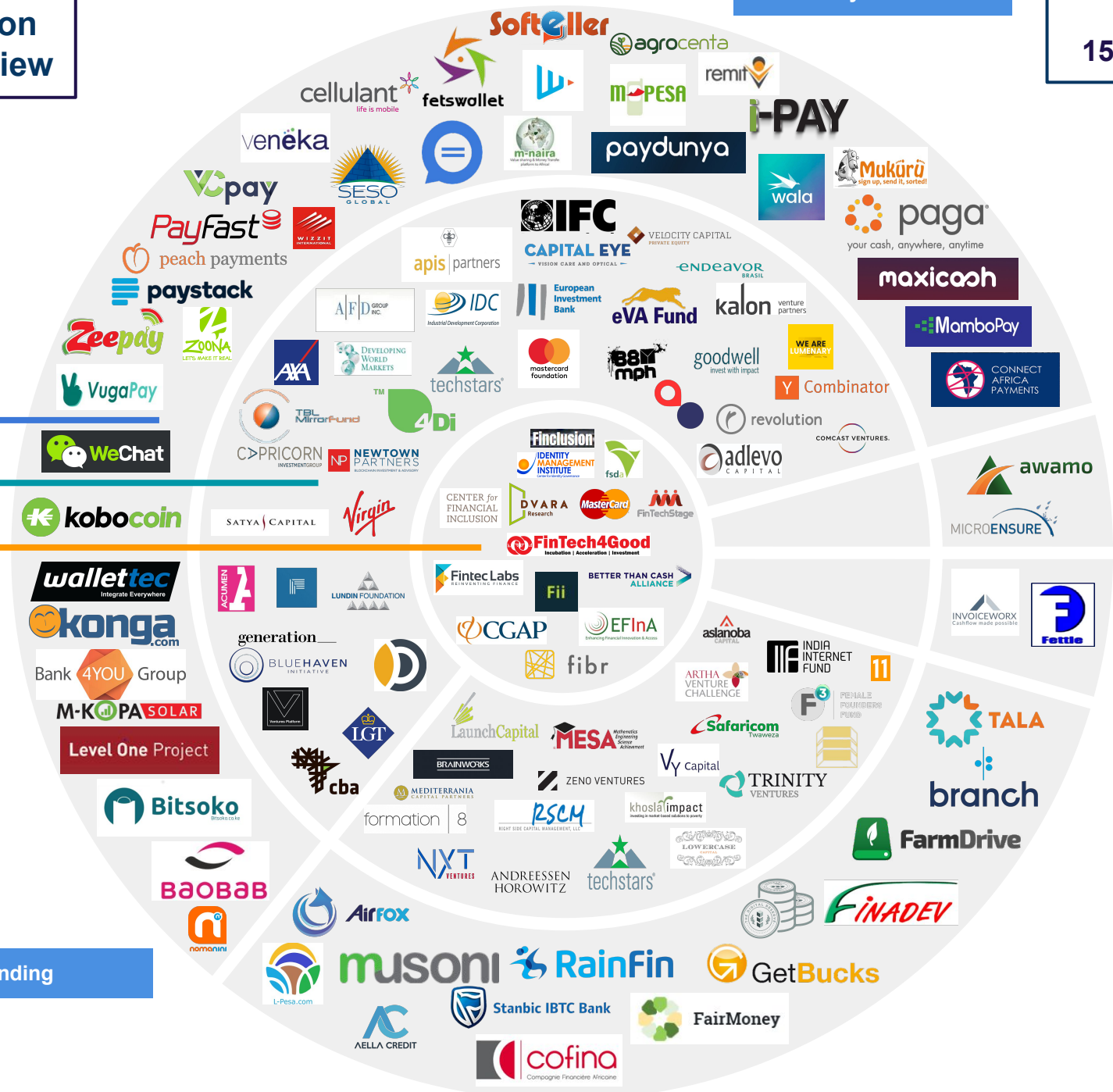
Companies
Investors
R&D centers

Lending

Payments

Insurance

Savings



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: **AI, 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.

180 Companies

1. Aella Credit	31. Cignifi	61. Groupe COFINA
2. AGROCENTA	32. Clix Capital	62. guiabolso
3. AirFox ICO	33. compareasiagroup	63. Hero
4. Amber Financial Services	34. ConnectAfrica	64. humaniq
5. Artawana	35. Coverfox Insurance	65. i-Pay EFT Payment
6. AsiaKredit	36. coverwallet	66. inclusivity.network
7. Aspire Singapore	37. Cow-Token	67. InVoiceWorkx
8. Atikus	38. creditease	68. iyzico
9. atombank	39. CreditMantri	69. Janalakshmi
10. Avante	40. CredoLab	70. juntos
11. awamo	41. Dewan Housing Finance	71. Juvo
12. ayannah	42. Dianrong	72. KASHIO INC
13. bank4you.io	43. digit	73. Kobocoin
14. BankBazaar	44. Domus Semo Sancus	74. Konfio
15. BanQu	45. ellevest	75. KongaPay
16. Baobab	46. Everex ICO	76. KORA
17. Bharat Financial Inclusion	47. FARMDRIVE	77. KREDICO
18. BigWin Infotech	48. Fettle Group	78. Kreditech Holding
19. Billon Group	49. Finadev	79. Kudi
20. BIMA	50. Financial Software Systems	80. L-Pesa Microfinance
21. Bitsoko	51. FlexM	81. ladder
22. BKash	52. forusall	82. LALA World
23. bloom	53. ftcash	83. Lenddo
24. BlueOrchard Finance S A	54. Fundbox	84. LENDINGKART
25. BPI Globe BanKO	55. Fundera	85. LendUp
26. Branch - Branch International	56. Funding Societies	86. level one project
27. Brazil Plus	57. Funds & Electronic Transfer Solutions	87. Loanadda
28. Capital Float	58. Fuzo Limited	88. lufax
29. CapWay	59. GetBucks	89. m-kopa
30. Cellulant	60. GoSwift	90. M-NAIRA

