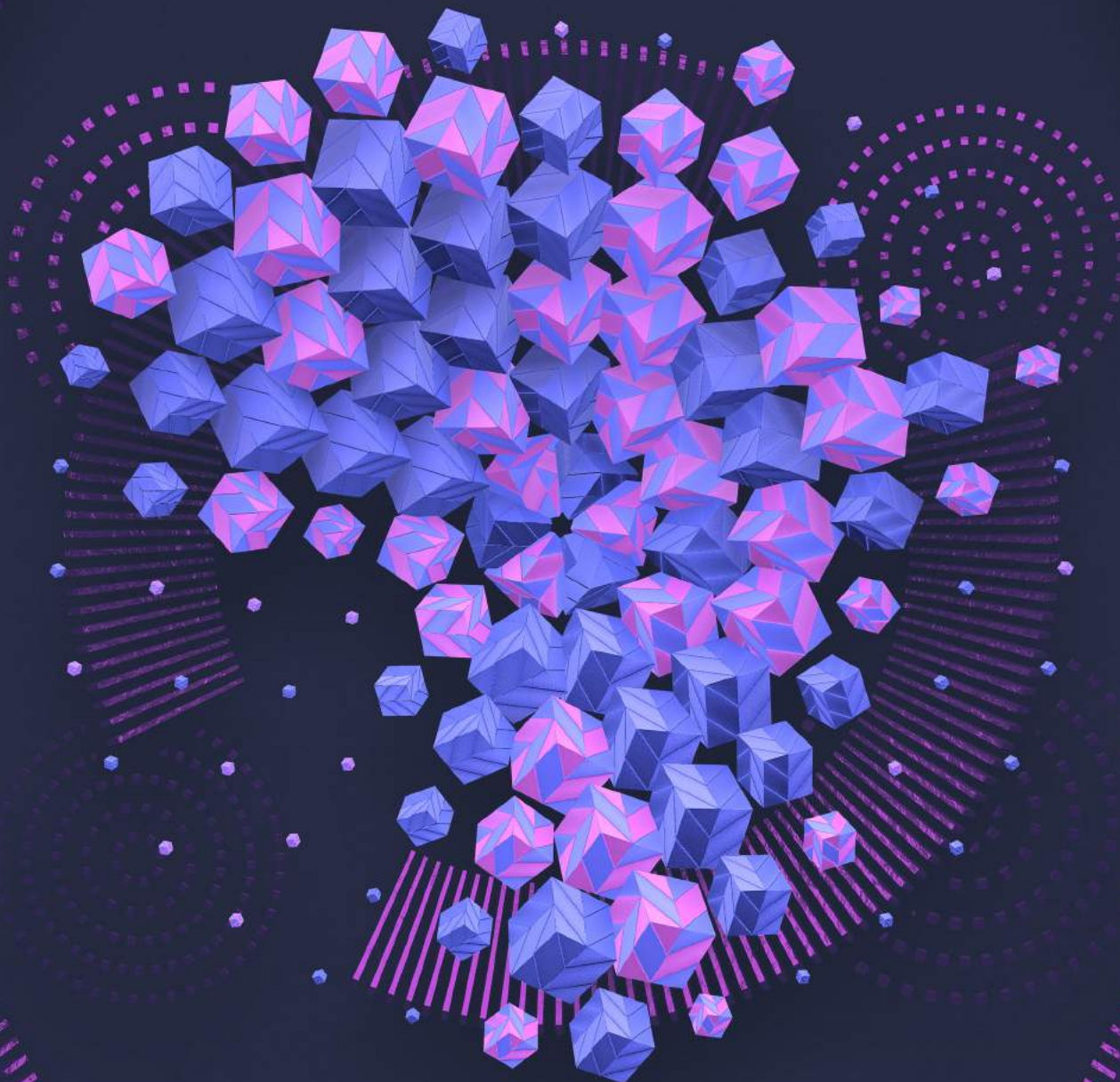




THE AFRICAN BLOCKCHAIN REPORT 2022



PUBLISHED BY CV VC AG IN COLLABORATION WITH STANDARD BANK

Contents

01 INTRODUCTION

Introduction	4
Editorial by Gideon Greaves	5

02 RESEARCH METHODOLOGY

Research Methodology	6
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03 EXECUTIVE SUMMARY

Global Venture Funding	10
African Venture Funding	10
Global Blockchain Venture Funding	11
African Blockchain Venture Funding	11

04 VENTURE FUNDING OVERVIEW

Introduction	13
Global Startup Funding - A Snapshot	13
Global Blockchain Venture Funding - A Snapshot	14
African Blockchain Venture Funding Landscape	16
Quarterly Blockchain Venture Funding in Africa 2021 vs 2022	17
Blockchain Venture Funding by Nations	18
African Blockchain Funding Analyzed by Industries	19
African Unicorns	21
African Investor Watchlist	22

05 FUNDED BLOCKCHAIN COMPANIES AT A GLANCE

Funded Blockchain Companies at a Glance	29
Custody & Exchanges	30
Fintech	32
Data Management, Verification & Analytics	33
DeFi	34
Energy	35
Infrastructure & Development	36
NFTs, Gaming & Metaverse	37
PropTech	38

06 AFRICAN BLOCKCHAIN INDUSTRY DEVELOPMENTS

African Blockchain Industry Developments	44
Conversations, Innovations & Observations	50

07 CRYPTOCURRENCY REGULATIONS IN AFRICA

Cryptocurrency Regulations in Africa	56
A New Way to Provide Universal Access to Digital Assets	62

08 CONCLUSION

Conclusion	65
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09 ABOUT

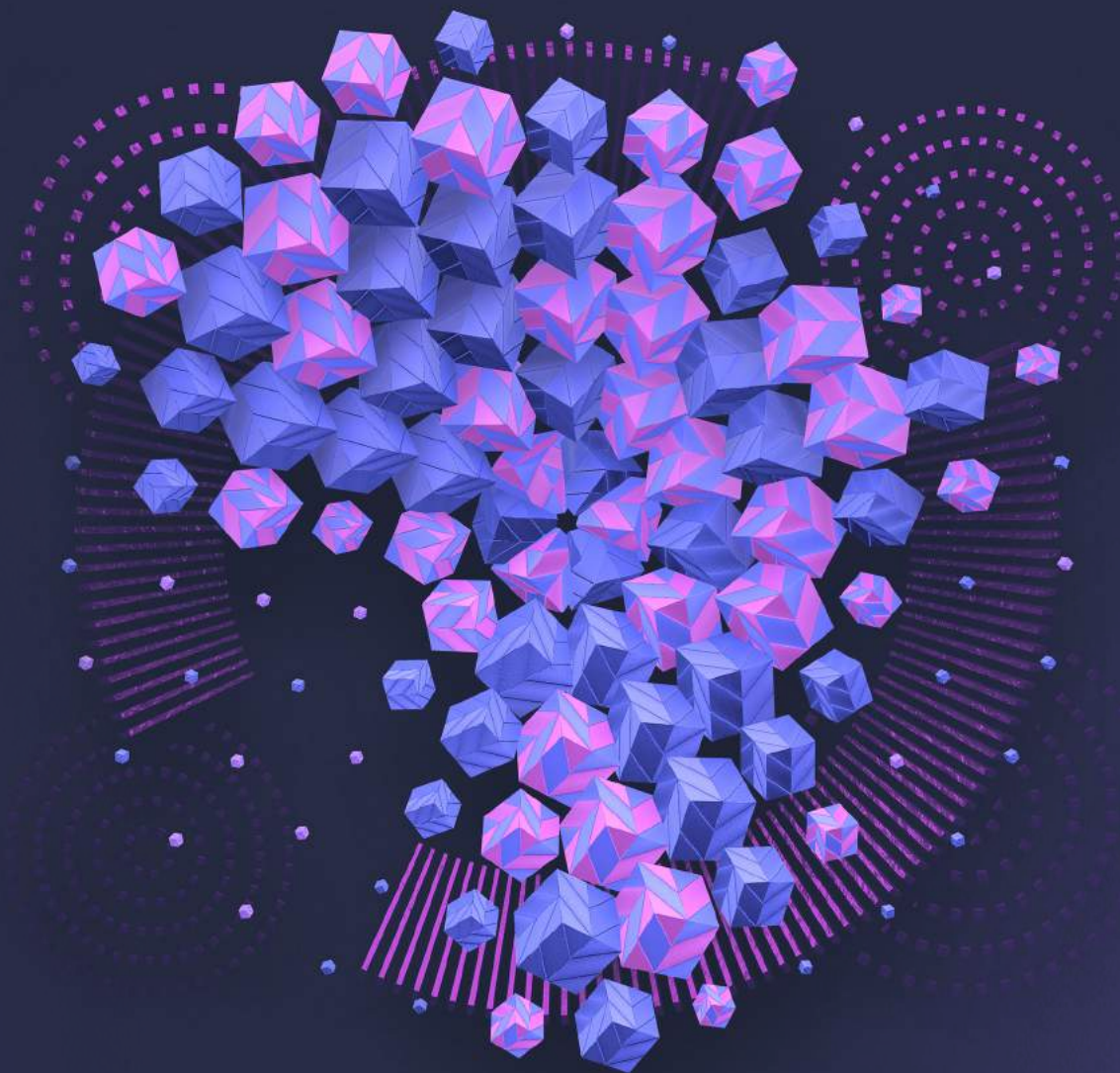
CV VC Portfolio	68
Previous Reports	71
About	72
Disclaimer	73

EXPERT ARTICLES

VALR - Where to Next? How Africa's Largest Native Crypto Exchange Weathered 2022 and what it Means for the Future of Crypto	23
BRI Africa - Toward WEB3: How the Blockchain Research Institute Africa is Advancing Africa's Digital Transformation	26
Ripple - How Africa is Leapfrogging into a Digital Payments Future	27
Jaltech - Cryptocurrency Investment Trends in South Africa	39
Polygon - Polygon Labs in Africa	41
CertiK - The High Stakes of Blockchain Adoption in Africa	42
Polygon - Blockchain Social Impact in Africa	48
Lisk - The Beat of the Afro-Blockchain	52
Standard Bank - Blockchain in Tax	53
Standard Bank - WEB 3: The Economy of Trust	54
Standard Bank - Tax (South Africa)	61
Financial Innovation Hub: A New Way to Provide Universal Access to Digital Assets	63
MOORE Johannesburg - Adapting to Change: How the Professional Services Sector Can Navigate the Digital Asset Landscape	64

01

INTRODUCTION



Introduction

Blockchain technology continues to impact Africa to a degree that is unprecedented anywhere else in the world.

The African continent continues to be a fertile ground for the growth and implementation of blockchain technology, positively impacting the welfare of its nations, wealth, as well as global standing. In this report, we reaffirm Africa's status not only as the ultimate crypto continent but also as one of the fastest blockchain technology adoption and development regions in the world.

As a continent, Africa has made tremendous strides as both a tech destination and one which is rapidly embracing blockchain and cryptocurrency technology. Evidence of the progress made in sector-agnostic venture funding is the growth of a multitude of funding metrics over the course of 2022. Significant improvements have been observed in Africa, including increases in total funds raised, deal count, and median deal size. Notably, Africa was one of only two regions to experience growth in these areas. Furthermore, Africa's share of global funding has risen more than any other region by a considerable margin.

On a blockchain-specific venture funding front, Africa has also continued to perform well and has shown consistent growth. African blockchain startups raised \$474 million in 2022, a 429% YoY funding increase, the highest funding growth rate of any region. When combining the sharp increase in blockchain funding with the fact that Africa had the smallest increase in blockchain deals, the annual median deal size has increased significantly, indicating that businesses are raising larger cheques and investors are gaining confidence.

With one of the youngest and most populous demographics in the world, Africa is in a unique position to capitalize on its

current circumstances to drive innovation. In the areas of financial infrastructure, personal identification, record-keeping, and access to financial independence, the continent's present situation has created the perfect environment for blockchain technology to flourish and tackle real-world issues - demonstrating real-life utility.

While the African blockchain ecosystem continues to thrive and crypto adoption rates soar, there remains a need for comprehensive, up-to-date information on blockchain-related activities and regulatory developments in the region.

The African Blockchain Report, Published by CV VC in Collaboration with Standard Bank.

Recognizing the need for benchmarkable, ongoing consolidated information about blockchain technology, funding, regulations, company data, and innovation, CV VC is proud to present the African Blockchain Report 2022.

This report offers vital insights into African blockchain-related activities, presenting an all-encompassing perspective on the region's blockchain landscape. Topics covered include the latest funding data, regulatory updates across various countries, and industry advancements. The report highlights the remarkable speed at which the ecosystem is evolving and the resulting improvements in the quality of life across the continent.

The future of Africa and its infrastructure looks increasingly promising as cryptocurrencies and blockchain technology continue to address many of the continent's fundamental challenges. The surge in adoption shows no signs of slowing down.

Editorial by Gideon Greaves

As an entrepreneur who has been actively involved in the African blockchain ecosystem for the past 18 months, I must say that I am excited about the future of blockchain technology on the continent. The growth and progress made over the past year is nothing short of remarkable, and the potential for further advancements is even more exciting.

The African Blockchain Report by CV VC is a testament to this growth and progress. As the report states, Africa is not only the ultimate crypto continent but also one of the world's fastest blockchain technology-adopting and developing regions. The report provides a comprehensive overview of the African blockchain ecosystem, highlighting its remarkable evolution and the resulting improvements in the quality of life across the continent.

Africa, as the world's most populated region with the youngest demographic, is distinctively situated to take advantage of its current conditions. The existing circumstances have provided an ideal setting for the growth of blockchain technology, which can address practical problems and showcase tangible benefits.

However, despite the rapid growth and progress made, a significant knowledge gap still needs to be addressed. Having had the opportunity to engage with legacy companies across the continent, it is clear to me that most C-level staff don't know what blockchain does and why they should pay attention to it.

This lack of knowledge and understanding hinders the potential for further growth and progress. It is imperative that we bridge this gap and educate those in positions of power and influence on the potential of blockchain technology. This will not only drive innovation and progress but will also attract even more investors and entrepreneurs to the continent.

As we move forward, we must continue to push the boundaries of what is possible and work towards creating a more inclusive and equitable future for all Africans. The blockchain industry has the potential to do just that, and I am excited to be a part of this journey.

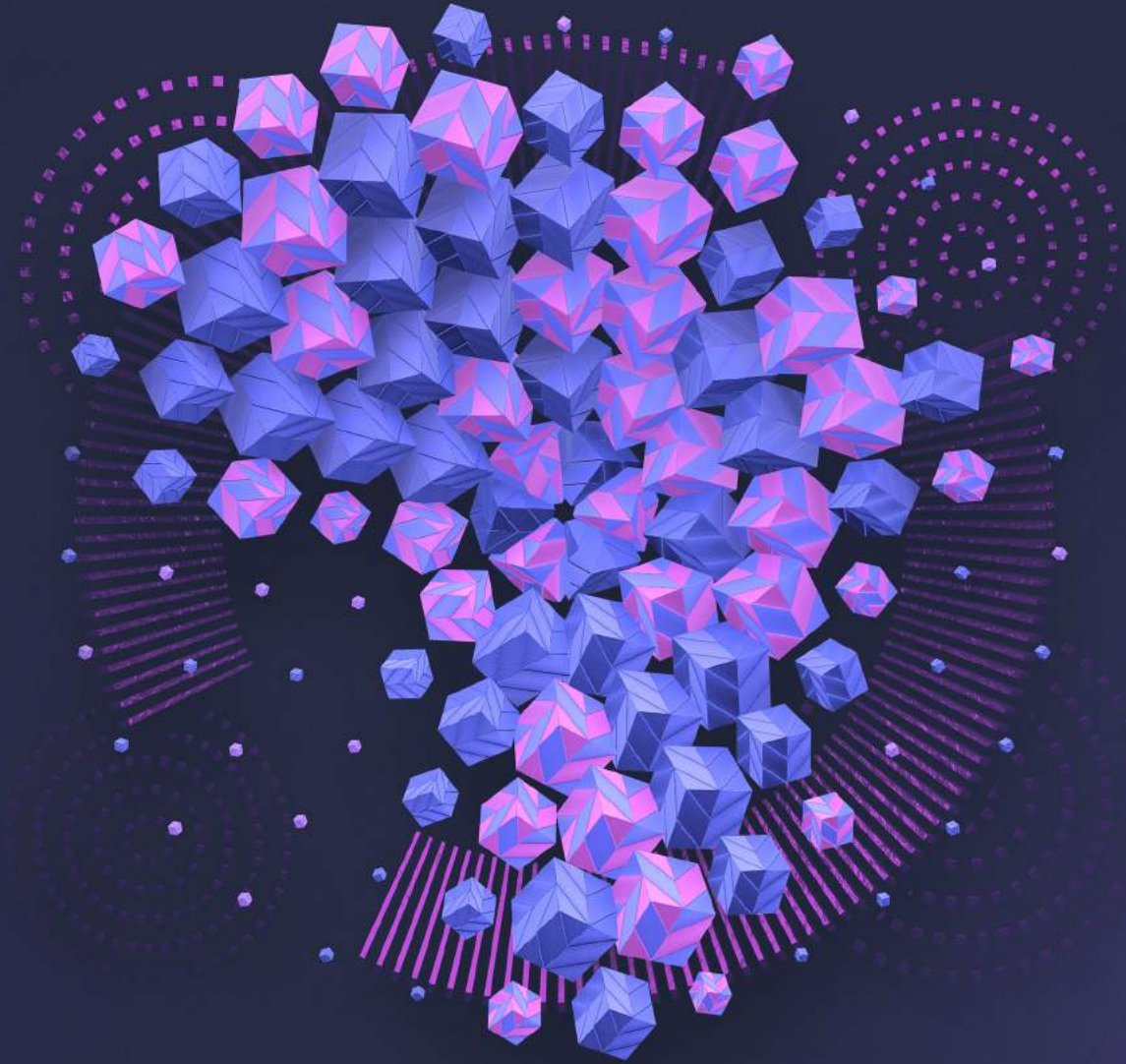
In conclusion, I am proud to be a part of CV VC and the remarkable work that has been done to promote and advance the African blockchain ecosystem. The African Blockchain Report is a valuable resource for anyone interested in the industry and highlights the immense potential for further growth and progress. Let us all work together towards creating a brighter future for Africa through the power of blockchain technology.



Gideon Greaves,
MD, CV VC Africa

02

RESEARCH METHODOLOGY



Research Methodology

1. REPORT INTENTION

This is the second edition of an annual report providing insights into the African blockchain landscape, industry developments, the various African regulatory environments for blockchain businesses, and the role of venture funding in the expansion of blockchain adoption in Africa. This report collates otherwise-sparse funding data on African blockchain companies. We aim to provide a high-level comparative synopsis to gain macro insights over time.

2. COMPANY DATA

We have focused on a data set of 28 African blockchain startups that have raised funding from January 2022 through March 2023. The rationale for the selected period was to have a full calendar year's worth of company funding data and 1st Quarter funding data for 2023, allowing us to compare the previous year's first quarter considering the later publishing date of this report. We have used various sources of data to compile a benchmark database. Sources include various public databases, research reports, LinkedIn profiles, reputable news outlets, press releases, investors, and entrepreneurs. The report criteria is as follows:

i. Inclusion

1. Must meet the following criterion:

a. The company is headquartered in Africa.

- i. The location of a company's headquarters was determined through publicly accessible sources such as the company's official website, official LinkedIn profile, legal documents, and press releases.

b. Note: the inclusion criteria for the African Blockchain Report 2022 have been further restricted in comparison to the 2021 Report to arrive at a more objective criterion for company inclusion. This installment of the report only includes businesses headquartered in Africa when analyzing blockchain-specific funding in Africa.

2. Company characteristics:

- a. Currently operational
 - b. Blockchain/cryptocurrency as a primary focus
 - c. Successfully raised a funding round between Jan 2022 and Mar 2023
 - d. Active website
3. Funding:
- a. Min funding = \$100k
 - b. Disclosed, publicly verifiable funding deals. In the case where funding has been totaled, and undisclosed rounds have fallen between disclosed rounds, the undisclosed rounds have been omitted from the total figure.
 - c. All stages, and
 - d. Private funding, and
 - e. Equity funding and funding in the form of convertible notes from traditional financiers.

ii. Exclusion

1. Company types:

- a. Publicly-traded businesses that trade on recognized securities exchanges, and
- b. Consulting Firms, and
- c. Investors
- d. Where a crypto business does meet the inclusion criteria in its own right, but has begun operating as an institutional funder (such as KuCoin) and has raised a fund for its own investing activities, these funds have not been included in that company's funds raised figures.
- e. Academia, and
- f. Events businesses, and
- g. Media houses and media businesses

2. Funding types:

- a. Debt (excepting convertible notes)
- b. Contingent funding. Where an amount of funding is promised contingent on the fulfillment of certain milestones, but the business has only received a portion

of such funds, the amount not received as yet has not been included.