180 Companies

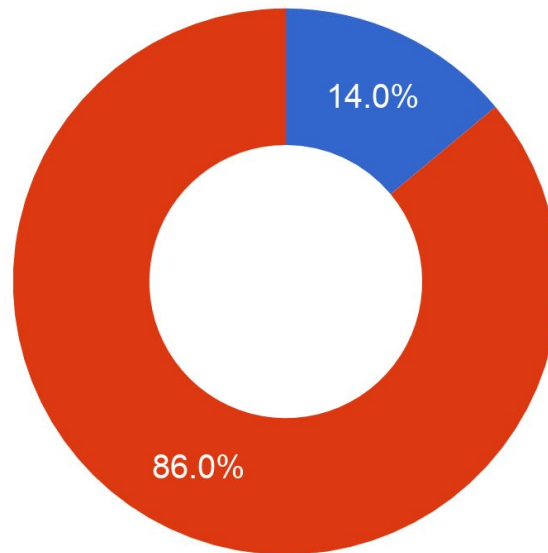
91. M-pesa	121. Oportun	151. stockpile
92. MamboPay	122. OptioAI	152. stripe
93. mambu	123. Oscar Health	153. sureremit
94. Margdarshak Financial Services	124. OTC Payments - Micro ATM	154. Tala
95. matchmove	125. paga	155. Telcoin
96. Maxicash	126. PayDunya	156. The Digital Reserve
97. microensure	127. PayFast	157. Three Wheels United
98. MicroMoney	128. PAYJOY	158. TOKENOMY
99. Mifos Initiative	129. Paystack	159. TRANSFORMIFY
100. Mirador	130. paytm	160. trulioo
101. mobikwik	131. Peach Payments	161. trustingsocial
102. MONEYFELLOWS	132. Pintail	162. Udhaar
103. moneyview	133. plaid	163. upgrade
104. Mosaic	134. policybazaar	164. upstart
105. Movilway	135. Predictus	165. uulala
106. Mpurse	136. Prepaid Online Systems, Corp. (POLS Corp.)	166. Varo Money
107. Mukuru	137. producepay	167. VCpay
108. Musoni	138. RainFin	168. Veneka
109. Nav Technologies	139. raisin	169. VugaPay
110. Naya Jeevan Foundation	140. Remit	170. wala
111. Neogrowth	141. remitly	171. Walletec - Walletec (Pty) Ltd
112. nerdwallet	142. revolut	172. WeCashUp - WeCashUpGv
113. NIRA	143. Rupeek	173. WeChat Wallet - WeChat
114. Nivesh.com	144. Sentinel Chain	174. welab
115. Nomanini	145. SESO	175. wiGroup
116. nubank	146. Shubham Housing Development Finance Company	176. Wizzit
117. nutmeg	147. SmartPesa	177. worldremit
118. OHMY Technologies	148. Softeller	178. Zeepay
119. OmiseGO	149. Stanbic IBTC Bank	179. ZestFinance
120. Onelyst	150. stellar	180. Zoono

Investments in Africa Financial Inclusion Big Gap - Big Opportunities

According to our findings, only 14% of investors, which invested in 180 companies presented in this report, have invested in companies which are based in African countries or focused on Africa. We forecast that in the next several years the African market will become a great opportunity for investment. For example, the situation is changing rapidly, and according to the 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.

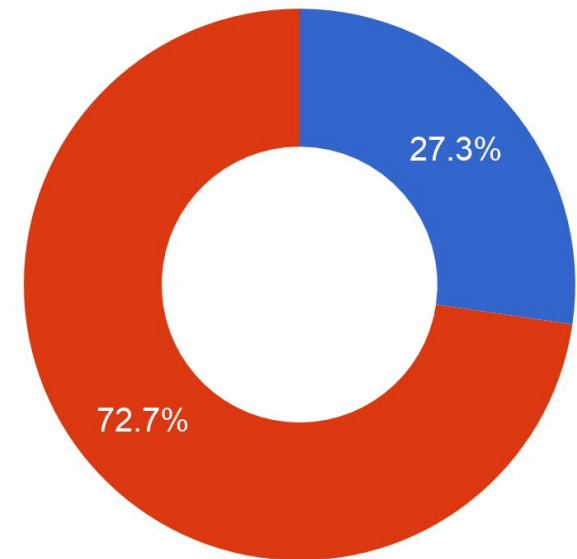
2018 Results

- Investments in Africa
- Investments in other regions



2020 Predictions

- Investments in Africa
- Investments in other regions



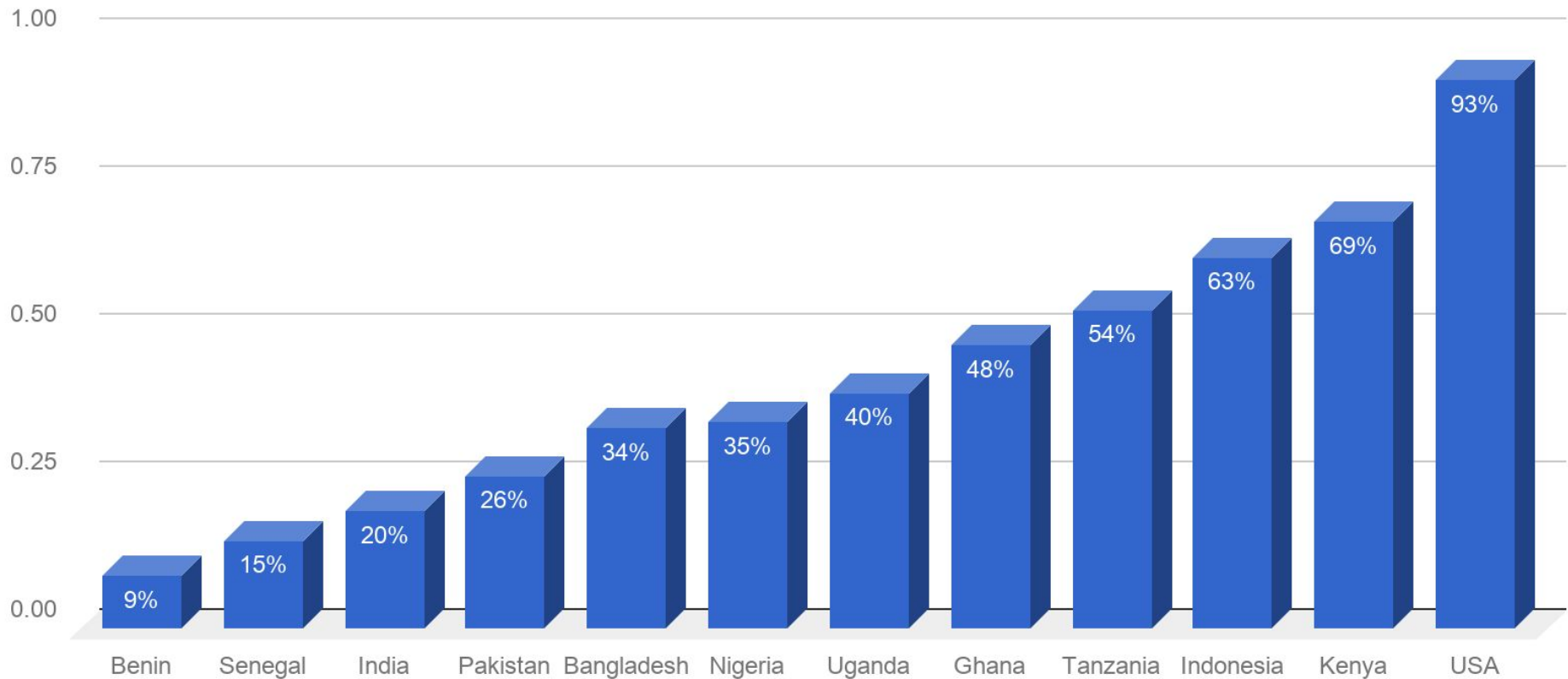
Source: <https://www.gsmainelligence.com/research/?file=7bf3592e6d750144e58d9dcfac6adfab&download>

Africa Financial Inclusion / 60 Investors

- | | |
|---|-------------------------------------|
| 1. 4Di Capital | 31. Kalon Venture Partners |
| 2. 88mph.ac | 32. Khosla Impact |
| 3. Acumen | 33. LaunchCapital |
| 4. Adlevo Capital | 34. LGT Venture Philanthropy |
| 5. AFD Group | 35. LocalGlobe |
| 6. Andreessen Horowitz | 36. Lowercase Capital |
| 7. Apis Partners | 37. Lumenary |
| 8. Artha India Ventures | 38. Lundin Foundation |
| 9. Aslanoba Capital | 39. Mediterrania Capital Partners |
| 10. AXA Group | 40. Mesa Ventures |
| 11. Barclays Accelerator (Powered by Techstars) | 41. Newtown Partners |
| 12. Blue Haven Initiative | 42. NXT Ventures |
| 13. Brainworks Capital Management | 43. Opportunity International |
| 14. Capitaley Investments | 44. Project 11 Ventures |
| 15. Capricorn Investment Group | 45. Revolution |
| 16. Comcast Ventures | 46. Right Side Capital Management |
| 17. Commercial Bank of Africa | 47. Safaricom |
| 18. DDF | 48. Satya Capital |
| 19. Developing World Markets | 49. TBL Mirror Fund |
| 20. Endeavor Catalyst | 50. Techstars |
| 21. European Investment Bank (EIB) | 51. Telenor |
| 22. eVentures Africa Fund | 52. The MasterCard Foundation |
| 23. Expansion Venture Capital | 53. Tokyo Founders Fund |
| 24. Female Founders Fund | 54. Trinity Ventures |
| 25. Formation 8 | 55. Velocity Capital Private Equity |
| 26. Generation Investment Management | 56. Ventures Platform |
| 27. Goodwell Investments | 57. Virgin Group |
| 28. IFC Asset Management Company | 58. Vy Capital |
| 29. India Internet Fund | 59. Y Combinator |
| 30. Industrial Development Corporation | 60. Zeno Ventures |

Developing Countries Financial inclusion

Financial Inclusion in developing countries differ from one country to another. The reasons of a low financial inclusion, for instance, in Africa is lack of money (70.8%) like worldwide (59%). The next important self-reported barriers are “too expensive” (27.7%), “too far away” (25.6%), “cannot get one” (24.4%) and “lack of documentation” (21.5%). The least important barriers are “religious reasons” (7.2%) and “family member has an account” (7.6%). This latter result is of interest because this barrier is of greater importance worldwide (28%).



Source: http://quantumglobalgroup.com/commodities_cat/digital-financial-services-and-financial-inclusion-in-africa/

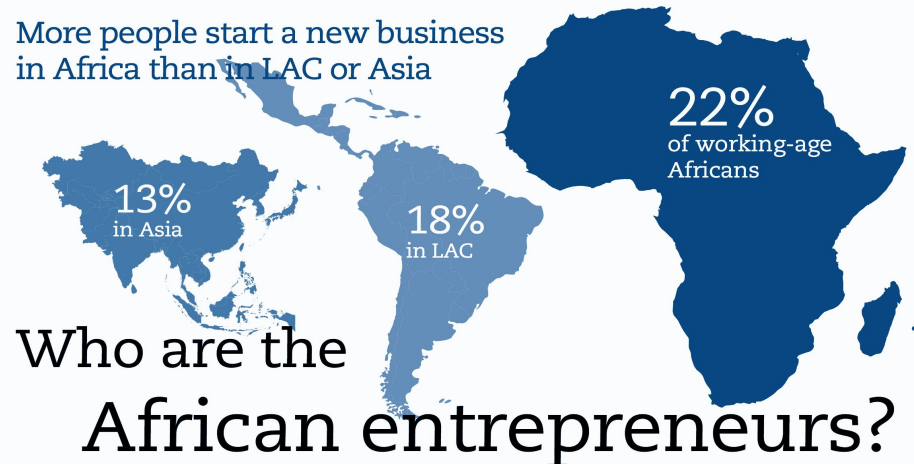
Entrepreneurial activity in Africa is higher than in Asia and Latin America