- c. Public and private grant funding. In the case where funding has been totaled, and grant funding has occurred in between private equity funding rounds, the grant funding has been subtracted or omitted from the total figure.

d. IPO rounds

- e. Crypto Coin Offerings (ICOs/IEOs/ISOs/ITOs et al.) have not been included.

- i. The above Crypto Coin Offerings were excluded to ensure only traditional means of venture capital were analyzed.

- f. Non-cash contributions (such as Google Cloud Credits in the case of Google-accelerated ventures).

B. African Unicorns

i. Inclusion

1. A privately-owned tech company, valued at \$1 billion+, headquartered in Africa.
2. We have included Unicorns here from all sectors, not only businesses that are blockchain-specific, though we have indicated which of these businesses do in fact have a blockchain aspect to their business.
3. **Note: the inclusion criteria for the African Blockchain Report 2022 have been further restricted in comparison to the 2021 Report to arrive at a more objective criterion for company inclusion. This installment of the report only includes businesses headquartered in Africa when listing African Unicorns.*

i. Exclusion

1. Publicly traded,
2. Companies founded by Africans but primarily servicing a market outside of Africa. **Example: Esusu has been excluded because the primary customer base is in the US despite the company having an African Founder.*

C. African Investor Watchlist

- i. We have included a “Watchlist” of investors that have invested in African blockchain businesses ordered by the firm’s count of all-time investments.

1. Inclusion

- a. These investors have closed at least one publicly-disclosed funding deal with an African blockchain business being the recipient of the funding.

j. [Chain Analysis: Geography of Cryptocurrency 2022 Report](#)

k. [Galaxy Digital Research: 2022 Crypto VC Comes Down to Earth](#)

5. COUNTRY LEGAL STATUS

- a. Legal
 - i. Financial institutions are allowed to deal in and hold cryptocurrencies
 - ii. Individuals are permitted to deal in and hold cryptocurrencies
- b. Implicit Ban
 - i. Banks or other financial institutions are prohibited from dealing in cryptocurrencies or offering services to people or businesses involved in crypto.
- c. Absolute Ban
 - i. Any cryptocurrency usage, trading, holding, or mining is explicitly prohibited.
- d. Uncertain
 - i. Insufficient conclusive information was available to make an informed statement about the legality of cryptocurrencies.

3. GLOBAL CONTEXT AND FIGURES

In placing our company data in a broader context, we have included significant statistics from various core databases and venture funding reports. We have referenced these reports using hyperlinks in the relevant sections.

In sections where the data found in industry-leading reports were contradictory, we have provided data ranges and averaged the data of the most credible reports to maintain consistency when drawing inferences from such data.

All financial figures in this report are portrayed in USD unless otherwise specified. All amounts have been rounded to maintain context when compared to the other figures in a specific data set.

**In sections where comparisons of blockchain venture funding by region was analyzed on a YoY basis, Australia, Canada, and LatAm blockchain figures were not comprehensive for prior years. As such, these regions were not included in annual comparisons.*

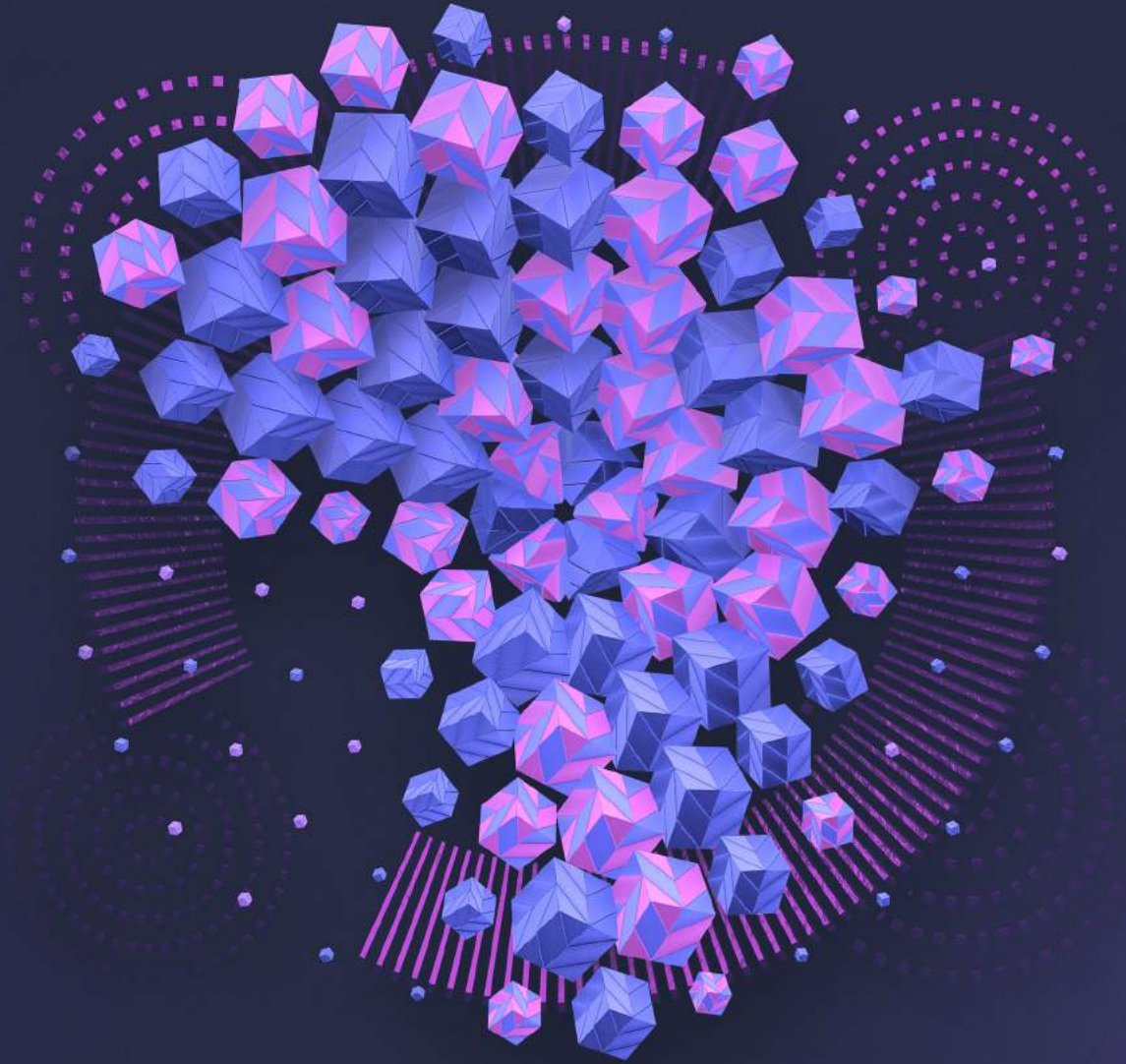
4. CORE DATABASES AND REPORTS UTILIZED

- a. [Crunchbase](#)
- b. [Africa: The Big Deal - Startup Deals Database](#)
- c. [Dealroom.co](#)
- d. [CB Insights: State of Blockchain 2022 Report](#)
- e. [CB Insights: State of Fintech 2022 Report](#)
- f. [CB Insights: State of Venture 2022 Report](#)
- g. [KPMG: Venture Pulse Q4 2022 Report](#)
- h. [Partech: 2022 Africa Tech Venture Capital Report](#)
- i. [Briter Bridges: Africa’s Investment Report 2022](#)

Should you require any further clarity surrounding the research methodologies used or feel that your company has not been included where it should have been, please don’t hesitate to reach out to reports@cvvc.com

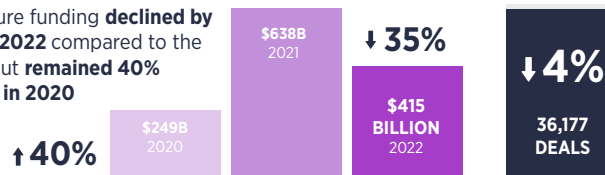
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EXECUTIVE SUMMARY



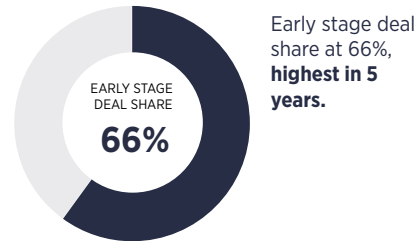
GLOBAL VENTURE FUNDING

Global venture funding **declined by 35% YoY in 2022** compared to the prior year, but **remained 40% higher than in 2020**

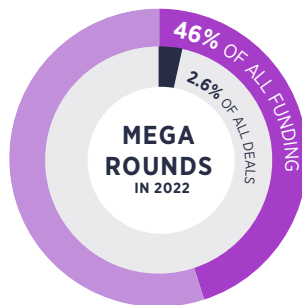
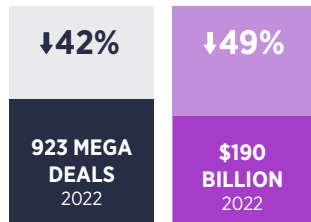


The global sector-agnostic venture funding deal count **declined by 4% in 2022 YoY** compared to the prior year, totalling 36,177 deals.

Average deal size decreased to **\$16.8m**, a **32% drop** compared to 2021, but a **6% increase from 2020**, the year prior to 2021's breakout year.

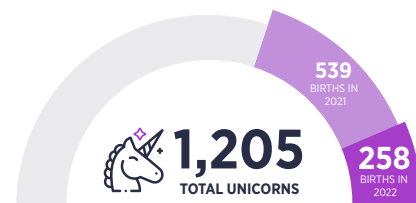
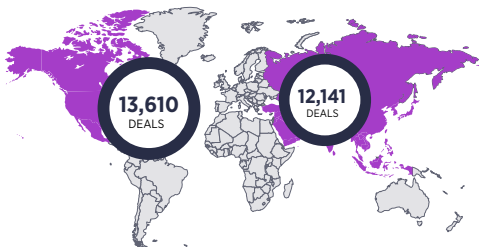


Mega round funding and deals **decreased by 49% and 42% respectively** - hitting a 10-quarterly low as well.



Mega rounds made up **46% of all funding** in 2022, and **2.6% of deals**, a decline of 21% and 40% from the previous year.

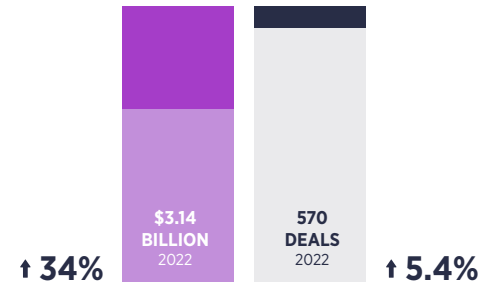
Asia and the US lead the pack in global deal share concluding 13,610 and 12,141 respectively. Europe being next in line, trailing the US by 44.4%



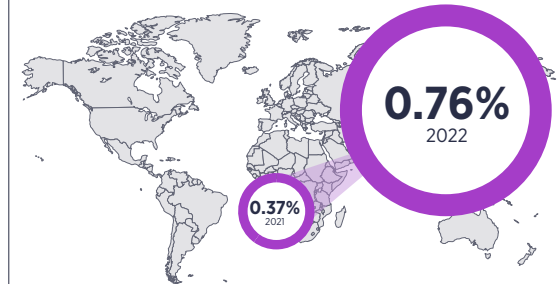
Unicorn births have also fallen to **258 in 2022** for a total count of **1,205** compared with 539 births and 987 at the close of Q4 in 2021.

AFRICAN VENTURE FUNDING

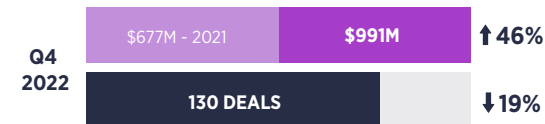
Africa saw **\$3.14b** raised across **570 deals** through 2022, up 34% and 5.4% compared to 2021.



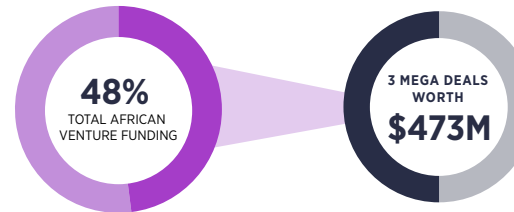
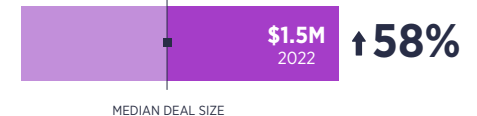
Africa's share of global venture funding was **0.76% in 2022**, up from **0.37% in 2021**



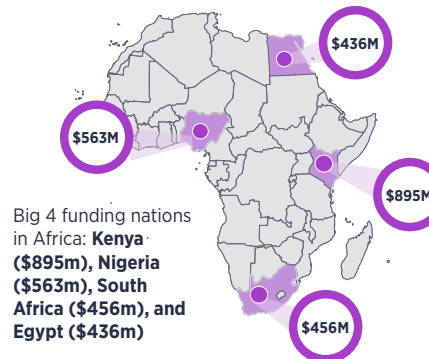
Funding in Q4 2022 was **\$991m (+46% YoY)** across **130 deals (-19% YoY)**.



Median deal size in Africa: **\$1.5m**, a **58% YoY increase**



Mega round deals in Africa **increased by 20% in 2022**, totaling **6 deals**. Africa had **3 mega deals in the fourth quarter of 2022**, accounting for **\$473m** worth of funding or **48% of total African venture funding** within the quarter.



Africa added **1 unicorn in Q2 2022** and **another in Q1 2023**, totaling **6** (0.4% of global unicorns)



GLOBAL BLOCKCHAIN VENTURE FUNDING

Globally, \$26.8 billion was raised across 1,828 deals in 2022

2022 **\$26.8B ACROSS 1,828 DEALS**

Blockchain funding reached new all-time-high in 2022, surpassing 2021 by 4%. The amount of deals in 2022 overshadowed 2021's previous all-time-high by close to 30%

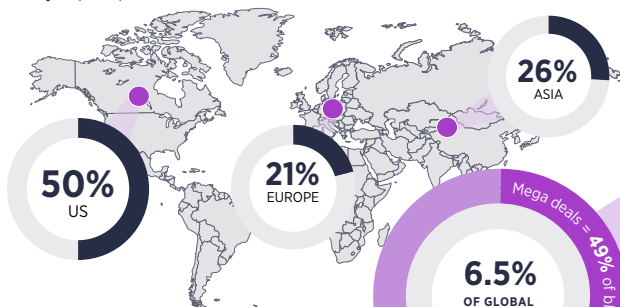
↑ 4%

**\$26.8
BILLION
2022**

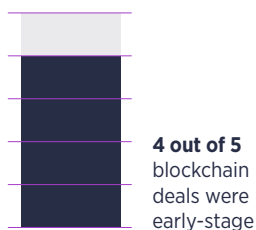
**1828
DEALS
2022**

↑ 30%

The US led in deal share (50%), followed by Asia (26%) and Europe (21%)



Blockchain received **6.5% of all global venture funding** in 2022



35 BLOCKCHAIN UNICORNS born in 2022, making for a total of 79

AFRICAN BLOCKCHAIN VENTURE FUNDING

African blockchain businesses **raised \$551 million** (Q1 2022 - Q1 2023) across **33 deals**

\$474M IN 2022 ↑ 429% YoY

African blockchain businesses raised **\$474 million in 2022**, a **429% YoY funding increase**, the highest funding growth rate of any region

African blockchain funding deals increased by 12% YoY from 26 to 29

↑ 12%

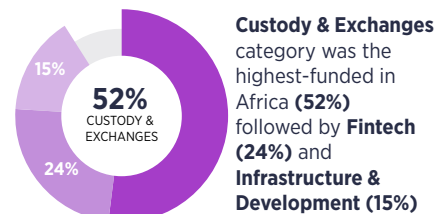
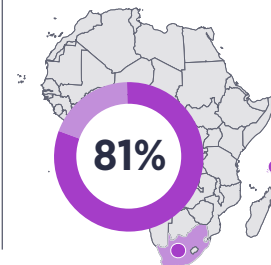
**29
DEALS
2022**

91%

OF FUNDING FROM 12 DEALS

Venture Rounds accounted for the vast majority of funds raised in Africa, obtaining **91.4% of the funding from 12 deals**, up from 43% from 6 deals in 2021

Seychelles and South Africa accounted for **81% of African blockchain funding** in 2022



Custody & Exchanges category was the highest-funded in Africa (52%) followed by Fintech (24%) and Infrastructure & Development (15%)



FIRST AFRICAN BLOCKCHAIN UNICORNS ARE BORN:

Kucoin and Scroll.io

\$150M
KUCOIN

\$100M
MFS AFRICA

FIRST AFRICAN MEGA DEALS

African blockchain funding growth outpaced general African venture funding growth (429% vs 34%)

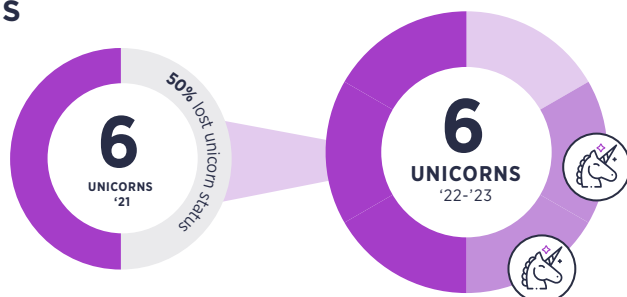
34% African Venture Funding

429% African Blockchain Funding

AFRICAN UNICORNS

50%

of the unicorns that were included in our 2021 unicorn list - which **totalled 6 businesses** - have since lost their unicorn status.



3 NEW UNICORNS in 2022 - 2023

2 BLOCKCHAIN UNICORNS

Kucoin (Q3 '22)
Scroll.io (Q1 '23)

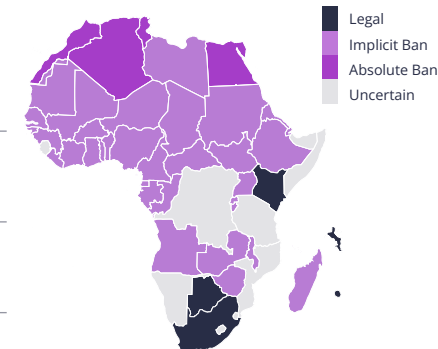
CRYPTOCURRENCY REGULATIONS

5
LEGAL

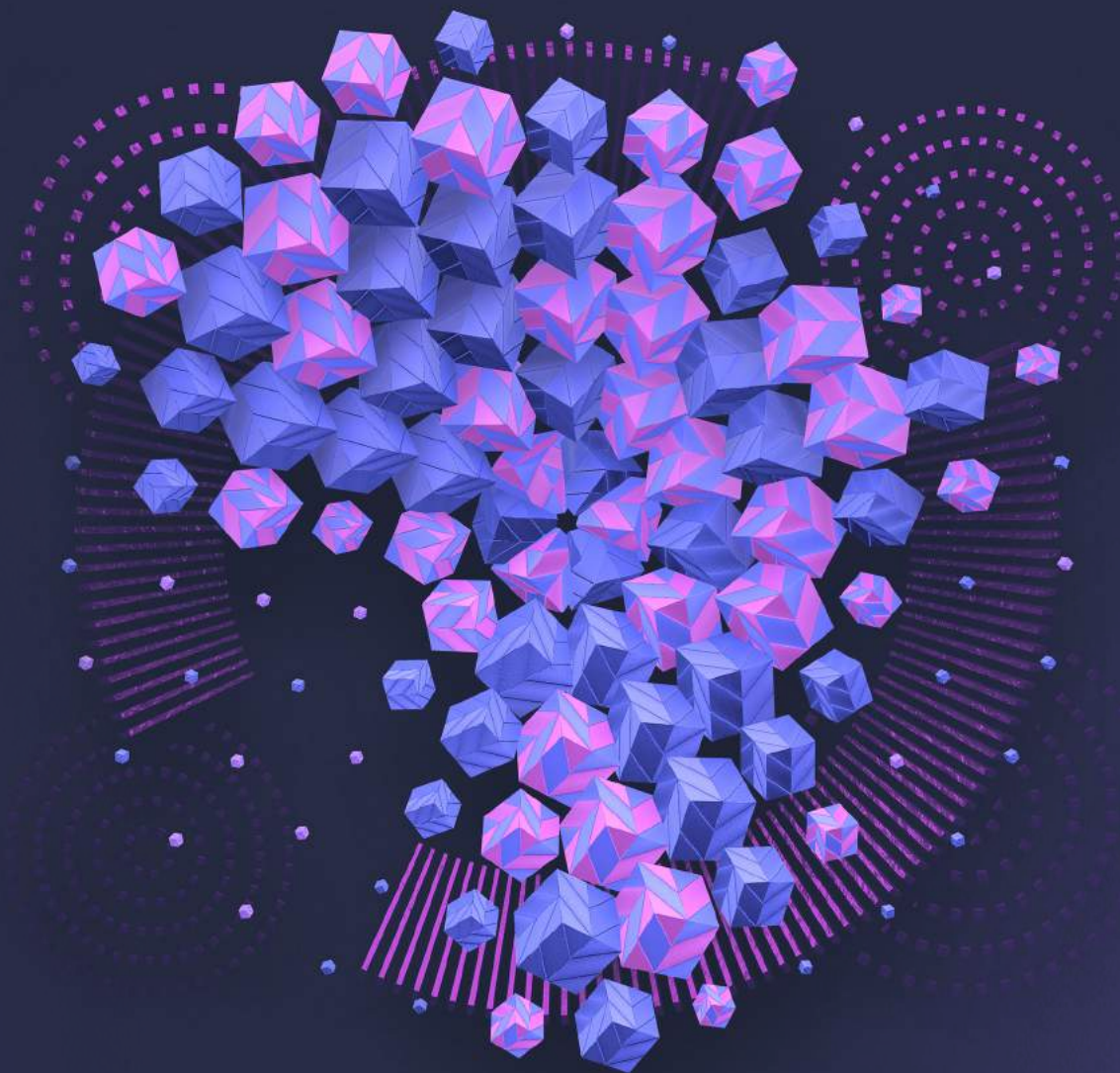
4
ABSOLUTE BAN

36
IMPLICIT BAN

9
UNCERTAIN



04

**VENTURE
FUNDING
OVERVIEW**

The State of Venture Funding in Africa

INTRODUCTION

This section investigates the state of blockchain and cryptocurrency venture funding in Africa compared to global figures. As a result, context will be given to the African figures. We will provide an overview of sector-agnostic funding on both a global and an African scale before doing so in relation to blockchain businesses. We then continue to present the African blockchain businesses that have successfully raised funding rounds in the 2022 calendar year through to the first quarter of 2023.