Entrepreneurship levels in Africa are the highest in the world

22% of Africans are starting new businesses

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

More people start a new business in Africa than in LAC or Asia



Young



36 in Asia

35 in LAC

31 years old on average in Africa



Mostly in services

Top early-stage entrepreneurs:



Trade, hotels and restaurants



Agriculture, forestry and fishing



Manufacturing

Innovative

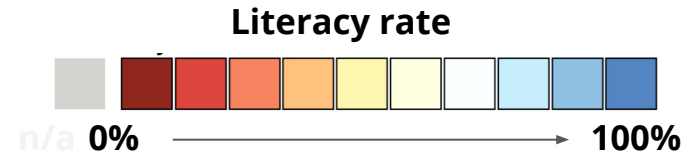


20%

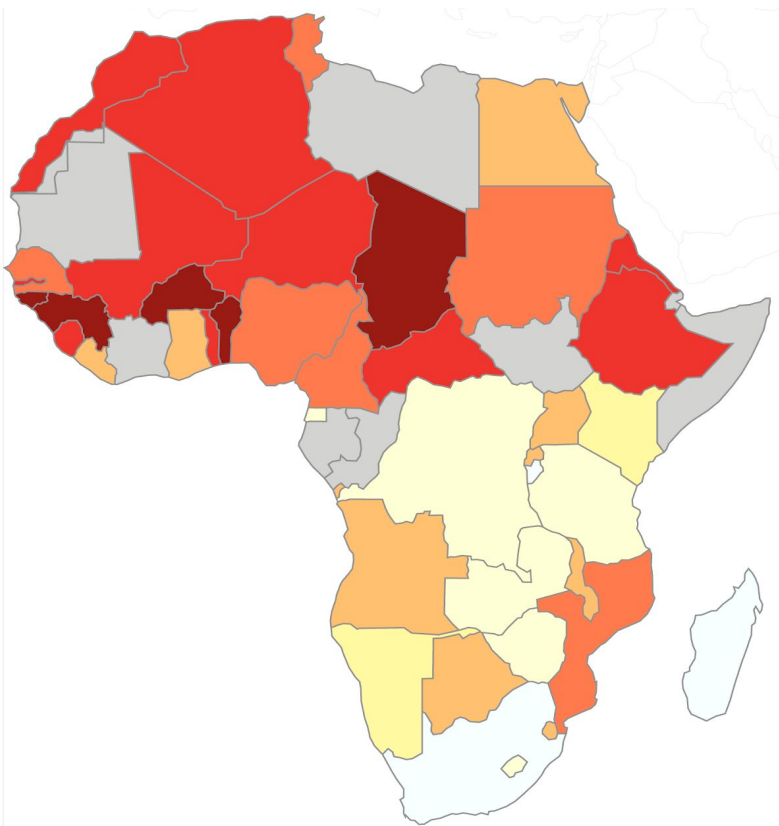
of new African entrepreneurs are introducing a new product or service

Source: African Development Bank

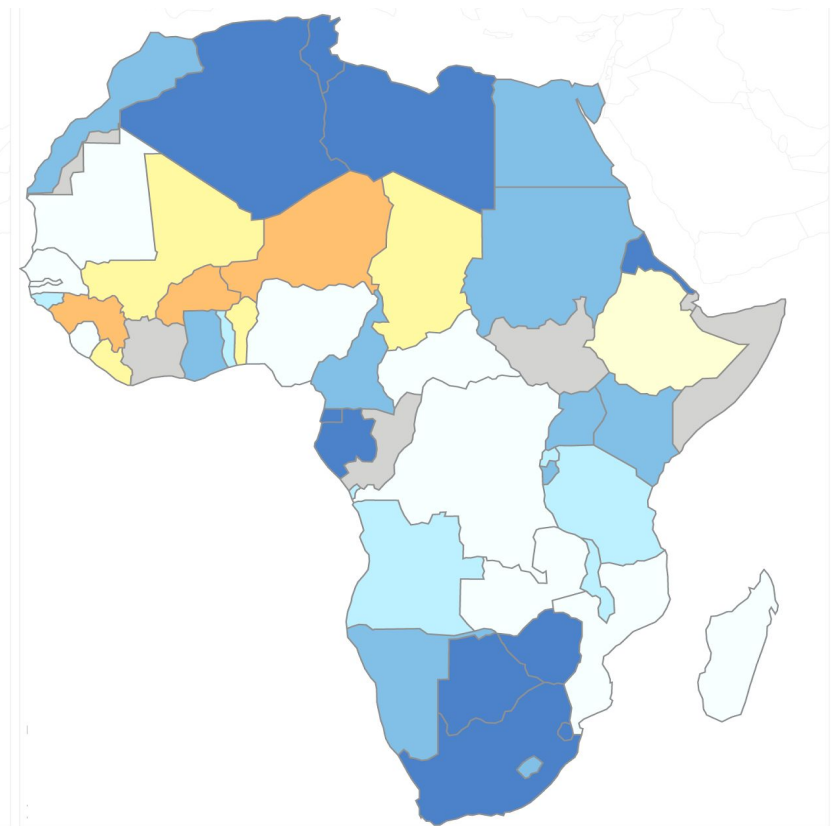
The young generation in Africa is much better educated than before



Older (65+ years)