In addition to an analysis of the African blockchain businesses that raised funds in the 2022 calendar year, we have included a brief analysis of blockchain businesses that have successfully raised funding in Q1 of 2023 for the sake of completeness - considering the publishing date of this report.

GLOBAL STARTUP FUNDING - A SNAPSHOT

To provide a more comprehensive analysis of blockchain-specific venture funding, it is essential to consider the broader context of global venture funding and significant developments that have taken place. It's also important to track trends in venture funding and the global economic climate to gain a deeper understanding of the overall picture.

Before drawing conclusions based on venture funding figures in 2022, it's crucial to consider that the previous year shattered all previous records by a considerable margin. Therefore, it's essential to approach the data with a perspective that acknowledges the significant increase in funding from the previous year. So much so that 2021 has been dubbed by some as the "year of insane valuations." 2021 saw a myriad of records broken on all fronts,

whereas 2022 saw the emergence of due caution and the brakes being applied across the board in venture funding generally. It appears that investors took a far more prudent approach to venture funding in 2022 when compared to the more maverick attitude that was present in 2021. Caution prevailed in 2022, and this year's figures are more modest compared to 2021. Despite the significant cooling of the venture funding market, generally speaking, blockchain-specific venture funding in 2022 finds itself breaking some of even 2021's highs.

There has not been a significant change in the pecking order of global regions in terms of total funds raised; however, certain regions have captured a higher percentage of total funds raised from some of the larger regions. The US still tops the list in terms of raising the most venture dollars, while Asia still leads in terms of total deal count. Asia and the US account for nearly 70% of all deals globally. Africa showed the greatest increase in terms of its share of global venture dollars, while Lat-Am showed the largest decline in this respect. Meanwhile, Europe hit a 5-year high in its share of global deals.

Early-stage deal share increased for the third year in a row, while later stage deals have declined to a five year low due to the fact that confidence in valuations has decreased and investors are questioning the prevalence of sound underlying business cases. The deal share changes, combined with a decline in the median deal size of nearly half for late-stage deals, has had a significant impact on venture dollars raised.

We will now expand on some of the global venture funding key insights and figures before delving into blockchain-specific venture funding.

Below are some key insights:

Global Venture Funding

- Despite a decline of 35% YoY from \$638 billion in 2021 to \$415 billion in 2022, global venture funding remained 40% higher than in 2020. Deal counts also remained relatively stable, with a 4% decline totaling 36,177 compared to 2021.
- Where the record-breaking year of 2021 saw venture funding increase consecutively each quarter, 2022 saw the opposite take place, where each quarter's funding and deal counts declined consecutively as the market gradually became more subdued, with the largest annual decrease on a quarterly comparison coming in Q4. Q4 of 2022 showed a decrease of 64% against the same quarter a year prior. The only quarter to have shown an increase against its 2021 counterpart was Q1 of 2022.
- Q4 of 2022 saw the lowest funding amounts and deal counts since Q2 of 2020 despite total annual funding and deals in 2022 being higher than 4 of the 5 previous years on record.
- Venture funding declined in the US as well as in Asia for the 4th consecutive quarter.
- The US still sits firmly ahead of the rest of global regions in terms of funds raised, with 48% of the total. This being said, the region's share decreased by nearly 10% YoY. The largest beneficiary of this decrease was Asia, whose share increased by the same margin. Meanwhile, Canada saw its share of global venture funding increase by 241%, and Europe reached a 5-year high.
- Early-stage deal share has increased by 3% YoY to 66%, its highest share in 5 years. Mid-stage deals garnering a 12%

- share, late-stage a 10% share, and other-stage deals bagging 12%.
- The average deal size declined by 32% to \$16.8m in 2022 but remained 6% higher than the 2020 average. While the median deal size also declined by 13%, this figure surpassed its 2020 figure by 23%.
- All regions except for Africa saw a decrease in annual median deal size in 2022. The largest decline was in Asia, sliding by 25% YoY.
- Annual mega round funding and deals came in at \$190b and 923 deals representing decreases of 49% and 42%, respectively. Mega rounds made up 46% of all funding in 2022, and 2.6% of deals, a decline of 21% and 40% from the previous year.
- Mega round deals also declined in all regions except Africa on a YoY basis, with the LatAm and the Caribbean region showing the largest decline of 64%, with the US and Asia showing declines of 45% to 471 and 236 mega-round deals, respectively.
- Global first-time venture financing is continuing at a steady rate in terms of deal size, having surpassed the deal value of all but one of the past 5 years (2021).
- Unicorn births fell to 258 in 2022 for a total count of 1,205 compared with 539 births and 987 at the close of Q4 in 2021.
- Asia and the US lead the pack in global deal share, concluding at 13,610 and 12,141, respectively. Europe is next in line, trailing the US by 44.4%.
- It is clear that there is a more conservative outlook for funders and that they are looking for profitability and underlying, long-term value as opposed to chasing the unjustified, inflated, and speculative valuations that we have become used to in recent years. This is evidenced by a number of significant down rounds, such as Klarna's [\\$800m](#) raise at a \$6.7b valuation — [down 85% from \\$45.6 billion in 2021](#).

- Fintech has experienced its worst quarter since Q4 of 2018, raising \$10.7b in Q4 of 2022, down 65% QoQ, with the picture looking significantly different than it did at this point last year. The sector is down by almost all measures.
- Despite the Fintech sector having struggled on a QoQ-basis, the sector still raised the largest portion of all funding throughout 2022 on an annual basis with \$75.2b, followed by the Retail Tech sector and the Digital Health sector raising \$52.9 and \$25.9, respectively.

Overall, VC investment had a promising year in that all key indicators are higher than the five prior years on record except 2021, which was a remarkable record-breaking year in funding across the board. It could be said that 2021 was an outlier.

African Venture Funding

- Africa saw \$3.14b raised across 570 deals through 2022, up 34% and 5.4% compared to 2021. Funding in Q4 2022 was \$990m (+46% YoY) across 130 deals (-19% YoY). The total funding for 2022 being a new all-time high for the continent.
- Africa makes up 0.76% of global venture funding in 2022, up from 0.37% in 2021.
- Except for Africa, all regions' annual median deal size for 2022 is down. Africa's median deal size came in at \$1.5m, surpassing \$1m for the first time on record, a YoY increase of 58%.
- Mega-round deals also declined in all regions except Africa on a YoY basis. Where the LatAm and Caribbean region showed a decline of 64% on 2021's 47 mega-round deals, Africa showed an increase of 20%, totaling 6 mega deals in 2022. Africa had 3 mega deals in the fourth quarter of 2022, accounting for \$473m worth of funding or 48% of total African venture funding within the quarter.
- Quarterly African venture funding has increased by 46% YoY compared to Q4 2021, but deals have decreased by 19%. This reflects a total investment amount of \$990m across 130 deals.

- While Africa's share of global venture deals dropped from 1.4% to 1% QoQ, funding amount has increased drastically. The continent's share of global venture funding increased more than any other region in 2022, hitting an all-time high of 1.5% in Q4, up from 0.37% in Q4 2021.
- Of the Big 4 funding nations in Africa, Kenya led in terms of funds raised with a total amount of \$895m, followed by Nigeria, which raised \$563m, South Africa coming in at \$456m, and Egypt at \$436m.
- Africa added 1 unicorn in Q2 of 2022, taking the total number of unicorns to 5. This represents 0.4% of global unicorns. In Q1 of 2023, Africa added another unicorn, bringing this total to 6.

GLOBAL BLOCKCHAIN VENTURE FUNDING - A SNAPSHOT

There are few things to be said that would not point to 2022 being the most promising and significant year in blockchain venture funding to date. Not only because the majority of key metrics have seen growth off the back of a record-breaking year (2021) but also because of the global context in which this growth occurred.

A number of flames were put to powder kegs globally on an economic and socio-political front throughout the course of 2022. Chief among them were the tensions in Ukraine bubbling into a full-blown Russian invasion - bringing instability in global supply chains, volatility in energy costs, and a host of other challenges, - the continued fallout of the global pandemic, labor shortages, and ever-increasing interest rates. Add to the challenges a cautious (and perhaps more diligent) investor, after having experienced a year of insane valuations and the most brutal crypto crash for over a [decade](#), and you would be forgiven for not having had a positive outlook for 2022. However, what ended up transpiring within blockchain funding markets kicked against even the most pessimistic of naysayers.

For starters, blockchain venture funding reached yet another all-time high in 2022 - despite 2021 having been a record-breaking year - surpassing 2021's high by 4%. The number of deals in 2022 overshadowed 2021's all-time high by close to 30%. Almost all major metrics are indeed up for blockchain-specific funding.

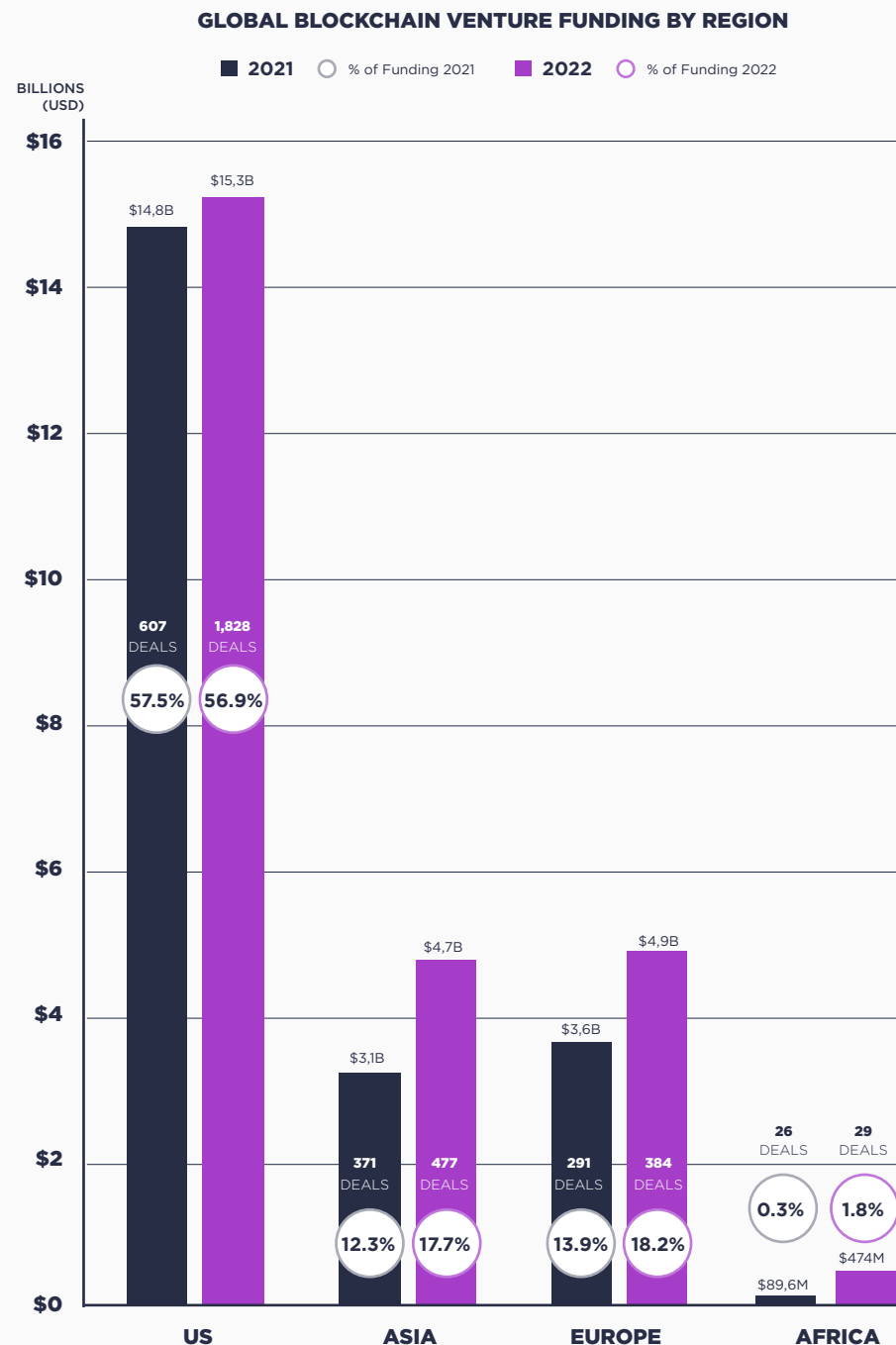
Even more telling than the funding figures themselves is where the funding which was raised went to. There were significant changes in the industries and regions that garnered funds in 2022. Blockchain funding increased, unlike the decrease seen in general venture funding. However, both types of funding shared the positive sentiment towards industries and regions focusing on long-term, high-impact value.

The funding figures themselves are impressive, with blockchain businesses raising \$26.8 billion across 1,828 deals throughout 2022. The US leads in terms of deal share, accounting for almost half of all deals, followed by Asia and Europe with 26% and 21%, respectively. The funding raised in 2022 went to industries and regions that focus on longer-term, high-impact, value development, with fewer insane valuations for lackluster traditional businesses parading the blockchain buzzword.

As we reflect on the blockchain industry's funding landscape in 2022, it's clear that despite a slight dip in the number of blockchain unicorns compared to the previous year, the industry remains a highly attractive destination for investment. In total, 35 blockchain unicorns were born in 2022, and mega deals continued to flow into the industry, with 65 deals bringing in a whopping \$13 billion, accounting for 49% of all blockchain funding.

In 2022, blockchain businesses received a 6.46% share of all global venture funding with four out of five blockchain venture funding deals having been early-stage deals. Notably, blockchain venture funding as a percentage of all venture funding is on the rise both globally, and when comparing Africa's blockchain funding to its regional venture funding total as a whole. In Africa, blockchain funding achieved a record 15% share of all sector-agnostic venture funds raised by the continent, more than double the global average, highlighting the continent's continued emergence as a promising investment destination for blockchain-based startups.

Investors continue to demonstrate increasing confidence in the blockchain industry's longevity and potential, we can expect to see even more growth and investment in the space in years to come.



AFRICAN BLOCKCHAIN VENTURE FUNDING LANDSCAPE

In this section, we analyze 28 African companies to provide insights into the landscape of blockchain and cryptocurrency venture funding on the continent. From the start of 2022 through to the end of Q1 2023, these companies collectively raised \$551 million across 33 deals, with 29 of the deals occurring in the 2022 calendar year. The 4 deals within Q1 of 2023 making up \$77.5m or 14% of funds raised from Q1 2022 - Q1 2023.

Africa saw a number of standout funding metrics emerge this year, which meant it diverged from the course that other regions had followed, given that Africa's metrics mostly saw positive changes. This holds true for African sector-agnostic venture funding and is even more pronounced for blockchain-specific venture funding. For instance, Africa's blockchain-focused annual funding growth was 759% greater than Asia's, which was the next highest growth contender. In 2022, Africa was the sole region to experience an increase in median deal size. Africa was also the only region we looked at that showed a triple-digit percentage increase in its share of the total global blockchain venture dollars raised, increasing by a factor of five. To tie off the first-time blockchain-specific funding accolades for the continent, Africa saw its first mega-deal and its first (and second) blockchain unicorns born in 2022.

Some Key Takeaways for 2022:

- African blockchain startups raised a total of \$474m in 2022, an annual YoY funding increase of 429% compared to the \$90m in 2021. Africa has a higher funding growth rate than any region. In the US, funding was similar to 2021 at \$15.2b, while Asia and Europe's funding increased by 50% and 35% YoY to \$4.74b and \$4.88b, respectively.
- The vast majority - 81% - of African blockchain venture funding during 2022 was recorded in Seychelles and South Africa, raising \$208m and \$177m.
- The number of African blockchain deals increased by 12% YoY from 26 to 29. African blockchain venture funding accounts for 1.77% of global blockchain venture funding, up by 407% YoY, represented by 7 countries for the period. Comparatively, the US concluded 137 deals, Asia had 84, and Europe 78.
- Nigeria is the leading country in terms of the number of blockchain startups funded, followed by South Africa, Seychelles, and Kenya.
- Although Nigeria had the most deals within the continent during 2022, it only amounted to a 3.4% share of all African blockchain venture funding with an average deal size of \$1.25m.
- Venture Rounds (Series A - C rounds) accounted for the vast majority of funds raised in Africa, raising 90% of the funding from 12 deals, up from 42% from 6 deals in 2021. Correspondingly, the share of funds raised in Seed Rounds fell from 55% from 13 deals in 2021 to 8% from 13 deals in 2022. This indicates increased interest in later-stage investments and more significant amounts of capital being raised.
- When comparing 2021 vs. 2022, venture funding for African blockchain startups far outpaces the growth seen in general African venture funding (429% vs. 34%) showing over 12.5 times the level of growth on a YoY basis.
- 2022 saw the closing of the first mega-deals for African blockchain companies, with Kucoin raising \$150m and MFS Africa raising \$100m. These deals make up 33% of the total mega-deal count on the continent in 2022.
- Kucoin and Scroll broke the ice, becoming the first African blockchain companies to reach unicorn valuations, meeting the expectations we laid out in the previous instalment of this report.
- One of our primary criteria for inclusion in the analysis portion of this report is that funding should be publicly available and verifiable. There were a total of 3 African blockchain businesses that raised funding within our time period that had undisclosed funding data.
- There were 10 African cities present in our data set. Johannesburg and Mahé garnering 31% and 37% of all African blockchain funding over the period.
- In contrast to the global blockchain funding trend, where businesses within the Custody & Exchanges category raised only 10% of the global share, it was the highest-funded blockchain industry in Africa with a 52% share of funding. Fintech was in second place with a comparatively modest 24%, followed by Infrastructure & Development with 14%.
- More deals were recorded in 2022 for all industry categories.

Quarterly Blockchain Venture Funding in Africa 2021 vs 2022

The funding for African blockchain ventures was primarily driven by significant funding rounds in Q1 and Q2 of 2022, contributing to the remarkable YoY funding increase of 2073% at the end of Q1 2022 compared to the same quarter of the prior year. Although funding decreased during the course of the year, with Q4 2022 being the only quarter with less funding than the corresponding quarter in 2021, the overall trend for the year was still positive. Despite the fluctuations in funding throughout the year, the sustained growth of the African blockchain venture funding landscape indicates the growing interest and confidence of investors in the African blockchain industry.

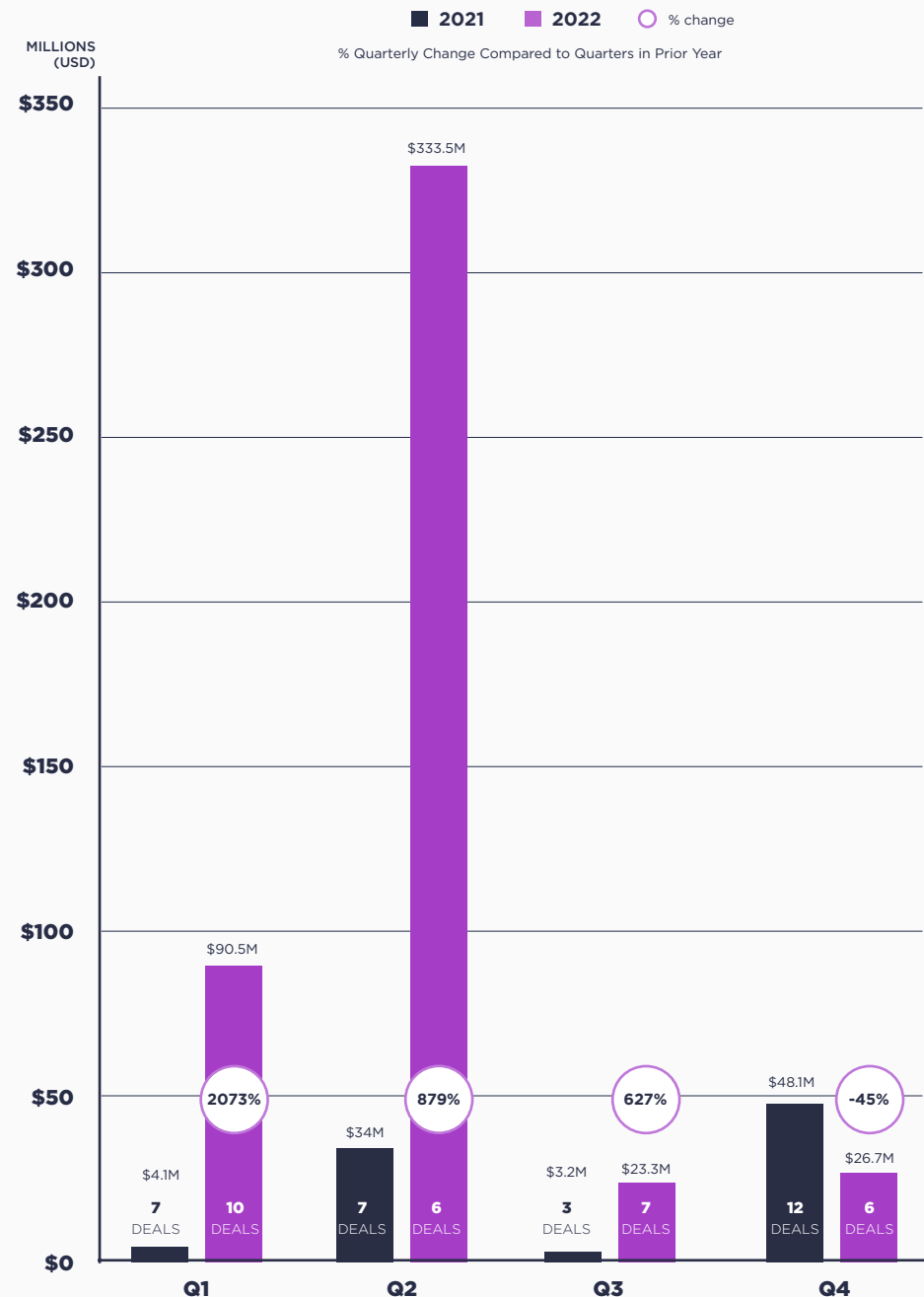
AFRICAN BLOCKCHAIN VENTURE FUNDING Q1 2022 VS Q1 2023

\$90,515,000
Q1 2022

\$77,520,000
Q1 2023

-14.4%
% CHANGE

AFRICAN BLOCKCHAIN VENTURE FUNDING PER QUARTER CHANGE

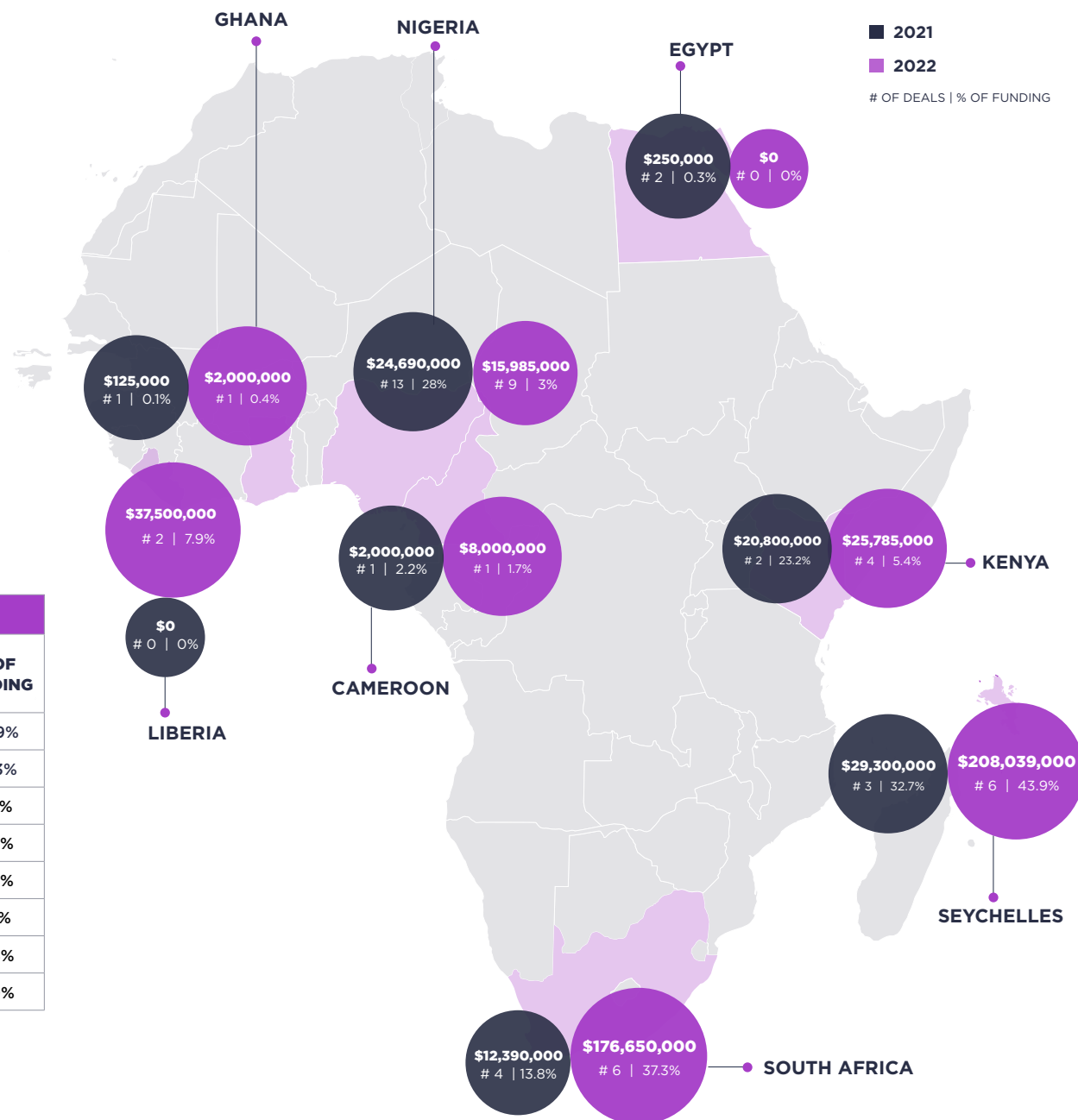


Blockchain Venture Funding by Nations

African blockchain companies have received funding irregularly. Still, certain countries have emerged as clear leaders in terms of the amount of funds raised. The title of the Biggest Fish in the Pond continually changes hands.

AFRICAN BLOCKCHAIN VENTURE FUNDING BY NATION

COUNTRY	2021			2022		
	DEALS	FUNDING	% OF FUNDING	DEALS	FUNDING	% OF FUNDING
SEYCHELLES	3	\$29,300,000	32.7%	6	\$208,039,500	43.9%
SOUTH AFRICA	4	\$12,390,000	13.8%	6	\$176,650,000	37.3%
LIBERIA	0	\$0	0.0%	2	\$37,500,000	7.9%
KENYA	2	\$20,800,000	23.2%	4	\$25,785,000	5.4%
NIGERIA	13	\$24,690,000	27.6%	9	\$15,985,000	3.4%
CAMEROON	1	\$2,000,000	2.2%	1	\$8,000,000	1.7%
GHANA	1	\$125,000	0.1%	1	\$2,000,000	0.4%
EGYPT	2	\$250,000	0.3%	0	\$0	0.0%



African Blockchain Funding Analyzed by Industries

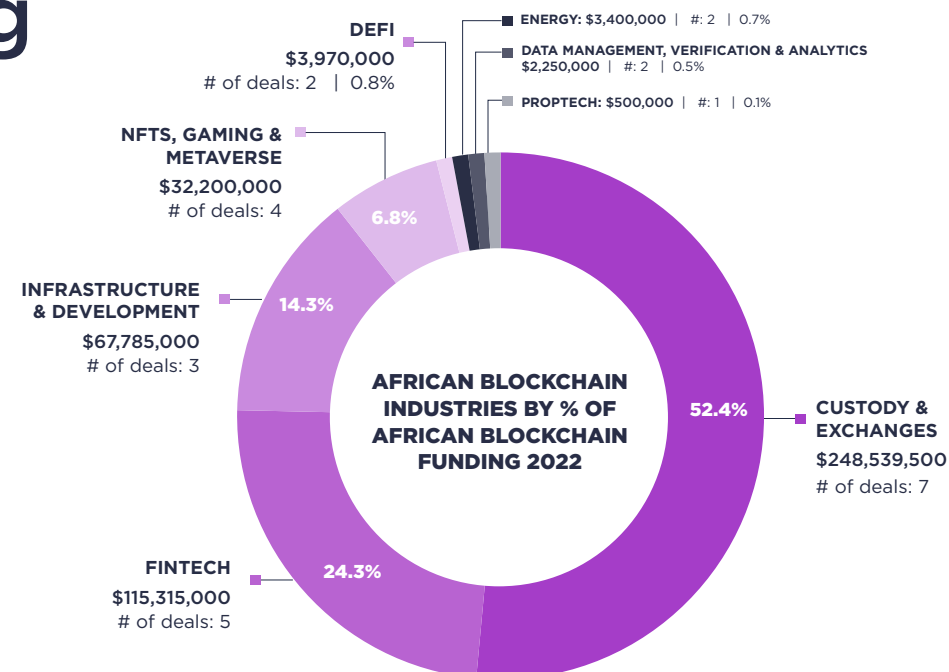
Custody and Exchanges were the top performing industry categories in 2022, raising \$250m, accounting for more than 50% of funding. The significant increase in funding for this sector demonstrates the growing demand for cryptocurrency trading in Africa, as well as the recognition of the importance of secure storage solutions.

Fintech is a critical sector in the African economy, as the region's financial landscape is often fragmented and underserved. Blockchain-based fintech solutions have the potential to revolutionize the financial industry, offering cheaper, faster, and more accessible financial services to individuals and businesses. The increase in funding for this sector in 2022 highlights the recognition of the potential for blockchain to address and even solve the challenges faced by the African financial industry.

Infrastructure & Development as a blockchain sector refers to the development of the underlying technology and infrastructure that supports blockchain networks and applications. This includes the development of blockchain protocols, decentralized networks, smart contract platforms, and other technological infrastructure that enables the deployment of decentralized applications and services on the blockchain. Three companies within the sector raised a combined share of 14.3% of all African blockchain venture funding.

In addition to the more established sectors, several emerging sectors are gaining traction in the African blockchain funding landscape. DeFi (Decentralized Finance) represents a disruptive force in the traditional financial sector, offering decentralized lending, borrowing, and other financial services. Energy is an emerging sector that seeks to leverage blockchain technology to improve access to energy and facilitate the transition to renewable energy sources. NFTs, Gaming & the Metaverse, are emerging sectors that have gained popularity in recent years, presenting unique opportunities for digital ownership, gaming, and immersive experiences. Data Management, Verification & Analytics sector is focused on leveraging blockchain technology to improve data management, verification, and analytics. With the increasing importance of data in decision-making, this sector has significant potential for growth in the African blockchain ecosystem. PropTech is another emerging sector that often leverages blockchain technology to improve property transactions, land registries, and other aspects of real estate management.

As blockchain technology continues to evolve and gain wider adoption in the region, these sectors are expected to play an increasingly important role in shaping the future of blockchain in Africa.



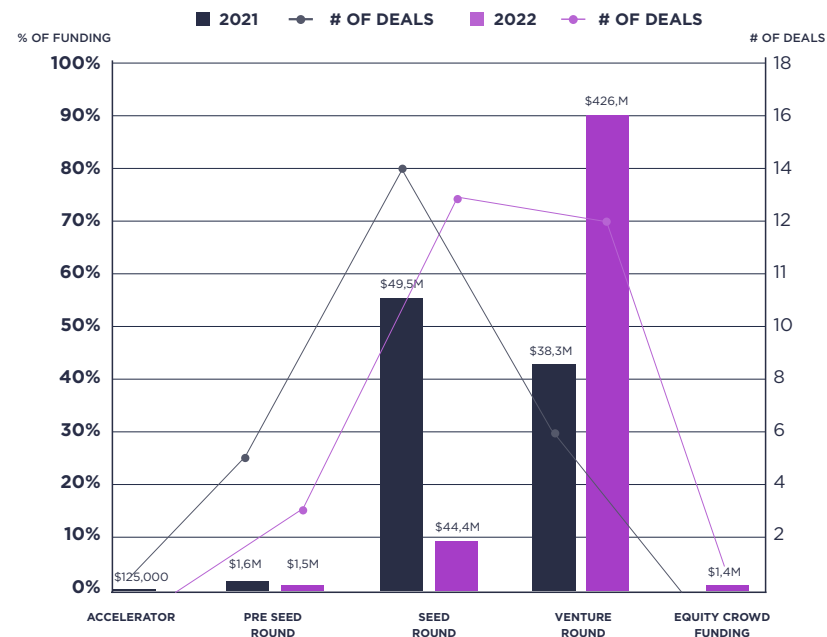
AFRICA BLOCKCHAIN VENTURE FUNDING BY INDUSTRY

COUNTRY	2021			2022		
	# COMPANIES	FUNDING	% OF FUNDING	# COMPANIES	FUNDING	% OF FUNDING
CUSTODY & EXCHANGES	5	\$10,750,000	2.3%	7	\$248,539,500	52.4%
FINTECH	8	\$60,050,000	12.7%	5	\$115,315,000	24.3%
INFRASTRUCTURE & DEVELOPMENT	2	\$1,750,000	0.4%	3	\$67,785,000	14.3%
NFTS, GAMING & METAVERSE	2	\$12,890,000	2.7%	4	\$32,200,000	6.8%
DEFI	3	\$840,000	0.2%	2	\$3,970,000	0.8%
ENERGY	1	\$2,500,000	0.5%	2	\$3,400,000	0.7%
DATA MANAGEMENT, VERIFICATION & ANALYTICS	2	\$650,000	0.1%	2	\$2,250,000	0.5%
PROPTech	1	\$125,000	0.0%	1	\$500,000	0.1%

AFRICA BLOCKCHAIN VENTURE FUNDING BY FUNDING ROUND TYPES

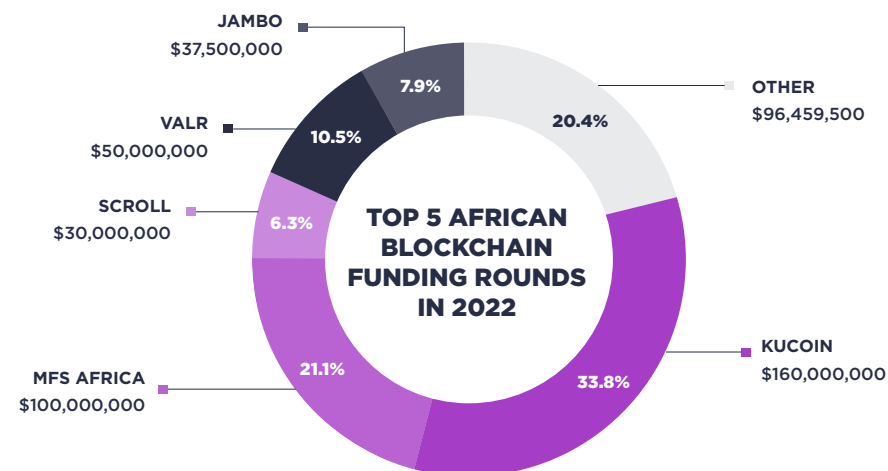
FUNDING ROUND TYPE	2021			2022		
	DEALS	FUNDING	% OF FUNDING	DEALS	FUNDING	% OF FUNDING
ACCELERATOR	1	\$125,000	0.1%	0	\$0	0.0%
PRE SEED ROUND	5	\$1,600,000	1.8%	3	\$1,485,000	0.3%
SEED ROUND	14	\$49,530,000	55.3%	13	\$44,435,000	9.4%
VENTURE ROUND	6	\$38,300,000	42.8%	12	\$426,639,500	90.0%
EQUITY CROWD FUNDING	0	\$0	0.0%	1	\$1,400,000	0.3%

AFRICAN BLOCKCHAIN FUNDING & DEALS BY ROUND TYPE



TOP 5 AFRICAN BLOCKCHAIN FUNDING ROUNDS IN 2022

COMPANY	2022		
	FUNDS RAISED	COUNTRY	% OF FUNDING
KUcoin	\$160,000,000	Seychelles	33.8%
MFS Africa	\$100,000,000	South Africa	21.1%
VALR	\$50,000,000	South Africa	10.5%
JAMBO	\$37,500,000	Liberia	7.9%
SCROLL	\$30,000,000	Seychelles	6.3%
OTHER	\$96,459,500	N/A	20.4%



African Unicorns

Criteria: Private tech companies valued at \$1 billion and above headquartered in Africa.

[KuCoin \(2017\)](#)



Unicorn Status:
2022

Headquarters:
Seychelles

Industry:
Crypto Exchange

Blockchain Aspect:
Yes

KuCoin is an international cryptocurrency exchange platform that offers a secure and convenient way to trade digital assets for its global user base.

\$10,000,000,000

VALUATION

\$180,000,000

TOTAL FUNDS RAISED

Unknown

REVENUE

[OPay \(2018\)](#)



Unicorn Status:
2021

Headquarters:
Nigeria

Industry:
Fintech

Blockchain Aspect:
No

OPay is a Nigerian financial technology company that provides a suite of smart financial services, allowing users to manage their finances efficiently through its mobile app.

\$2,000,000,000

VALUATION

\$570,000,000

TOTAL FUNDS RAISED

\$100M to \$500M

REVENUE

[Scroll \(2018\)](#)



Unicorn Status:
2023

Headquarters:
Seychelles

Industry:
Blockchain
Infrastructure

Blockchain Aspect:
Yes

Scroll is an Ethereum Layer-2 scaling solution that enhances the network's performance by increasing transaction throughput and reducing gas fees, facilitating efficient and seamless blockchain transactions.

\$1,800,000,000

VALUATION

\$83,000,000

TOTAL FUNDS RAISED

Unknown

REVENUE

[Wave Mobile Money \(2018\)](#)



Unicorn Status:
2021

Headquarters:
Senegal

Industry:
Fintech

Blockchain Aspect:
No

Wave Mobile Money is a mobile financial service that offers accessible, low-cost money transfers, savings, and loans to users across Africa.

\$1,700,000,000

VALUATION

\$301,525,269

TOTAL FUNDS RAISED

\$10M to \$50M

REVENUE

[Interswitch \(2002\)](#)



Unicorn Status:
2019

Headquarters:
Nigeria

Industry:
Payments

Blockchain Aspect:
Yes

Interswitch is a leading African digital payment and commerce company, simplifying transactions and enhancing the payment experience for individuals and businesses.

\$1,000,000,000

VALUATION

\$320,500,000

TOTAL FUNDS RAISED

\$10M to \$50M

REVENUE

[MNT-Halan \(2017\)](#)



Unicorn Status:
2023

Headquarters:
Egypt

Industry:
Fintech

Blockchain Aspect:
No

MNT-Halan is an Egyptian fintech firm that offers a range of financial services, including microloans, payments, and digital banking solutions for underbanked businesses and individuals.

\$1,000,000,000

VALUATION

\$530,000,000

TOTAL FUNDS RAISED

Unknown

REVENUE

African Investor Watchlist

These investors have closed at least one publicly-disclosed funding deal with an African blockchain business being the recipient of the funding.