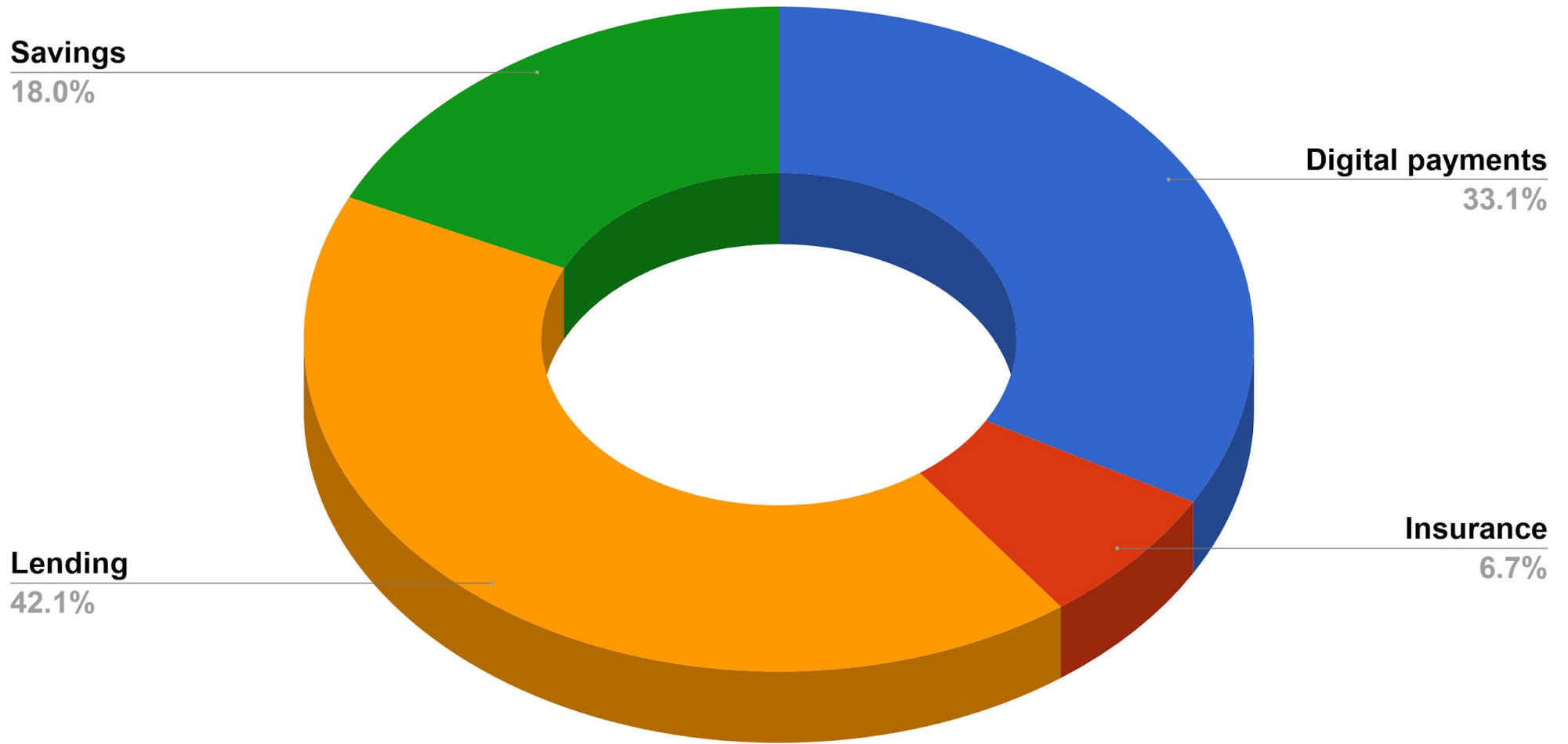


Younger (15-24 years)



Source: UNESCO

180 companies industry overview

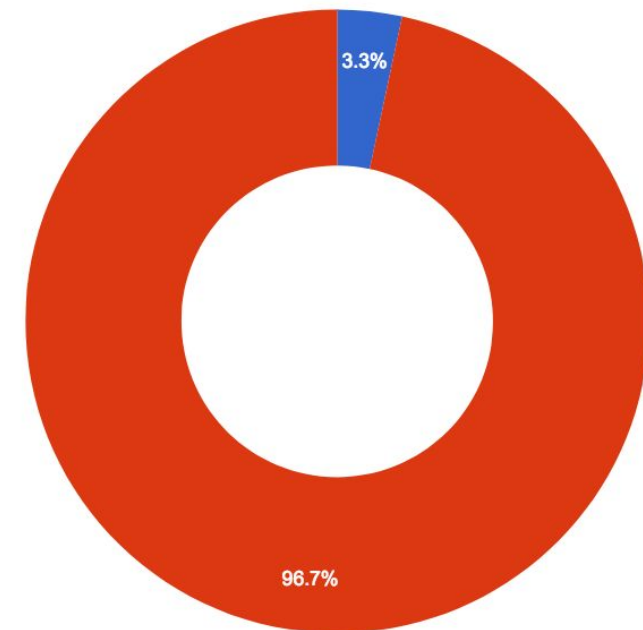


Bio-identification

With 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. The stakes are high, for those people, their governments, and by extension all the societies they reside in. "If they don't exist officially, they cannot have a stake in society, and as a consequence it's a priority to rectify. It's a priority for development agencies because of the opportunity to empower the development indicators," says ID4Africa President Dr. Joseph Atick, emphasizing the scope of the issue all the way from individuals to global efforts.

Bio-identification will serve two functions – a form of identification that simulates an official government issued ID, and as a method of accessing user wallets that replaces passwords and cryptographic keys.

- Bio-Identification
- Non bio-identification

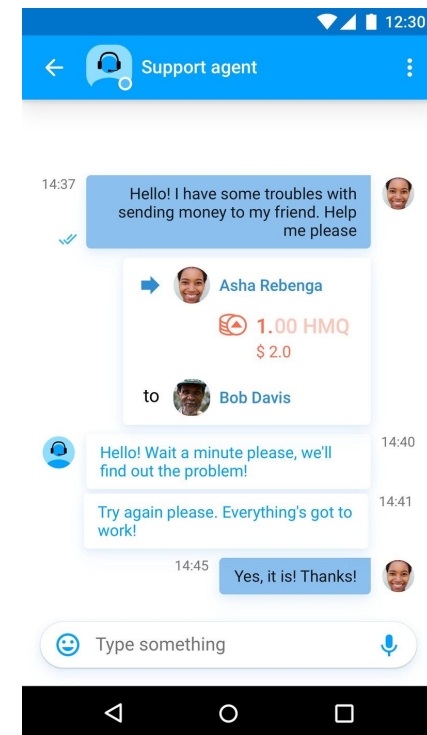


Only 3% of the companies from our list has bio-identification tools.