4Di Capital 	Catalyst Fund 	Chandaria Capital 	CV VC 	EchoVC Partners 
Endure Capital 	Flat6Labs 	Founders Factory Africa 	Golden Palm Investments 	GreenHouse Capital 
Ingressive Capital 	Knife Capital 	Launch Africa 	Meltwater Entrepreneurial School of Technology (MEST) 	MEXC Global 
Microtraction 	Prosus Ventures 	Raba 	Savannah Fund 	Ventures Platform 

WHERE TO NEXT? HOW AFRICA'S LARGEST NATIVE CRYPTO EXCHANGE WEATHERED 2022 AND WHAT IT MEANS FOR THE FUTURE OF CRYPTO

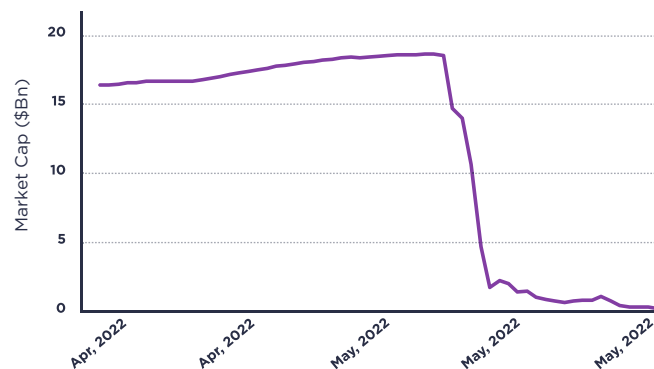
The crypto markets in 2022 were marked by extreme volatility. Several key market participants, along with large sums of creditors and depositors, were wiped out in quick succession. How did the events of 2022 affect VALR, Africa's largest native crypto exchange? And what can VALR's metrics tell us about the future of crypto in Africa?

Before we dive into the figures, it's worth stepping back to look at a timeline of the events that changed the crypto landscape so dramatically.

2022: A Global Liquidation Timeline

After a relatively uneventful first quarter of the year, a series of severe deleveraging events started in May with the algorithmic stablecoin Terra USD (UST) collapsing in value during a bank run on this protocol. Due to the size and widespread use of UST in DeFi, this sent shockwaves through the crypto market. At its peak, more than \$18B in UST existed in the market, and in a few days, this was reduced to only \$200M.

**UST MARKET CAP
APRIL 2022 - MAY 2022⁽¹⁾**



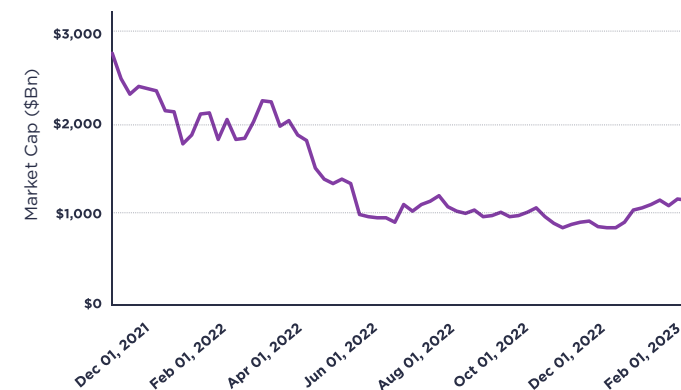
At the time, several large counterparties were heavily exposed to the protocol, and this flash crash ultimately resulted in widespread financial distress of heavily leveraged market participants. Most notable was the insolvency of hedge fund 3 Arrows Capital, which owed large sums to several crypto lenders. Over the coming weeks, the dominos collapsed, and we subsequently saw crypto lenders Voyager, Celsius, and BlockFi (amongst many others) file for bankruptcy, as they were unable to pay depositors back their capital. Between May and November 2022, these events saw more than \$700B wiped off the market cap of cryptocurrencies (\$1.7T to \$1T).

In early November, just when the market was starting to lick its wounds, FTX and its trading firm, Alameda, began showing signs of weakness. By 11 November, after more than \$5B had been withdrawn from the exchange, the FTX group filed for bankruptcy, and the FTT exchange token was all but worthless (\$22 to \$1.50). What followed was a free fall of collateral value, causing mass liquidations worldwide. In January 2023, Genesis, one of crypto's most reputable and largest prime brokers and lending houses, declared bankruptcy due to the losses resulting from Alameda, FTX, and prior events.

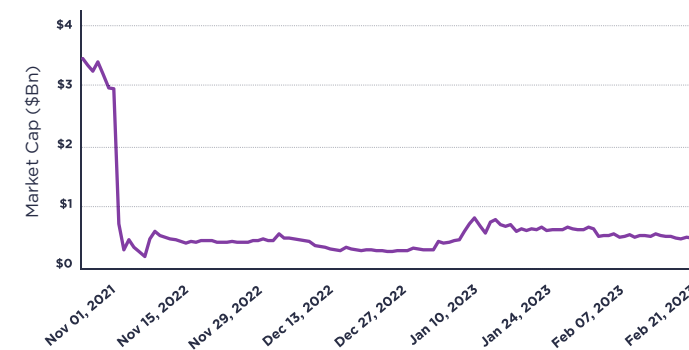
The Impact on Africa

Africa, and in particular South Africa, was not insulated from these events; such is the nature of a globally interconnected and decentralized financial system. South Africa leads Africa in terms of centralised exchange volume, with daily trade worth an estimated \$25M presently. This volume is shared mainly by two large local

**TOTAL CRYPTO MARKET CAP
DECEMBER 2021 - MARCH 2023⁽¹⁾**



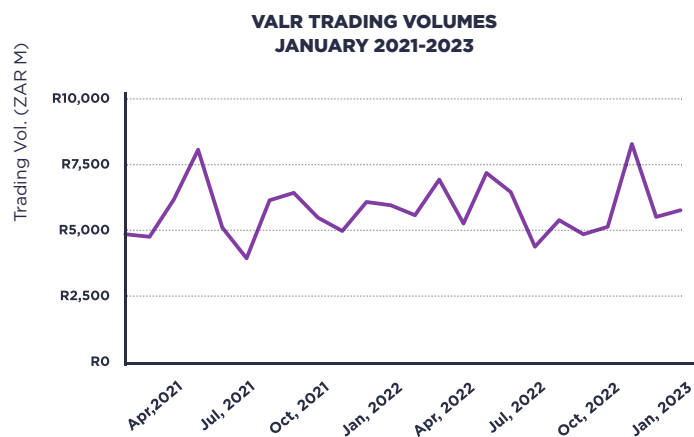
**FTT MARKET CAP
DECEMBER 2021 - MARCH 2023⁽¹⁾**



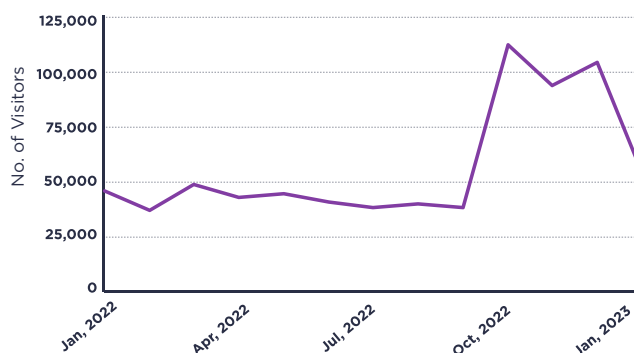
exchanges (VALR and Luno) and now more recently, Binance, which reentered the South African market in 2022. VALR presently accounts for $\pm 50\%$ of the exchange volume of trade against ZAR, followed by Luno with about $\pm 33\%$ and Binance with $\pm 10\%$. There are also several smaller exchanges, such as Altcoin Trader, and OTC desks like Ovex, which operate.

Despite negative market sentiment at the end of 2022, VALR succeeded in maintaining volumes relative to the same period in 2021. Owing to the volatility surrounding the FTX collapse, VALR recorded one of its best-ever months ($> \$480$ million or R8 billion) in November 2022, with a significant increase in unique monthly visitors to VALR.com ($> 110,000$). This increase in activity has continued into 2023, with signups remaining strong as we onboard more than 10,000 users per month. Robust volumes during this time are in large part the result of the institutional and commercial crypto ecosystem that exists in South Africa, with many professional high-volume traders maintaining operations throughout the market cycles. VALR has now onboarded and serves more than 800 corporate clients, and this number is steadily increasing.

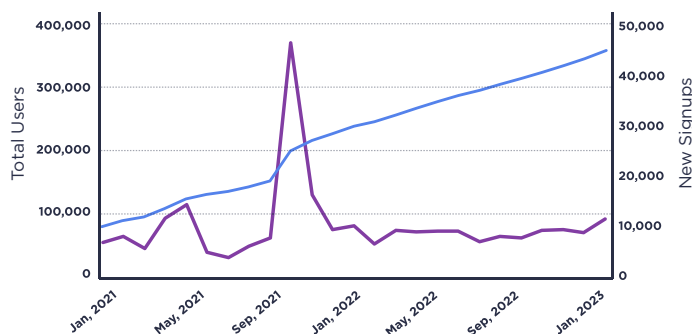
An overview of 2022 shows a clear spike in activity on VALR towards the end of the year as the FTX crisis unfolded:



**UNIQUE VISITORS TO VALR.COM
BY MONTH 2022**

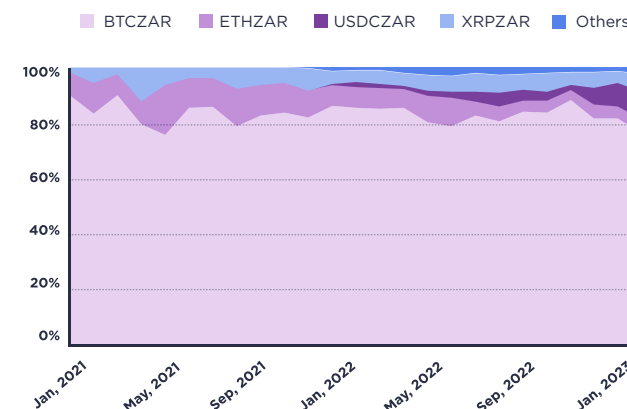


**VALR SIGN UPS BY MONTH
JANUARY 2021-2023**



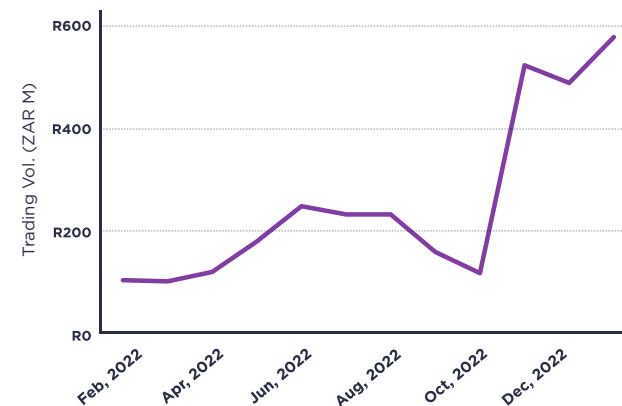
Trade volume in the country continued to be dominated by the BTC/ZAR pair ($> 75\%$ of volume), with a sharp growth in the popularity of USDC/ZAR toward Q4 of the year. This trend was reflected across Africa and with other exchanges and OTC desks. The demand for USD stablecoin as a means of value storage, transmission, and exchange in Africa surged in 2022 and continues to grow. This is partly driven by the difficulty many African countries face in obtaining and using fiat USD, as well as the weakness in most local currencies, exacerbated by global uncertainty.

**VALR TRADING VOLUME BY PAIR
JANUARY 2021 - 2023**



VALR currently trades up to \$3.5 million per day in USD stablecoins. Given the growing awareness of the benefits of stablecoins and the rising demand for access to financial products available to token holders in the globalized crypto markets, we project that this volume will continue to increase. VALR has also recently launched USDT (Tether) trading pairs, which have grown quickly in popularity, with USDT/ZAR often exceeding volumes on the USDC/ZAR pair.

**VALR USDC/ZAR TRADING VOLUMES
FEBRUARY 2022 - JANUARY 2023**



Looking Forward

The crypto industry faced a perfect storm in 2022. But as trading volumes at VALR show, there is plenty of appetite for digital assets in South Africa and beyond, even in a bear market. Given the growth we've seen in corporate and institutional users, volumes, and demand for crypto as a utility amongst our key customers, we're confident that the industry will recover and rebuild. The use case for crypto and digital assets remains sound. As Africa's largest native crypto exchange, VALR's resilience in a challenging year is a reminder that people understand the value of, and need for, digital assets. Crypto is here to stay.



Blake Player

Head of Growth, VALR

(1) Crypto price and market capitalisation data as provided by CoinMarketCap

(2) Market share numbers estimated based on average volumes calculated from exchange API feeds at the time of writing

TOWARD WEB3: HOW THE BLOCKCHAIN RESEARCH INSTITUTE AFRICA IS ADVANCING AFRICA'S DIGITAL TRANSFORMATION

Over the last decade, Blockchain technology has caused significant disruptions in industries worldwide. It has transformed how people execute transactions, offering end-to-end visibility and transparency in supply chains, providing digitally verifiable identities to rural communities, eliminating the need for intermediaries in several sectors, and allowing for fractional ownership of digital assets, thereby promoting broader equity distribution. Africa has remarkably shown the highest adoption rates of this technology globally. However, despite its massive benefits, the institutional adoption of blockchain in Africa remains low. To address this disparity, the Blockchain Research Institute (BRI) Africa was founded to bring together Africa's foremost industry leaders, academics, policymakers, entrepreneurs, and researchers. This collaborative effort aims to conduct pioneering research on blockchain technology, effectively bridging the divide between the practical applications of blockchain and the actual market demand.

The Institute is an independent, global think tank based in Toronto dedicated to exploring and sharing knowledge about blockchain's strategic implications and applications on business, government, and society. They have been studying blockchain technology since the 2016 publication of *Blockchain Revolution*, co-authored by co-founders Don and Alex Tapscott. They have conducted over 100 research projects investigating blockchain-related opportunities and challenges to industry, governments, and organizations. BRI Africa is a subsidiary of the BRI launched in partnership with Standard Bank Group. It co-exists with its independent counterparts in Europe, Brazil, the Middle East, and Korea.

We work with various corporate and government partners and members to drive the vision's success. Our ecosystem network partners include blockchain technology companies, academic institutions, research organizations, financial institutions, and development agencies. By working with these partners and members, we are fostering a collaborative culture among

industry leaders and creating a robust ecosystem for blockchain innovation and enablement in Africa to drive Africa forward. Our objective is to produce contextually relevant research, educate, and foster connections among experts and individuals dedicated to a reimagined Africa. These individuals will champion the use of blockchain technologies to empower every sector of society to participate in a democratized African economy. This, in turn, will expedite growth and extend opportunities to all members of society.

BRI Africa memberships provide unique opportunities for members to attend exclusive industry events and participate in roundtable discussions with thought leaders from the BRI ecosystem. Additionally, members gain access to our research, educational courses, and other resources to identify best practices, guide policy, and empower Africa to realize the full potential of the Web3 promise. Members benefit from diverse perspectives, expertise, and experiences, enhancing their understanding of best practices and equipping them with the skills and tools they need to succeed in today's rapidly changing business landscape.

Over the past year, organizations have encountered numerous challenges in navigating the rapidly evolving landscape of blockchain and Web3 technologies. These include economic instability, geopolitical upheaval, market volatility, and the spread of the so-called "crypto-contagion," all of which contribute to and make it challenging for organizations to maintain an edge in such a complex environment. Therefore, we have developed our new 2023 program, *Toward Web3: Digital Assets, Digital Transformation*. This program is designed to assist our member organizations in understanding the potential applications and benefits of Web3 technologies and provide guidance on how to integrate blockchain into their operations successfully. The program offers a series of deliverables across five categories: community, research, education, action, and influence. Additionally, the program offers our members customized options, such as requesting bespoke

research, educational courses, and advisory services, to better meet their specific needs.

Due to Africa's fast-paced movements and potential to leap-frog traditional systems, our research focuses on blockchain use cases in different sectors, including finance, retail, agriculture, and healthcare. This research aims to identify use cases based on Africa's unique challenges that distributed ledger technology has the potential to address, improve operations and reach new markets. By working with our members and partners, we are creating a database of relevant research and case studies that can be used to educate businesses and policymakers on the benefits of blockchain technology.

Through harnessing the power of Web3 technologies, the organization aims to grow the continent from the ground up and assist in creating a thriving future for all Africans. By leveraging the capabilities of this innovative technology, we are confident in its ability to transform the economic and social landscape of the continent through its inherent transparency and accountability properties that unlock new opportunities for growth and development. Standard Bank Group's Head of Blockchain Centre of Excellence and Regional Director of BRI Africa, Ian Putter, says, "Blockchain technology presents a unique opportunity for African economies to leapfrog traditional financial infrastructure, unlocking new levels of efficiency, transparency, and financial inclusion. As a bank, we are committed to harnessing the power of blockchain to drive Africa's growth and create a more prosperous future for all."



Ian Putter

Head Blockchain Centre of Excellence

HOW AFRICA IS LEAPFROGGING INTO A DIGITAL PAYMENTS FUTURE

The opportunity available to Africa to benefit from digital payments innovation is staggering. While the region has made significant progress in recent years, we've just barely begun to scratch the surface. From leapfrogging over traditional payments infrastructures straight to mobile payments; to experiencing record growth in electronic payments over the past two years; [to reaching \\$40B in domestic electronic payments revenue by 2025](#), the region is ripe for continued innovation.

But there are still gaps in the continent's financial system that have left countless individuals unbanked and placed a burden on many African businesses. With crypto solutions, payment rails can be made more efficient and have a profound impact on financial inclusion.

African Payments Today

Advances in payment infrastructure are driving significant growth opportunities for better financial services and financial inclusion across the continent. The high rates of mobile phone adoption and easy-to-use financial applications have enabled individuals in the region to send and receive mobile payments, which increases access to payment rails outside of traditional financial systems. Designing and introducing blockchain-based payment solutions that integrate with mobile apps can help the region further leapfrog into the future of inclusive payment solutions.

Currently, less than 10% of overall payments in Africa are digital—the market is essentially untapped. In particular, crypto-enabled payments and remittances present an exciting opportunity for banks, PSPs, and other financial institutions. By harnessing this growth potential, financial players can enable faster, more transparent, and cost-effective cross-border remittances while simultaneously boosting financial inclusion for the unbanked.

Blockchain and Crypto-Enabled Remittances

Remittance payments sent via traditional methods cost [an](#)

[average of 6.3%, and Sub-Saharan Africa has the most expensive remittance payments at 8.46%.](#)

Ripple's payments solution, [On-Demand Liquidity](#), enables organizations to settle global payments in real-time at a fraction of the cost without tying up working capital in destination accounts. By leveraging the digital asset XRP as a bridge currency, funds can be sent and received in local currency on either side of a transaction. Both financial institutions and individuals stand to gain from modernizing Africa's payment system.

With greater access to liquidity and a growing global network of payout partners, multinational financial institutions can get:

Cost Optimization

- Drive cost savings by eliminating pre-funding
- Lower the cost of capital via extended repayment terms
- Send payments now, pay later with a post-funding model

Superior Technology

- Real-time settlement of payment funds
- Access to payout rails around the globe
- Upfront visibility of fees in addition to end-to-end payment status

Enabling Seamless Cross-Border Payments

As digital payments innovation and crypto adoption broaden, Ripple is partnering with local financial institutions and fintechs to bring the benefits of better cross-border remittances to the region, including regional payment interoperability and seamless money movement across the continent.

What does this mean for companies around the world looking to send payments to Africa? Financial institutions can gain access to Ripple's growing global network, providing them with more choice

in how and where they send money while simultaneously boosting financial inclusion throughout the region.

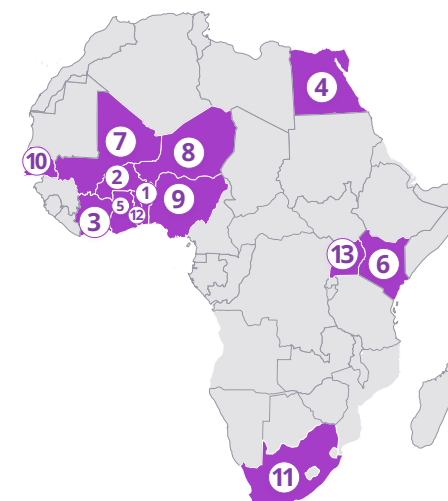
Africa is focusing its attention on fintech for industry development and economic growth. Through clear regulatory guidance and greater adoption of crypto and blockchain technology, Africa is now positioned to be a global leader in the digital asset landscape. We are only just getting started.

[Learn more](#) about Ripple's cross-border payments solution or [contact us](#) today.