ChatBots and AI

Live chats and chatbots are increasingly gain popularity among developers and, concerning the focused regions, they can be very useful as well. The issues such cultural and religious reasons are another barrier for financial inclusion in the regions, and economic undeveloped and 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 can be easily addressed by the chatbots. Humaniq example is very illustrative:

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.



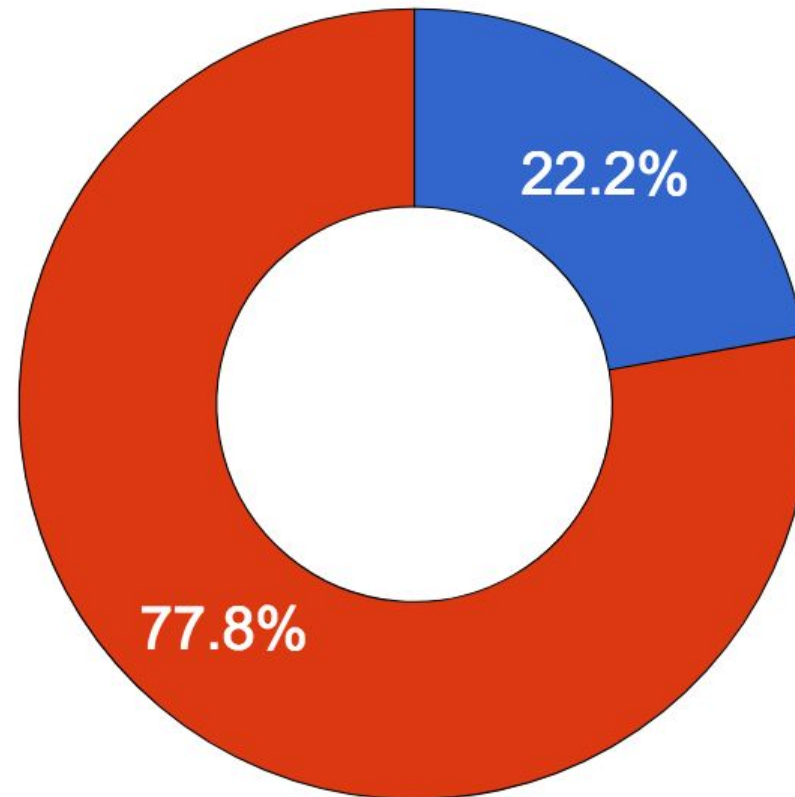
ChatBot has one more important role - education of population about their possibilities by being financially included in the economic life of their country.

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

ChatBots and AI

Live chats and chatbots are increasingly gain popularity among developers and, concerning the focused regions, they can be very useful as well. The issues such cultural and religious reasons are another barrier for financial inclusion in the regions, and economic undeveloped and 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 can be easily addressed by the chatbots. Only 22% of companies from the list has Machine Learning Algorithms, including 8% of companies with developed ChatBot.

- Basic AI and/or ChatBots
- Non AI Companies



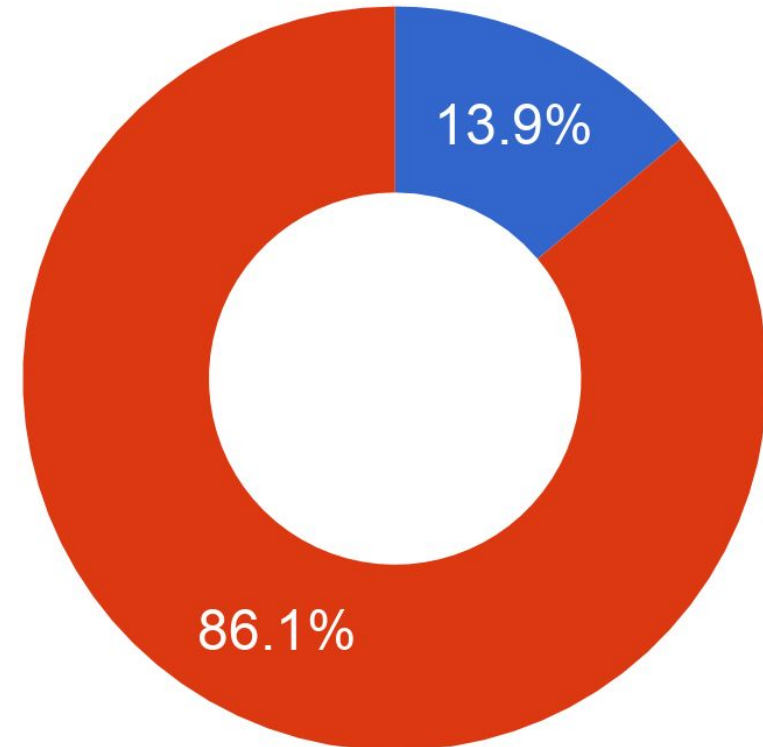
Blockchain & Crypto Technologies vs Traditional FinTech

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 African 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.

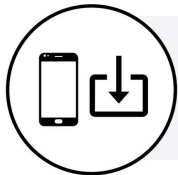
However, only 14% companies from our list has blockchain technologies. In the nearest future situation may change and this segment will boost.