Brooks Entwistle

Ripple Senior Vice President and Managing Director

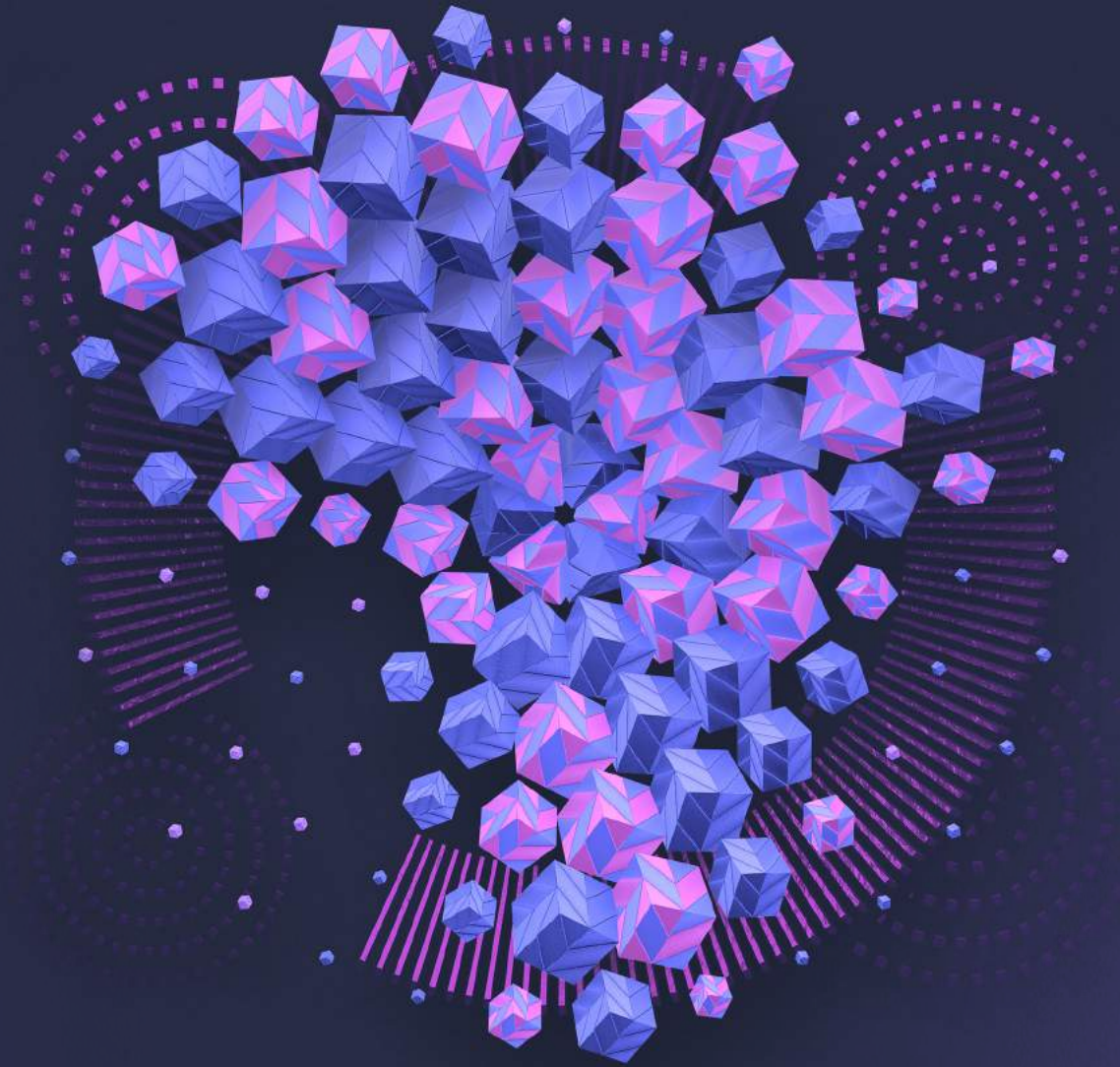


Ripple Locations

1. Benin
2. Burkina Faso
3. Cote d'Ivoire
4. Egypt
5. Ghana
6. Kenya
7. Mali
8. Niger
9. Nigeria
10. Senegal
11. South Africa
12. Togo
13. Uganda

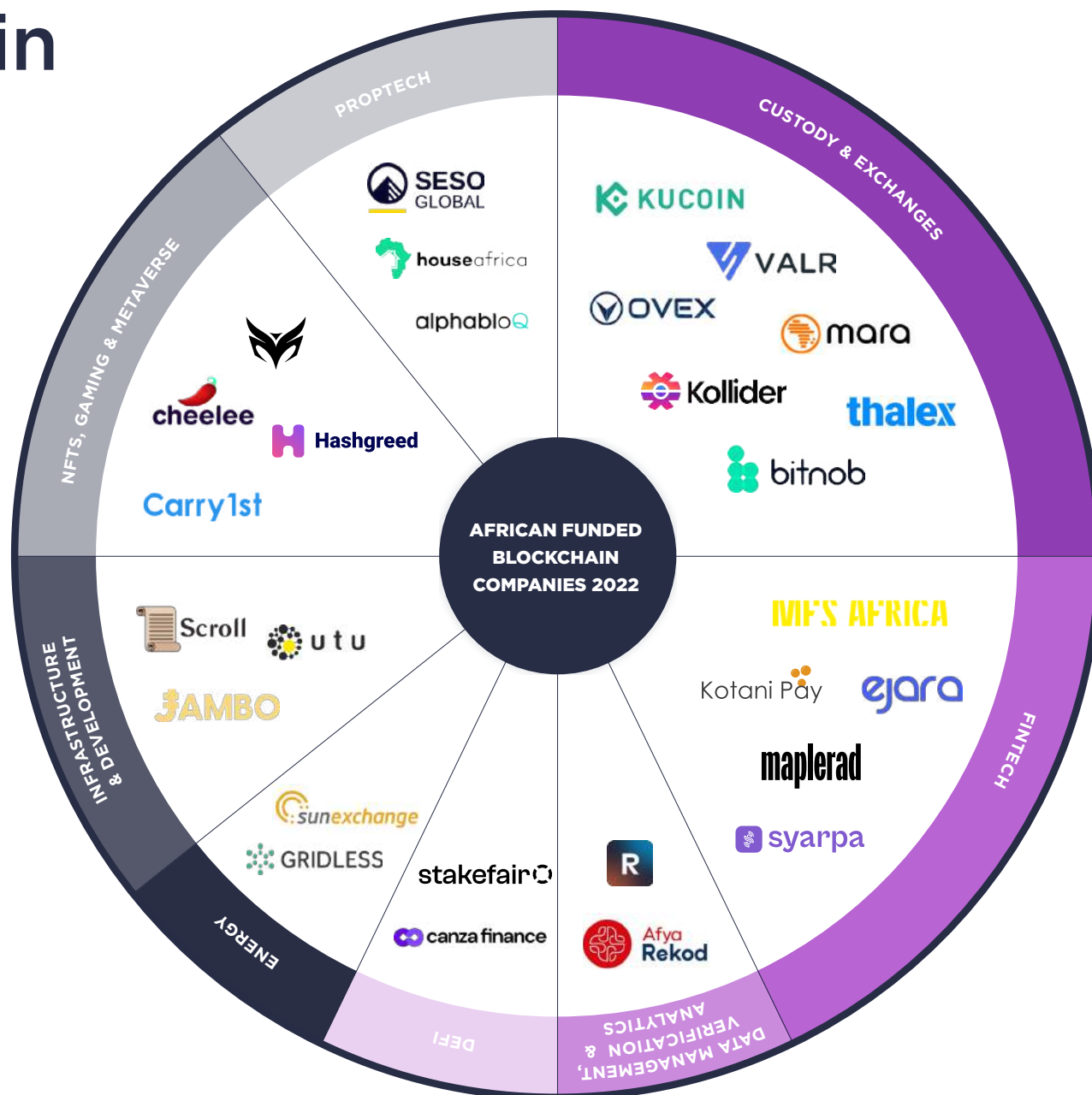
05

FUNDED BLOCKCHAIN COMPANIES AT A GLANCE



Funded Blockchain Companies at a Glance

This section lists the African blockchain businesses that have successfully raised funding from Q1 2022 to the close of Q1 of 2023. We have provided a summary for each of the businesses - which have been broken down into their respective industry categories.



Custody & Exchanges

Custody and exchanges are services that enable secure storage and seamless trading of digital assets. These platforms prioritize asset security while providing a user-friendly interface to manage and trade cryptocurrencies with ease and efficiency.

KuCoin



Founded:
2017

Headquarters:
Seychelles

KuCoin is a cryptocurrency exchange that offers over 700 digital assets. Its services include Spot trading, Margin trading, P2P fiat trading, staking, and lending.

\$180,000,000

TOTAL FUNDING

\$160,000,000

FUNDING Q1 - Q4 2022

Venture Round

LAST FUNDING TYPE

Thalex



Founded:
2020

Headquarters:
Seychelles

Thalex is a cryptocurrency exchange providing a wide range of derivative trading instruments, including perpetuals, futures, options and future rolls. They offer stablecoin settlement and multi-collateral support for BTC, ETH, USDT and USDC.

\$7,639,500

TOTAL FUNDING

\$7,639,500

FUNDING Q1 - Q4 2022

Venture Round

LAST FUNDING TYPE

VALR



Founded:
2018

Headquarters:
South Africa

VALR is a digital asset exchange that allows customers to buy, sell, store and transfer crypto-assets seamlessly and securely. The exchange offers the widest crypto selection of any platform in Africa and has a negative fee rate for market makers.

\$54,900,000

TOTAL FUNDING

\$50,000,000

FUNDING Q1 - Q4 2022

Venture Round

LAST FUNDING TYPE

Ovex



Founded:
2017

Headquarters:
South Africa

OVEX is a digital asset exchange that operates an OTC trading desk with market-making and prime brokerage services. They cater to institutional and retail clients globally who require seamless access to cryptocurrencies.

\$9,000,000

TOTAL FUNDING

\$5,000,000

FUNDING Q1 2023

Venture Round

LAST FUNDING TYPE

Mara



Founded:
2021

Headquarters:
Kenya

Mara provides a range of crypto-related services, such as a cryptocurrency exchange, token-based lending, and solutions for NFT marketplaces, as a digital finance company.

\$23,000,000

TOTAL FUNDING

\$23,000,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

Kollider



Founded:
2021

Headquarters:
Seychelles

Kollider provides a Lightning-native wallet and derivatives exchange, allowing users to leverage Bitcoin to trade USD and EUR denominated perpetual contracts and mint synthetic stablecoins.

\$2,400,000

TOTAL FUNDING

\$2,400,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

Bitnob



Founded:

2017

Headquarters:

Nigeria

Bitnob is a cryptocurrency exchange where users can buy, sell, borrow, earn, send, receive, and pay with cryptocurrency. Bitnob also offers savings and purchases, collateralized loans, remittance services, OTC, and business applications that make it easier for people to transition into the crypto economy.

\$500,000

TOTAL FUNDING

\$500,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

Fintech

Fintech firms leverage technology to enhance traditional financial services, improving efficiency and accessibility. By utilizing innovative solutions, they aim to transform the financial landscape, promoting financial inclusion and broadening the range of available services.

MFS Africa

MFS AFRICA

Founded:
2009

Headquarters:
South Africa

MFS Africa is a digital payment company that offers mobile financial solutions for senders, money users, and service providers.

\$290,200,000

TOTAL FUNDING

\$100,000,000

FUNDING Q1 - Q4 2022

Venture Round

LAST FUNDING TYPE

Syarpa

syarpa

Founded:
2020

Headquarters:
Nigeria

Syarpa is a fintech providing various services, including international remittance, crypto exchange, and crypto payment solutions to its customers.

\$815,000

TOTAL FUNDING

\$815,000

FUNDING Q1 - Q4 2022

Pre Seed Round

LAST FUNDING TYPE

Ejara

ejara

Founded:
2021

Headquarters:
Cameroon

Ejara is a developer of blockchain-based mobile investment software designed for investment products. Investors can invest in companies and cryptocurrencies while also utilizing interest-saving accounts.

\$10,000,000

TOTAL FUNDING

\$8,000,000

FUNDING Q1 - Q4 2022

Venture Round

LAST FUNDING TYPE

Kotani Pay

Kotani Pay

Founded:
2020

Headquarters:
Kenya

Kotani Pay is a technology stack that enables blockchain protocols, dapps, and blockchain fintech companies to integrate into local payment channels in Africa. Kotani has built a reliable on/off-ramp service to reach a broader customer base that operates primarily on mobile money services.

\$1,300,000

TOTAL FUNDING

\$500,000

FUNDING Q1 2023

Seed Round

LAST FUNDING TYPE

Maplerad

maplerad

Founded:
2022

Headquarters:
Nigeria

Maplerad provides banking-as-a-service infrastructure that empowers businesses to integrate robust financial services into their products, while handling the complexities of compliance, bank relationships, and licensing.

\$6,000,000

TOTAL FUNDING

\$6,000,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

Data Management, Verification & Analytics

Data management, verification, and analytics companies focus on harnessing blockchain technology to store, verify, and analyze data securely. By leveraging the immutability and transparency of blockchains, these businesses provide reliable insights and facilitate data-driven decision-making.

Afya Rekod



Founded:
2020

Headquarters:
Kenya

Afya Rekod is a digital health data platform that allows health facilities to capture, store, and have realtime access to a patient's health data. The patient maintains the sovereign right of ownership of their health data by employing blockchain modules.

\$2,000,000

TOTAL FUNDING

\$2,000,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

Riskbloq



Founded:
2022

Headquarters:
South Africa

Riskbloq is a blockchain analytics platform that creates risk profiles for digital assets.

\$250,000

TOTAL FUNDING

\$250,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

DeFi

Decentralized Finance (DeFi) continues to provide financial products and services through public, permissionless blockchains. Eliminating the need for third-party intermediaries, DeFi offers a more open, accessible, and efficient financial ecosystem.

Canza Finance



Founded:
2019

Headquarters:
Nigeria

Canza Finance is a neobank that facilitates decentralized cross-border payments for individuals in Africa.

\$3,500,000

TOTAL FUNDING

\$3,300,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

Stakefair (Betdemand)



Founded:
2021

Headquarters:
Nigeria

Stakefair is a ecosystem of blockchain, cryptocurrency, and DeFi products that includes innovative gaming products such as the no-loss staking and BTC price prediction market. Other finance platforms can use Stakefair's technology to develop their own market prediction tools and money markets.

\$670,000

TOTAL FUNDING

\$670,000

FUNDING Q1 - Q4 2022

Pre Seed Round

LAST FUNDING TYPE

Energy

Energy-focused blockchain companies are revolutionizing the energy sector by utilizing distributed ledger technology to improve efficiency, transparency, and sustainability. These firms optimize energy distribution, enable peer-to-peer trading, and promote the integration of renewable resources.

The Sun Exchange



Founded:
2014

Headquarters:
South Africa

Sun Exchange is the world's first peer-to-peer solar panel leasing company. Through Sun Exchange, anyone can own solar energy-producing cells and lease those cells to power businesses and organizations in emerging markets.

\$11,400,000

TOTAL FUNDING

\$1,400,000

FUNDING Q1 - Q4 2022

Equity Crowd Funding

LAST FUNDING TYPE

Gridless



Founded:
2022

Headquarters:
Ghana

Gridless is a bitcoin mining company aiding in the creation of new energy sources in rural communities located in East Africa.

\$2,000,000

TOTAL FUNDING

\$2,000,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

Infrastructure & Development

Infrastructure and development businesses concentrate on building the underlying foundation for blockchain ecosystems. They create essential tools, protocols, and frameworks that support the growth and adoption of blockchain technology across various industries.

Scroll



Founded:
2013

Headquarters:
Seychelles

Scroll is a zkEVM-based zkRollup on Ethereum that enables native compatibility for existing Ethereum applications and tools.

\$83,000,000

TOTAL FUNDING

\$30,000,000

FUNDING Q1 - Q4 2022

\$50,000,000

FUNDING Q1 2023

Venture Round

LAST FUNDING TYPE

Jambo



Founded:
2022

Headquarters:
Liberia

Jambo is a software development house with products built for multiple services such as ride-hailing, banking, communication, and food delivery. However, the current focus has been shifted to building out the Web 3.0 ecosystem in Africa.

\$37,500,000

TOTAL FUNDING

\$37,500,000

FUNDING Q1 - Q4 2022

Venture Round

LAST FUNDING TYPE

Utu Technologies



Founded:
2017

Headquarters:
Kenya

UTU Technologies aims to establish a reliable foundation for online interactions between users and platforms by creating a trust infrastructure for the internet. With a focus on Web3 and DeFi apps, UTU utilizes AI-powered algorithms to curate trust signals from various networks, providing users with the necessary information to engage in transactions with confidence. Through its blockchain protocol, UTU is transforming the economics of trust by offering users the opportunity to monetize the trust they build online through Review-to-Earn incentives.

\$1,500,000

TOTAL FUNDING

\$285,000

FUNDING Q1 - Q4 2022

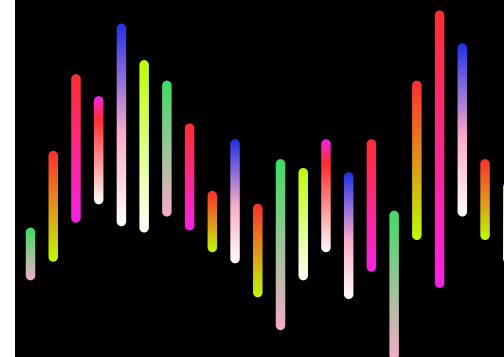
Seed Round

LAST FUNDING TYPE

Casper Labs

Everything you
ever wanted to know
about blockchain
(but were afraid to ask)

Get the free ebook from Casper Labs



NFTs, Gaming & Metaverse

Non-fungible tokens (NFTs), gaming, and the Metaverse are revolutionizing digital ownership and interaction. By leveraging blockchain technology, these industries create unique, scarce digital assets and immersive virtual experiences that redefine online engagement.

Carry1st



Founded:
2018

Headquarters:
South Africa

Carry1st's platform provides a full-stack publishing solution, handling distribution, localization, user acquisition, marketing, customer experience, and monetization for game developers.

\$57,000,000

TOTAL FUNDING

\$20,000,000

FUNDING Q1 - Q4 2022

\$27,000,000

FUNDING Q1 2023

Venture Round

LAST FUNDING TYPE

Hashgreed



Founded:
2021

Headquarters:
Nigeria

Hashgreed is an NFT marketplace for creative, commerce and asset tokenization.

\$1,000,000

TOTAL FUNDING

\$1,000,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

Cheelee



Founded:
2022

Headquarters:
Seychelles

Cheelee is a blockchain-based social network designed to enable users to earn money through social media. Their platform features a "watch and earn" system that rewards users for consuming content, transforming social media browsing into a profitable activity. This innovative approach enables influencers to receive compensation regardless of their follower count and motivates users to spend more time on the platform.

\$8,000,000

TOTAL FUNDING

\$8,000,000

FUNDING Q1 - Q4 2022

Venture Round

LAST FUNDING TYPE

Metaverse Magna



Founded:
2021

Headquarters:
Nigeria

The company operates an online community platform that allows users to earn cryptocurrency rewards by participating in competitions and e-sports with other gamers.

\$3,200,000

TOTAL FUNDING

\$3,200,000

FUNDING Q1 - Q4 2022

Seed Round

LAST FUNDING TYPE

Proptech

Proptech companies utilize blockchain technology to transform the real estate industry. They streamline property transactions, enhance transparency, and improve trust among stakeholders by providing secure, decentralized solutions for property management, investment, and financing.

Seso Global



Founded:
2017

Headquarters:
Nigeria

Seso Global operates a platform for property listings, allowing sellers in Nigeria, South Africa, and Ghana to list their commercial properties, houses for sale, and rental properties. The platform also enables buyers to browse the available properties and connect with other service providers such as banks and law firms to facilitate the transaction process.

\$1,100,000

TOTAL FUNDING

\$500,000

FUNDING Q1 - Q4 2022

Venture Round

LAST FUNDING TYPE

HouseAfrica



Founded:
2019

Headquarters:
Nigeria

HouseAfrica leverages blockchain and modern geospatial capabilities to build a modern digital land and property registry that enables owners and other third parties to access, verify and value properties effortlessly.

\$525,000

TOTAL FUNDING

\$400,000

FUNDING Q1 2023

Seed Round

LAST FUNDING TYPE

Alphabloq



Founded:
2022

Headquarters:
Kenya

The alphabloQ platform enables both individual and institutional investors to invest in fractional ownership of properties, providing a more accessible and diversified investment option.

\$120,000

TOTAL FUNDING

\$120,000

FUNDING Q1 2023

Accelerator

LAST FUNDING TYPE

CRYPTOCURRENCY INVESTMENT TRENDS IN SOUTH AFRICA

Jaltech, a leading fund management business specialising in alternative investments, is committed to being a front-runner in the South African alternative investments market. To achieve this, we conduct frequent surveys that aim to reveal the general attitudes, behaviours, levels of knowledge, and capital exposure of South African investors towards alternative investments, with a particular focus on cryptocurrencies. As experts in the field, and due to the nascent stage cryptocurrencies find themselves in, we know how important it is to stay up-to-date with the latest market trends and understand our clients' needs.

Jaltech has conducted two surveys over the last 11 months, the first between April and July of 2022, and the second survey was carried out in Q4 2022 and Q1 2023.

The Samples

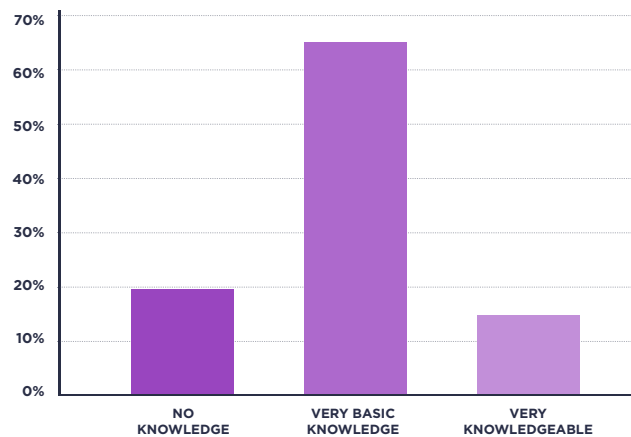
The first survey had 624 respondents, and was undertaken just as markets were coming to terms with the need for aggressive interest rate hikes to tame breakneck global inflation, the Russian invasion of Ukraine, and the collapse of the massive Terra-Luna ecosystem.

1300 people participated in the second survey – which covered alternative assets more generally, but also had cryptocurrency-specific questions. The survey ran over a period that included the high-profile collapse of FTX. More positively, it also included a bullish January and February, with most risk assets rallying with inflationary pressure appearing to taper off.

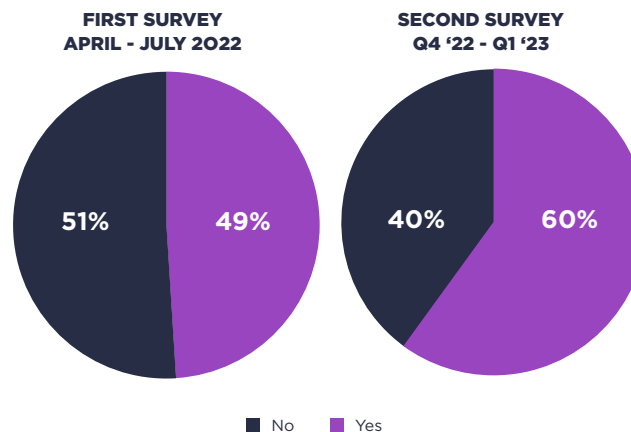
Survey 1: Levels of cryptocurrency knowledge among investors

Of the investors surveyed, 80% reported having at least some knowledge about cryptocurrencies. 65% of investors indicated having a “very basic level of knowledge” of cryptocurrencies, while 15% of investors rated themselves as “very knowledgeable”.

There has been an incremental improvement in knowledge about cryptocurrencies among South African investors, as some of the following data indicates.



Are you invested in cryptocurrencies?



When the 2022 survey was conducted, 49% of respondents had exposure to cryptocurrencies. As the data shows, the number of investors with exposure to cryptocurrencies at this point in the market cycle was still relatively high despite significant headwinds.

In the second survey, the share of investors with cryptocurrency exposure appears to have grown substantially, despite lower prices across the board indicating less demand over the period.

This suggests that South African investors are using the bear market as a time to build exposure and enter the market after the frenzy that was 2021. Historically, this has been a lucrative strategy.

Survey 1: Personal investment value into cryptocurrencies

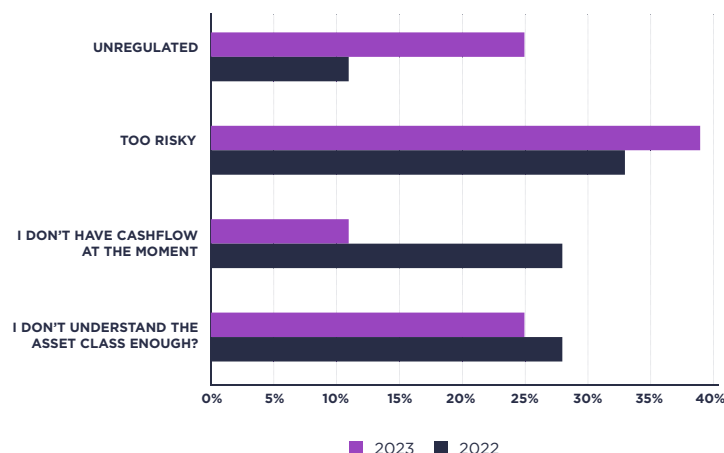


It came as little surprise that a considerable number of investors invested less than R50 000 in cryptocurrencies, as the general guideline for portfolio allocation to speculative assets like cryptocurrencies is about 1-2%.

However, the fact that 42% of investors reported having between

R50 000-R100 000 and R100 000+ invested in cryptocurrencies showed that a reasonable portion of the investments being made into cryptocurrencies were likely more significant than small, speculative bets.

Barriers for investors who DO NOT invest in cryptocurrencies



When it comes to the barriers preventing the first survey's participants from investing in cryptocurrencies, the most common reason cited was the view that they are "too risky".

With the bear market still seemingly intact by the time of the second survey, it was no surprise to see the share of participants with this viewpoint grow to 39% (up from 33%).

Over a quarter of investors who did not invest in cryptocurrencies in 2022 reported that a lack of understanding hindered them from doing so. This still seems to be a barrier for investors going into 2023, although there has been some improvement between surveys. This is a result you'd expect, as cryptocurrencies made many headlines throughout 2022.

A lack of regulation was the furthest down the list of barriers for investors in 2022. However, we saw a significant increase in this data point in the follow-up survey. This was despite the Financial

Sector Conduct Authority categorising cryptocurrency assets as financial products under the ambit of the FAIS regulations in October. The result is likely explained by respondents being exposed to the news of FTX's collapse – a clear failure on the part of global regulation.

Conclusion

Although more investors have exposure to cryptocurrencies than in the past, the events of 2022 (namely, the implosion and bankruptcies of major exchanges and market makers) have left their mark and had an impact on investor behaviour and attitudes.

Regulations being introduced in the local market are likely to only go so far in cryptocurrencies continuing to gain traction within South Africa. Clearly, greater efforts at consistent global regulation to protect consumers are needed to encourage a new wave of cryptocurrency investment from those on the sidelines locally.

There is also a need for education, specifically in educating those investors who do not have exposure to cryptocurrencies to date. The education barrier will likely be a difficult one to overcome, as data from our latest survey shows that investors who already own cryptocurrencies have a bias toward gaining further exposure, while those who do not own cryptocurrencies remain reluctant to dip their toes into the market.



Chris McCormick
Senior Distribution
Specialist, Jaltech



Jason Welz
Head of Digital
Assets, Jaltech

POLYGON LABS IN AFRICA

Who We Are

As Africa continues to embrace the cutting-edge possibilities of blockchain, Polygon Labs has been at the forefront of expanding support to developers, businesses, and Web3 enthusiasts throughout the continent. Increasing numbers of people are tapping into the digital economy and leveraging the power of blockchain. Distributed ledger technology promises more equitable access to financial ownership, data, and sovereignty.

And Polygon Labs is pioneering the architecture to help developers build future economies.

Polygon Labs is leading the industry in developing solutions that scale the Ethereum network. Many people are familiar with the widely used, open-source, and much beloved Polygon Proof-of-Stake chain. On Polygon PoS, developers are powering a decentralized finance (DeFi) future that promises to cut out fee-grabbing intermediaries and open access to finance for populations that may have been iced out of banks. With low transaction fees, high throughput, and user-friendly interfaces, Polygon PoS has thousands of decentralized applications (dApps) showing what's possible in Web3. But mass adoption requires infrastructure to handle billions of users.

Last year, Polygon Labs announced an Ethereum Virtual Machine (EVM) equivalent zero-knowledge (ZK) rollup, Polygon zkEVM. This breakthrough ZK technology promises to bring infinite scalability to Web3, with the ultimate goal of mass adoption. It is the nuclear fusion moment of blockchain. If Web3 aims to become a decentralized, peer-to-peer layer of value transfers, technologies like Polygon zkEVM will be essential in rolling up batches of transactions at low costs and incredible speed, thereby creating a network that can truly scale to the human population.

We foresee a decentralized future where anyone, anywhere, can access the full potential of blockchain technology, and billions of value transfers occur on Polygon.

At Polygon Labs, we recognize numerous advantages in

incorporating blockchain technology into various industries throughout the continent. With work on groundbreaking, first-of-its-kind technology like Polygon zkEVM, the potential to integrate blockchain will only grow. Some potential use cases that can be built by developers using Polygon PoS and other protocols may include:

- **Value transfers:** Enabling cross-border value transfers with instant settlement and more transparency, benefiting people without access to banks.
- **Elections:** With zero-knowledge cryptography, voting systems that maintain privacy but ensure a vote is counted are possible. Using blockchain to bolster democracy is a huge potential in the coming years.
- **Access to Finance:** Democratizing finance by tokenizing and fractionalizing valuable assets.
- **Ensuring transparent supply chains:** It's important to know that commodities are not sourced from conflict zones or environmentally protected areas.
- **Identity:** On a continent where the issuance of identity documents remains uneven or insecure, blockchain offers new paradigms for self-sovereign digital identity. Find a secure, private way to store identity or medical documents on-chain. That means your identity can follow you easily across borders.
- **Creating new economic opportunities** for more than a billion people across the continent.

All of this is just on the horizon. Polygon Labs understands that to realize this vision, active support and development of Web3 businesses, users, and developers building on Polygon protocols are essential.

Africa and Polygon Labs in 2022 and Beyond

In 2022, Polygon Labs launched Polygon Bootcamp Africa, one of the most successful developer education and hackathon

campaigns. More than 5400 applications from 43 countries came in from those eager to learn how to code in Web3. The Bootcamp ended with a continent-exclusive hackathon featuring \$60,000 in prizes, access to Polygon Labs' accelerator programs, and more funding opportunities.

Projects ran the gamut of use cases, from localizing DeFi for populations across the continent to an eco-centric dApp that incentivizes waste recycling and many more. With new technology comes new solutions to tricky problems. The Bootcamp demonstrated that through robust development and support, developers and entrepreneurs could leverage blockchain systems to solve real-world problems.

Enthusiasm from local Polygon Guilds helped fuel interest in Polygon Bootcamp Africa. A robust, grassroots Polygon Guild network has cropped up around the world, including throughout Africa. Polygon Guild communities in Nigeria, South Sudan, Uganda, Kenya, and Tanzania host regular events to share information and build community. The Polygon Advocates program, which helps organize and run Polygon Guilds, empowers local talent to become leaders in the industry. With support from Polygon Labs, advocates attend events across the continent, educating and growing networks.

As a truly global organization, Polygon Labs will continue to have a robust presence in Africa. Polygon Labs is dedicated to empowering those constructing and reshaping economic solutions on Web3. By investing in and attending major blockchain and technology conferences, such as CV Summit Africa, to disseminate knowledge about how blockchain can revolutionize economies.



In 2023 and beyond, Polygon Labs plans to continue the push on the continent and see the most innovative minds make great strides toward mass adoption.

Arnoud d'Yve de Bavay

Polygon Business Development Lead Africa, Middle East & France

THE HIGH STAKES OF BLOCKCHAIN ADOPTION IN AFRICA

As the CEO and co-founder of CertiK, a Web3 auditing firm, I have had a front-row seat to the remarkable growth of blockchain technology in Africa. Nigeria, in particular, has become one of the largest traffic sources to CertiK's Security Leaderboard, indicating a strong retail demand for secure Web3 platforms.

With such burgeoning demand comes an increased need for secure retail platforms. People in emerging and under-served markets rely heavily on trust, which places the onus on founders and developers to provide secure products. In Africa, where a significant percentage of people depend on stable currencies and secure Web3 products such as parametric insurance, the stakes are much higher than for those who merely use them as speculative investments, as is often the case in more developed countries.

The potential applications of blockchain technology in Africa are vast and transformative. One example is parametric crop insurance powered by smart contracts. Parametric insurance, also known as index-based insurance, pays out benefits based on a predetermined index or set of parameters rather than on the assessment of actual damages. Parametric smart contract insurance leverages blockchain technology and smart contracts to automate and streamline the parametric insurance process.

When integrated with rainfall or other measurements, this innovative solution can offer much-needed protection to people in countries where traditional insurance services are either inadequate or non-existent. By leveraging blockchain technology, we can create transparent and secure mechanisms that enable farmers to access affordable insurance coverage and safeguard their livelihoods.

Additionally, cryptocurrencies offer an escape from the crippling effects of hyperinflation, which has plagued several African nations. Zimbabwe experienced one of the most extreme cases of hyperinflation in modern history during the late 2000s. At its peak

in November 2008, the inflation rate reached an astonishing 89.7 sextillion percent (8.97×10^{22}) per month.

Hyperinflation poses a security risk to individuals and governments, making any release valve a welcome one. Both Bitcoin and stablecoins are used to mitigate the effects of hyperinflation by providing a more reliable store of value and a means of preserving wealth. This is particularly important in countries where local currencies are subject to high inflation rates and economic instability. Furthermore, digital assets are much easier to use in online transactions and financial markets, giving them a big advantage over physical gold. Individuals and businesses can maintain their purchasing power by adopting cryptocurrencies and foster financial inclusion, even in the most challenging economic environments.

However, the rapid growth of blockchain technology and cryptocurrencies in Africa is not without risks. Security remains a primary concern, as the potential for hacks, scams, and fraudulent activities looms large. Close to \$4 billion U.S. dollars was drained from Web3 protocols in 2023. To address these issues, it is imperative that robust security measures be implemented at every level of the blockchain ecosystem, from developers to end-users.

As a smart contract and Web3 auditing firm, our mission is to ensure that the underlying technology of these platforms is safe, reliable, and secure. This involves rigorous testing and examination of smart contracts and decentralized applications (dApps) to identify and address potential vulnerabilities. By doing so, we contribute to building a trustworthy and dependable digital infrastructure that serves as the foundation for Africa's blockchain revolution.

As blockchain technology continues to gain traction in Africa, it is crucial that security remains at the forefront of its development and implementation. By ensuring that platforms are secure and reliable, we can unlock the full potential of this revolutionary technology to unlock greater socio-economic opportunity across

the continent. The benefits of blockchain technology in Africa are immense, from enabling financial inclusion to fostering transparency in governance and empowering local economies. However, these benefits can only be realized if trust in the technology is established through a relentless focus on security.

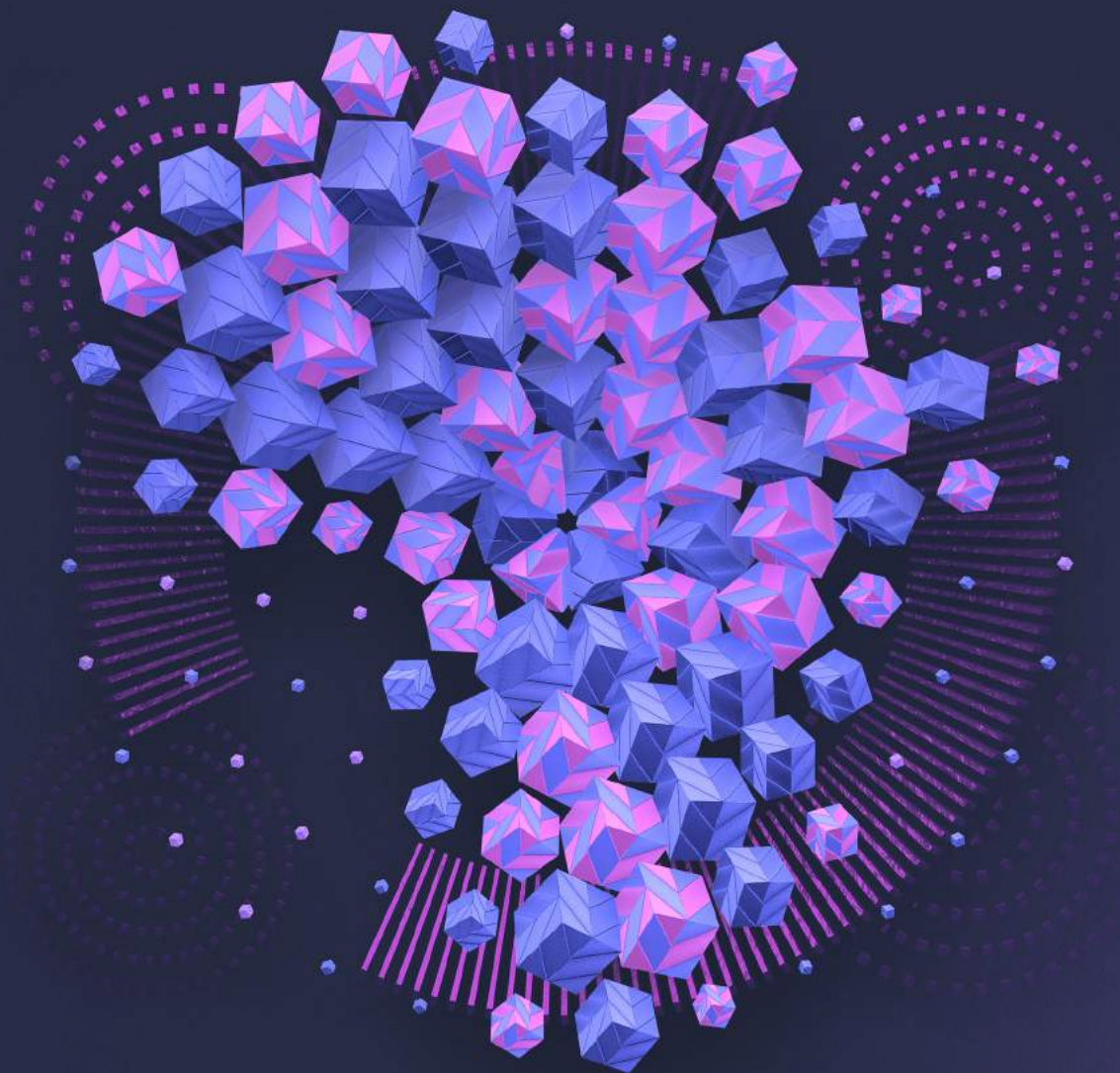
Stakeholders, including developers, founders, regulators, and end-users, must all work together to create a secure and resilient digital ecosystem. By collaborating and sharing knowledge, we can build a thriving blockchain-powered future for Africa that is inclusive, sustainable, and secure. As the continent continues to embrace this technological revolution, let us prioritize security and ensure that blockchain technology's transformative potential in Africa is harnessed for the greater good of all its people.



Professor Ronghui Gu
CEO & Co-Founder, CertiK

06

AFRICAN BLOCKCHAIN INDUSTRY DEVELOPMENTS



African Blockchain Industry Developments

The African continent, unlike its more developed counterparts, is not burdened by the weight of common legacy financial systems. This unique position offers an opportunity for blockchain technology to weave a new fabric of financial inclusion, propel nations' GDP, and enhance the overall wellbeing of its people. Picture the far-reaching effects of this technology, as it transforms industries and elevates the lives of millions, transcending borders and breaking down barriers.

In this section, we explore the companies and industries at the forefront of this movement, utilizing blockchain technology to innovate, transform, and improve efficiencies in Africa.

FINTECH, ECOMMERCE AND CONSUMER FINANCIAL SERVICES

According to a [McKinsey Report on Fintech in Africa](#), just under half of all new tech startups are in the fintech space. This is no surprise, considering the economic and political obstacles facing the citizens in many African countries. The informal trade sector dominates most of the commercial activity within these countries, and a large part of this activity is driven by cash.

However, with near-ubiquitous mobile phone distribution in most urbanized areas in Africa, many of the vulnerabilities of cash can be addressed in a manner that empowers consumers and small businesses.

These solutions take the form of consumer fintech applications of various kinds that solve several prevalent factors, including ease, speed, cost of transaction, onboarding, minimal fees, adoption rates, and a wide variety of exchange mechanisms to enable payment for goods and services.

Blockchain technology has emerged as a fintech solution with a unique value proposition. Its highly efficient payment rails, low costs, and flexibility for developers to build consumer applications on top of the same financial infrastructure have led to widespread adoption in African countries across various industries. Furthermore, blockchain's flexibility empowers individuals with the

ability to move money freely within and across borders, allowing businesses in Africa to collaborate and synergize more effectively. This autonomy from harsh political and economic policies has unlocked new opportunities for growth and development, leading to unprecedented levels of economic empowerment in the region.

By utilizing distributed ledger technology, blockchains ensure that financial transactions are processed with a high level of security and minimal fraud. Additionally, this technology can be used by a variety of applications, including low-fidelity mobile protocols like USSD, which makes blockchain an accessible solution for users regardless of their technological capabilities.

Between fintech and financial services, blockchain applications have enabled several breakthroughs between 2022 and 2023 that vastly improve financial inclusivity, equal access to investment opportunities, transactional services, and remittances, which serve as the lifeblood of African familial support and infrastructure for migrant workers.