- BlockChain
- non BlockChain



Bio-identification Case of Humaniq

HUMANIQ HOW TO USE



DOWNLOAD APP

Download the mobile application from HUMANIQ.co



BIOMETRIC IDENTIFICATION

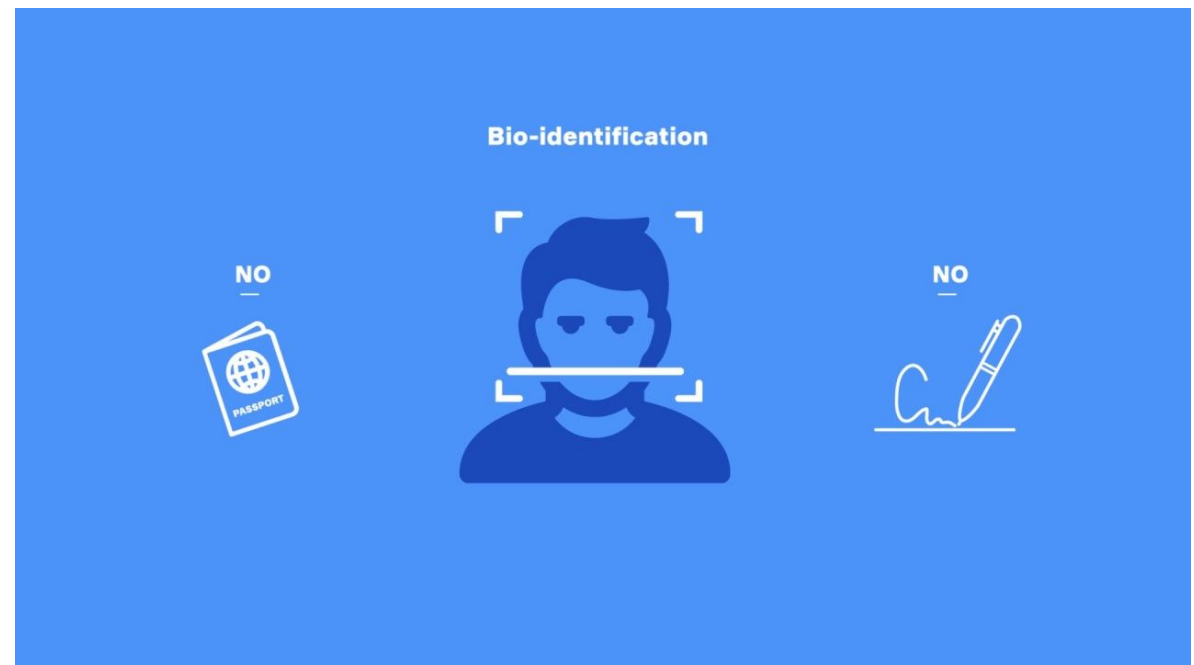
Identify yourself through our facial and voice recognition system



GET MONEY

Humaniq system release additional tokens as rewards for different tasks

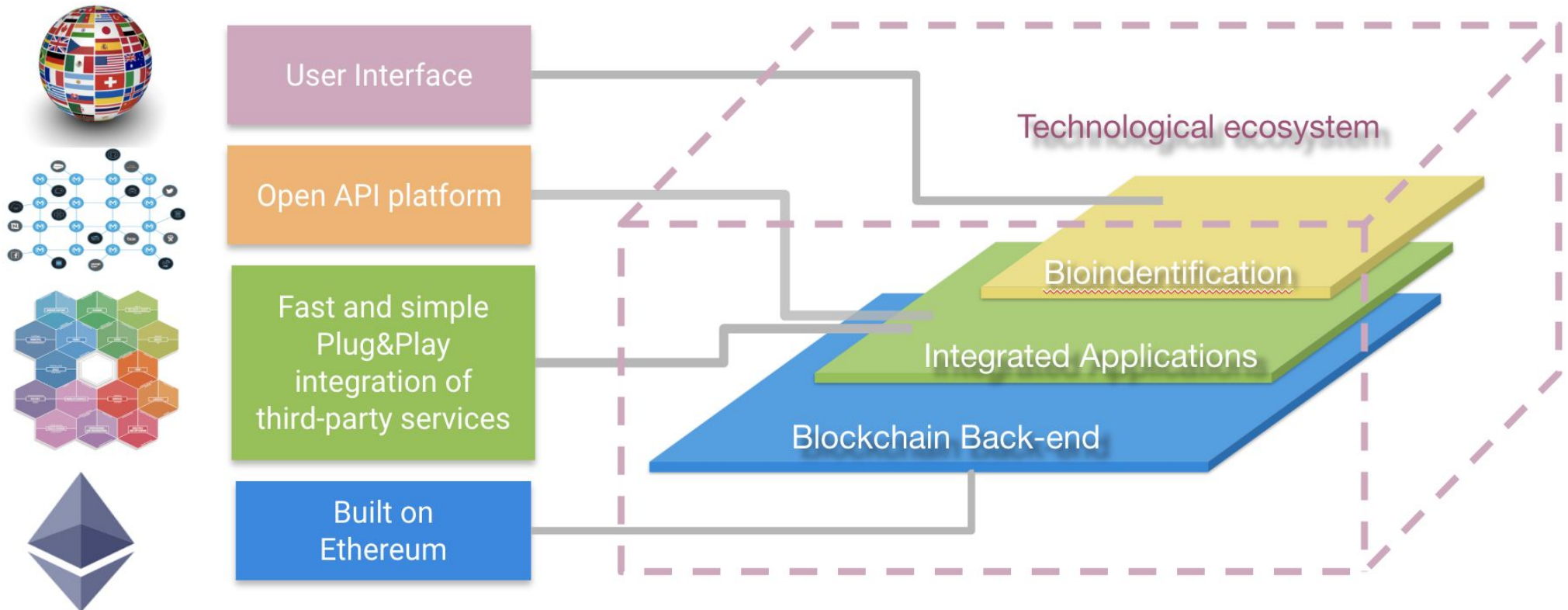
Humaniq adopted the bio-identification in order to avoid the problem of lack of ID in African countries.



Source: <https://humaniq.com/>

Technological Ecosystem

Humaniq Case



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. FINCLUDE 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.

The 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.

35 Best Banks in Africa in 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 African clients, including corporations, from global markets in 2017. French bank Societe Generale has major pan-African 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

Top 100 Impact Investors in African 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. Adevo 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. African Development Bank	40. Equity Bank	73. Novastar Ventures
8. African 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-African 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 Développement du Mali	52. Ghana Union Assurance	85. SIFEM
20. Banque Togolaise de Développement	53. Goodwell West Africa Microfinance	86. SIMEST
21. Bedrock Venture Capital Finance Limited	54. Government Employees Pension Fund of South Africa	87. Skye Bank
22. Bill & Melinda Gates Foundation	55. Grassroots Business Fund	88. Sonibank
23. BIO	56. Gray Matters Capital	89. SOVEC Fund
24. BOAD	57. GroFin Africa Fund	90. SSNIT
25. Caisse Nationale de Sécurité Sociale	58. Heirs Holdings	91. Swedfund
26. Cauris Croissance	59. Helios Investors II	92. The African Private Equity and Venture Capital Association
27. Cauris Investissements	60. HFC Bank	93. The Entrepreneur's Empowerment Fund
28. CBAO	61. I&P Investment Company	94. TIAA CREF
29. CDC Group	62. IBTC Chartered Bank Ltd	95. Tony Elumelu Foundation
30. China Africa Development Fund	63. ICF – Debt Pool	96. Universities Entrepreneurial Fund
31. Cofides	64. IFC	97. West Africa Agricultural Investment Fund
32. Cordiant Capital Canada Investment Fund for Africa	65. IFU	98. West Africa SME Growth Fund
33. Cordiant Emerging Loan Fund III	66. InfraCo Africa	99. West Africa Venture Fund
		100. Zenith Bank

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
2010 - 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
Humaniq	+	+	+	+	+	\$5,200,000	200,000+
BanQu	+	-	+	+	+	\$2,600,000	N/A
Baobab	+	-	+	-	+	\$125,800,000	1,500,000 clients
Wala	-	+	-	+	+	\$1,200,000	10,000
Awamo	-	-	+	+	+	\$2,300,000	N/A
MatchMove	-	+	-	+	+	\$30,000,000	N/A
Dianrong	+	-	-	+	+	\$509,000,000	230,000,000+
BIMA	-	+	-	-	+	\$110,600,000	1,000,000+
M-pesa	-	-	-	-	-	N/A	1,100,000+
Level One Project	+	-	-	+	+	N/A	N/A

Comparative Analysis of FinTech companies involved in Financial Inclusion

1. **Humaniq** is based in London, United Kingdom and it is a blockchain platform and app, that combines distributed ownership, mobility, visual simplicity and Biometric identification systems to connect the 2 billion unbanked people to the global economy. Humaniq is a new generation financial services with its own cryptocurrency, which is aimed at eradicating poverty amongst millions of people living in the emerging economies, combining its vision for economic empowerment and community building with the latest innovations in blockchain technology, mobile, biometrics, and artificial intelligence.
2. **BanQu** is based in US and focused on Kenya. BanQu is a universal platform based on blockchain that is starting to open the global economy to the 2.5 billion unbanked people by providing them an economic identity. It is based in the USA and it is a software technology company on a mission to connect refugees, the displaced, and the world's poorest to the global economy through a secure, portable digital identity that maintains transaction history through a proprietary blockchain-based platform. The BanQu platform uses immutable human-characteristics based (selfie) ID owned by the user who creates it.
3. **Baobab** focuses on serving individuals, micro & small businesses in 10 African and Asian countries. Baobab provides simple, affordable products to people under-served by traditional banks to help them unleash their potential. Baobab accomplishes this through Blockchain technology, providing a web-accessible networked graph of shops and stores where customers can freely spend their money using just one account. As well, Baobab enables free account opening with a paperless and simplified KYC process and biometric data.
4. **Wala** is a mobile financial platform based in the UK and it is on a mission to help people reach financial prosperity by eliminating the barriers to banking. Wala offers financial tips or help accessing recent transactions through the Wala Bot. The users get rewarded with Wala digital money when they use Wala
5. **Awamo** is a German mobile, biometric banking software tailored for microfinance institutions and SACCOs focused on Africa. Awamo's biometric technology gives additional security and protection from fraud. Awamo wants to support the microfinance sector in a way that financial services become available to anyone with less effort and risk for lenders.

Comparative Analysis of FinTech companies involved in Financial Inclusion

6. [MatchMove](#) is Singapore's fastest growing technology company, providing innovative enterprise solutions through the strategic use of customisable cloud-based platforms. MatchMove Wallet OS enables any company to easily offer their customers a fully branded, secure mobile wallet solution that includes P2P transfer, Cross-Border Money Transfers, Top Up channels, Virtual Payment Cards, Loyalty Points & Rewards, Promotions & Offers amongst many other features.
7. [Dianrong](#) is a leader in online marketplace lending in China. Dianrong offers small businesses and individuals a comprehensive, one-stop internet platform providing financial information and services supported by industry-leading technology, compliance and transparency. Dianrong raises fresh funds to lend more to families and small firms. Dianrong and FnConn have launched China's first-ever blockchain platform called 'Chained Finance'. The platform leverages advanced financial technology to meet the hugely underserved needs of supply chain finance in China.
8. [BIMA](#) is a leading insurance tech player that uses mobile technology to disrupt the global insurance industry and fuel financial inclusion. BIMA's unique model combines powerful tech platforms with distribution by dedicated agents to create a business model that serves the bottom-of-the-pyramid profitably and sustainably.
9. [M-Pesa](#) is a fast, secure and convenient way to transact money on mobile. M-Pesa is a registered trademark of Vodafone and is now available across India.
10. The [Level One Project](#) provides a framework for countries to level the playing field in financial services through the creation of a single national switch for digital payments. The Level One Project is the umbrella blockchain effort by the Bill & Melinda Gates Foundation, started in 2015. The Gates Foundation believes that everyone should benefit from an economy that includes everyone.

Conclusions

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.

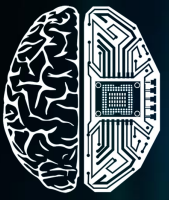
In this report, we have identified a specific set of emerging technologies that can help to overcome the roadblocks in terms of facilitating greater financial inclusion. These include:

- 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.



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