Below are some companies that have made innovative contributions to the fintech and financial services sectors using blockchain technology over the past year:

Thalex

Thalex is a crypto derivatives and options trading platform registered in Seychelles. Thalex has developed some of the most innovative and modern incarnations of crypto-native derivatives-trading products available on the market. Multi-collateral support is a feature that allows traders to use various major cryptocurrencies (including stablecoins) as collateral for their trades and settle those trades in stablecoins. This simplifies the process for a broader audience to access and utilize sophisticated crypto investment instruments, such as derivatives. As a result, the overall trading experience becomes more inclusive and empowers a wider range of people to participate in the crypto markets. Options trading experiences previously limited to large institutional traders can now be leveraged by individuals trading

portfolios of any size, furthering the philosophy that blockchain has the ability to democratize investment opportunities across all markets.

Kucoin

Kucoin is a crypto exchange registered in Seychelles focused on bolstering accessibility to crypto assets in emerging markets. In 2022, Kucoin began the rollout of its own proprietary non-custodial consumer crypto wallet solution, poised to help onboard the next generation of empowered crypto users into the realm of web3. This wallet solution will act as an intermediate product solution to slightly more comprehensive wallet offerings from the likes of Trust Wallet or Metamask.

Most blockchain and cryptocurrency users, both globally and in Africa, use exchange platforms that, as we have seen several times during 2022, come with inherent custodial risks. By managing and securing their funds through blockchain technology, African users gain greater financial autonomy. Additionally, choosing a wallet backed by a major exchange provides improved user experience, access to educational resources, and reliable platform support. This combination of features empowers users to take control of their finances while having access to trusted resources and support from established providers.

Ivorypay

An exciting venture based in South Africa, Ivorypay has introduced a comprehensive suite of ecommerce, point-of-sales and payment applications, empowering entrepreneurs across Africa, and even globally, to facilitate all of their commercial activity via crypto.

Blockchain has long been hailed as the ideal payment rails for seamless business within and across borders. Ivorypay turns this theory into reality with the grassroots technological infrastructure required to use and build upon blockchain-based commerce. By enabling automated crypto-based subscription payments in the vein of debit orders, as well as QR payment solutions, ecommerce checkouts that allow crypto transactions and more, the potential

for crypto to become the de facto payment platform of digital business may truly be realized.

A complete turnkey solution for payments and NFT-based transactions, the ability for Ivorypay customers to utilize QR and mobile, wallet-based payments empowers one of the largest economic sectors in South Africa (and much of the African continent); informal trade. Underserved members of the population may finally be able to make and receive payments for goods and services that don't require cash, and experience the safety, precision, low cost and ease doing business online, without having to invest in expensive technology or undergo the daunting task of creating a bank account.

Maplerad

Maplerad is a Nigerian company that offers a "banking-as-a-service" infrastructure to fintech products. This fully licensed, regulated, and compliant white-label solution allows fintech companies to embed financial services directly into their products, enabling them to focus on growth instead of navigating regulatory obstacles and development time. With Maplerad's infrastructure, fintech teams can streamline their operations and bring innovative financial products to market more efficiently. Maplerad provides out-of-the-box API solutions for crypto payments, empowering developer teams to build products to facilitate seamless cross-border remittances in Africa.

Remittances have been shown to be one of the most valuable and empowering use cases for consumers in Africa. Establishing a tech infrastructure that enables the development of affordable, compliant remittance services ensures that consumers have access to a diverse range of options, preventing them from being exploited by the exorbitant pricing of traditional solutions.

Nyayomat

Nyayomat is an Africa-first ecommerce platform, driven by values of accessibility, inclusion and empowerment. Based in Kenya, where informal trade has a significant footprint on commerce and GDP, the venture aims to equip small merchants with the tools, education and infrastructure to introduce their products to online markets, where they may be accessed and purchased by a far

wider range of consumers than ever before.

Nyayomat has innovated in several respects, creating features unique to its African context. While the business's focus on hyper-local trade and improving convenience for consumers and merchants alike is a leap forward for digital trade, it is Nyayomat's new product, Boost, which is truly innovative.

Boost is a flexible bridge financing and micro-credit solution for small businesses that allows merchants access to capital at affordable rates, when they most need it and in increments that make the most sense for their unique working capital cycles. This credit facility is focused on merchants that require capital for purchasing of new stock or mission-critical assets, as well as cashflow. The lendee may repay with flexible installments, allowing them to manage their operating capital in a way that is aligned with the normal patterns of their business. Through the native integration of this product into their marketplace, Nyayomat is serving the businesses and the consumers that rely on them, in a manner that is truly Africa-centric.

MFS Africa (In Collaboration With Ripple)

MFS Africa is a South African-based digital payment solutions provider tackling the challenge of commerce in mobile-first African economies. In 2023, MFS Africa partnered with the American crypto payment solutions provider Ripple to create ISO20022-compliant payment services using blockchain-based payment rails.

The ISO20022 standard is a new specification from SWIFT, the global cooperative that sets industry standards for financial messaging and transmission of payment information across borders. It establishes an innovative, high-speed incarnation of the existing SWIFT protocol for cross-border payment. It enables new opportunities to interoperate with DLT (distributed ledger technology) and blockchain transactional services.

MFS will be leveraging Ripple's On-Demand-Liquidity service to tap into vast existing liquidity reserves on Ripple's payment network, RippleNet, that will enable safe, secure, and efficient financial transactions at a high volume and concurrency.

GOVERNMENT

Blockchain technology is built upon principles of immutability, transparency, and trustlessness, and in an arena where human incentives run deep, blockchain shines through.

For a considerable period of time, the potential use case of blockchain-based voting mechanisms has been touted as a prospect available to governments even with currently existing technology.

Although regulatory constraints and bureaucracy are often thought to be the primary obstacles to implementing blockchain-based voting systems, some jurisdictions in Africa which are in dire need of governmental transparency and accountability. They have thus been inspired by the trustless features of the Bitcoin network. As a result, they are using these features to design digital voting systems that can provide greater security, transparency, and integrity to their electoral processes. This innovative voting approach highlights the potential of blockchain technology to address critical issues of governance and democracy in developing countries.

Kenyan Independent Electoral and Boundary Commission (IEBC)

The Independent Election and Boundary Commission is Kenya's primary authority on drafting and administering electoral processes.

For the 2022 Kenyan presidential elections, the IEBC introduced an innovative set of digitally-facilitated electoral procedures that, while not strictly blockchain-based, are closely informed by the organizational structures of blockchain, particularly the Bitcoin network and its consensus mechanisms.

So-called KIEMS (Kenya Integrated Election Management Systems) kits were deployed to some 46000 plus polling sites across the country designed to record and corroborate each registered voter's biometrics with the identification information held on public record for them. The matched biometric information and identification, coupled with the voter's individual signed ballots, were synchronously transmitted to the IEBC's servers. In contrast,

the physically signed ballots and forms served as the means of verification for an additional layer of trustless consensus.

Representatives of differing political alignments at the physical polling stations counted all votes cast once voting closed, then subsequently signed a digital form with the agreed tally for that station. This form would become a permanent record for that station. The IEBC publicly released the data from each polling station on its website, which could be independently checked by media, voters, party representatives, and foreign electoral witnesses for correctness, promoting transparency.

HEALTHCARE

With the ever-increasing importance of data in the healthcare and health-tech industries, the security and accuracy of information has become more critical than ever before. Patient medical records and prescriptions, clinical trial and study results, drug patents, and access to professionally-verified information are all crucial data points that are exchanged constantly and in enormous volumes between essential stakeholders within the industry and members of the general public.

The virality and danger of misinformation and the necessity of information security and privacy are all clear use cases that point to privacy-focused blockchain implementations as a possible solution to address many of these pain points within the healthcare sector.

Africa has historically suffered from low access to quality, affordable healthcare, and most public or socialized healthcare solutions across the continent are woefully inadequate, with obvious shortcomings in critical infrastructure. The following company is using blockchain technology to address some of the pain points of African healthcare:

Afya Rekod

Afya Rekod is a Kenyan-based, end-to-end digital health platform that empowers users to own their health and wellbeing journeys using the transparency and verifiability of blockchain. The platform is focused on the intersection of distributed ledger and AI technology to store and verify the credibility of various information

pertaining to health.

On the Afya Rekod platform, users' medical records may be securely stored using a privacy-focused blockchain solution, and further healthcare information can be credibly verified due to blockchain's immutability and consensus-seeking nature.

The company has recently introduced its Dynamic EHR feature, which retains patients' medical records at their point of care (the hospital they typically seek medical care from). It makes use of sophisticated analysis to determine when patients may be due for preventive health screening and subsequently notify the patients and their respective healthcare providers.

ENERGY

Energy is the lifeblood of global commerce, and Africa is no exception. However, with considerable infrastructural burdens, insufficient expertise, and lack of funding, many countries in the continent face energy deficits that affect the daily lives of ordinary people.

Africans face several energy-related challenges, including rolling blackouts, inadequate rural coverage of power grids, outdated and inefficient energy extraction processes, and everyday use of dangerous and environmentally harmful fuel sources. These issues significantly impact the daily lives of people across the continent, making it difficult for them to access reliable and safe energy sources.

While affordable, renewable, and cleaner energy sources are slowly becoming more commonplace, these technologies tend to become available to individuals and businesses in urban areas with the means to acquire them. Those in the greatest need don't benefit from the ongoing cycle of energy innovation as yet, and distribution and cost tend to be the biggest barriers.

Enter blockchain technology, which can, and currently is, acting as an enabling force to usher investment into energy infrastructure in underserved communities via tokenization, transparency, and anti-corruption measures. Here are some companies using

blockchain technology to innovate in this sector in Africa:

Momint

Momint is Africa's largest NFT platform by volume and a developer of solutions to tokenize real-world alternative asset classes, facilitating equal access to investment instruments.

In lieu of ongoing, government-mandated power outages in South Africa, Momint has developed a blockchain-based solution to allow members of the South African public to invest in and participate in the revenue of alternative energy sources.

The recently-funded development firm has partnered with solar panel providers to allow users to purchase NFTs representing unit ownership of solar cells. This unique approach will enable token-holders to freely trade ownership rights of their solar cells through Momint's platform and also share in the value-growth upside and revenue generated by the solar cell. This innovative solution enables people to invest in clean energy and support sustainable development while also potentially benefiting from financial returns.

This allows ordinary retail participants to participate in a burgeoning market for alternative and renewable energy sources in South Africa without understanding or addressing any logistical or supply-chain-based concerns inherent to the sector.

Sinan Energy

Sinan Energy provides tokenization solutions that enable investors to easily access carbon credits as an investment instrument via blockchain technology.

On May 17, 2022, Sinan Energy signed an agreement to supply in excess of 1 billion kWh of tokenized renewable energy to large industrial and chemical solvent manufacturing plants in Southern Africa. Sinan's token, the Sinan Energy Token, is a publicly-tradeable cryptocurrency that presents tokenized carbon credits, an emerging asset class that signify owners' contributions toward sustainable energy production. Sinan sources renewable energy from a decentralized network of renewable energy producers,

including wind and solar production methods.

Tokenized carbon credits derive their power from the ability to verify the renewable energy that underpins the value of the credit. This includes detailed information on the renewable energy production represented by the token, including how and where it was produced. By providing verifiable data on the source of renewable energy, tokenized carbon credits can offer investors greater transparency and accountability in their sustainable investments.

Sun Exchange

Sun Exchange is a platform for monetizing decentralized, tokenized solar energy. Sun Exchange allows members of the public anywhere in the world to purchase solar cells, have them installed on sites where there is existing demand for solar energy to curb energy deficits, and then earn passive income from the energy production of their acquired solar cells monthly, in crypto or fiat currency.

Given recent energy deficits and problems with the national power grids of many African countries (most notably South Africa), the ability to attract retail investors to alternative and renewable energy solutions, as well as empower individuals to own their own energy production capacity, is a step toward the democratization and independence of energy production and usage in energy-troubled jurisdictions.

CORE BLOCKCHAIN INFRASTRUCTURE

The use cases and impact of blockchain are far-reaching and span several sectors. However, to advance the industry built upon this technology, the core infrastructure and underlying tools available for developing these various use cases must be improved. The following ventures are pushing the envelope of what is possible with blockchain platforms:

Scroll.io

Scroll.io is a native zkEVM Layer 2 scaling solution for Ethereum. Scroll provides native support for all EVM-based smart contracts and infrastructure.

This means any protocol, dapp (decentralized application), or functionality deployed on Ethereum can be deployed on the Scroll L2 with no further development overhead. Scroll uses bleeding edge zero-knowledge (zk) cryptographic roll-up technology, a method of processing transactions and computation off the blockchain to reduce time and costs, before re-uploading processed transaction outcomes alongside cryptographically-sound and immutable proofs of correctness to the blockchain.

What this means for average blockchain users is vastly lower transaction fees and higher speed, meaning that Scroll lends itself to wider adoption by members of the public who wish to benefit from cheap and efficient payment rails, applications, or financial services.

Forward Protocol

The technical barriers to entry loom large for new web3 developers and non-technical founders alike. Creating applications, content and MVPs for ideating new technologies within the web and blockchain space can be a daunting task, even for the most experienced web2 software developers. However, gaining traction amongst developers, and reducing the time, learning and risk of deploying smart contracts and creating dapps is made significantly easier through the innovation of Forward Protocol.

Web-based applications peaked in popularity, impact and ease of use after the first low-code and no-code web development frameworks became available to consumers. This includes Wordpress (which some sources cite as hosting greater than 40% of all content on the internet), and Shopify, Squarespace and Wix at a later stage.

With Forward Protocol's core product, even non-technical visionaries will be able to ideate, create and deploy smart contracts and web3 dapps in both Solidity and Rust architecture (Ethereum-based chains and alternative blockchains such as Solana). This will no doubt drive greater numbers of creators, developers and entrepreneurs to experiment with web3, perhaps creating the early iterations of ventures that will appear on this list in years to come.

EDUCATION

Onboarding the next million web3 users will require more compelling use cases, killer applications and deep utility than ever before. One way to ensure a greater quality and rate of development within the web3 space is to attract more competent developers, engineers, power users and empowered technologists to explore it more deeply.

Hence, education around web3 and blockchain concepts and technologies is crucial to the mission of evangelizing the role and impact that blockchain, web3 and associated fields can have on a plethora of industries. Here is a venture that is furthering the mission of attracting world-class software developers to web3 tech stacks and empowering them with the tools to use them:

Web 3 Sanctuary

Web3 is at a pivotal stage in its growth - having garnered the attention of mainstream businesses, and many of the world's most prominent brands, tech companies and financial institutions, it is primed for the next phase of evolution and implementation.

With the aim of empowering the next generation of web3 advocates and blockchain-equipped disruptors to fill the growing need for subject matter experts in every industry, Web 3 Sanctuary is at the forefront of a new generation of edtech ventures. Focusing primarily on Solidity, the programming language of smart contract within the EVM (Ethereum Virtual Machine) ecosystem, Sanctuary offers a rigorous but engaging training experience.

The intended end result of the flagship Sanctuary training program is the successful and sustainable placement of certified Solidity developers in job roles that match their skillsets, personalities and interests. In a growing African market of developers seeking gainful employment, Sanctuary facilitates candidates moving into the multitude of sectors where they may use blockchain principles to add value and cultivate social impact at a grassroots-level.

BLOCKCHAIN SOCIAL IMPACT IN AFRICA

As seen in this Report, blockchain research, investments, use, and development are growing at an impressive rate on the African continent. The Global South has taken a specific interest in the real-world application of blockchain, even beyond currency and financial solutions. This combination of technology, innovation, and a mindset for growth is contributing to unprecedented opportunity.

The global blockchain space is shifting gears, with more developers and attention focused on social impact. Simply put, social impact is the value added or removed from the people and communities targeted by development organizations. These changes can manifest in various ways, such as improvements in living conditions, access to essential services, economic opportunities, and overall well-being. Blockchain applications for social impact are turning international development upside down, giving global South organizations the opportunity to lead their own development.

The inherent features of blockchain technology are crucial for fostering trustworthy and community-led approaches to development. As communities possess deep knowledge of their historical grievances, state and public service capabilities, perceived corruption levels, and power imbalances, they are best suited to leverage the unique properties of blockchain to tackle these issues. By incorporating local context and expertise, blockchain solutions can be tailored to meet the specific needs of the community and garner trust from those who live there, as it is perceived as relevant and useful in their daily lives.

The African startup ecosystem is experiencing rapid growth. This trend is reflected in the emergence of local web-3 communities across the continent; those in Kenya, Egypt, South Africa, and Nigeria are paving the way. Locally-led projects are starting to find solutions and improvements for international cash transfers, record management, supply chain tracking, data management, corruption, documentation of land ownership, and mismanagement of funds. Self-organized communities like EthSafari are taking the lead in fostering collaboration and

knowledge sharing within the African blockchain ecosystem. These communities organize conferences, meet-ups, and hackathons that bring together developers, entrepreneurs, and blockchain enthusiasts from across the continent. Many of these organizations and projects are measuring success according to progress made toward achieving the UN Sustainable Development Goals (SDGs). Some forward-thinking international NGOs, such as Mercy Corps, and venture capital firms, such as CV VC, recognize the growing interest in blockchain and actively support its development in Africa, helping to strengthen the ecosystem. By fostering innovation and adoption, they play a vital role in bridging the knowledge gap and expanding the technology's reach, enabling more people across the continent to benefit from its potential.

These are ambitious goals, and progress is being made. Yet, it is important to remember that while there is much more engagement with blockchain today than last year, it is still not used or understood by many people on the African continent and around the world. The technology has generated significant interest, and many start-ups are actively building on its potential. However, it is important to note that we are still in the early stages of development, and there is much to be explored and refined to unlock its capabilities fully. For example, regulatory challenges and the absence of a clear legal framework can lead to uncertainty and hinder innovation. It is also essential for start-ups to create and implement methods for evaluating their impact, comparing the benefits of blockchain technology to other viable options, incorporating ethical factors into project planning, fostering internal feedback and growth processes, and connecting their impact with return on investment (ROI). Adopting this strategy can be advantageous when pursuing financial support, as it enables start-ups to showcase their tangible results, bolstering their argument for receiving investments and fostering sustainable solutions. Introducing people to the decentralization that blockchain technology provides is crucial, and it must be done in a way that fosters trust and understanding rather than fear and skepticism.

Blockchain is in a strong early stage of development. Polygon Labs and its implementing partner Impact Plus, are committed to supporting this developing ecosystem. In order to gain a clearer picture of the development status on the continent, we spoke with three leading organizations in Africa's blockchain sector. The next section will present their perspectives on blockchain's successes, their challenges working with the technology, and how they see it evolving over the next five years.



Antoni Martin

Co-Founder Polygon zkEVM & Polygon ID

CONVEXITY

Convexity, a blockchain solutions consulting firm in Nigeria, was established in 2020. Creating the first blockchain hub in the nation, Convexity set out to improve transparency and reduce the political and social corruption woven into the daily lives of the Nigerian people. As a consulting agency, many projects and solutions are ongoing at all times involving financial inclusion, banking, development, identity, and more. Recently, the organization built a Cash and Voucher Assistance (CVA – www.chats.cash) app to ensure beneficiaries aren't duplicated in the aid distribution process using identification verification. The app uses national identification cards for those who have them and decentralized identification via a unique direct identifier for those who don't, such as internally displaced persons. Convexity has also been working with an aid project to pay teachers and feed the elderly in the Makoko floating community in Lagos, Nigeria. Supporting the donation process with blockchain, they created a solution to engender transparency and ensure the money donated reaches the intended recipients. Convexity has recently received support from UNICEF.



Deji Owonibi
Founder/COO, Convexity

CAMBIATUS

Cambiatus, a DAO operating in various locations throughout the Global South, recognized the potential global benefits of complementary currency built on the blockchain. Complementary currencies are used worldwide alongside national currencies; they are typically not legal tender. They are often used within a region or community to help stimulate or protect the local economy, enhancing financial inclusion. Engaging with self-help groups in Adama City, Ethiopia, a new complementary cryptocurrency was created called the AGL, or Agelgil, with support from Tearfund. These groups are co-designing and piloting their own currency, collaborating as Cambiatus members, learning about the technology, and sharing best practices with other communities. Communities like Agelgil pay a membership fee to support the web app infrastructure, where members of these self-help groups, usually women, can use a shop to showcase their products and exchange them with other members using AGL. Members benefit from a free web app and no transfer fees, allowing them to grow their businesses by exchanging products with members from their self-help group and others within the local community.



Karla Córdoba Brenes
Cofounder, Cambiatus

SHAMBA NETWORK

In Kenya, Shamba Network recognized that the majority of the Global South was not equitably included in voluntary carbon markets due to a bottleneck in the process of verification. As the world tries to reduce greenhouse gas emissions in an effort to reduce air pollution and slow climate change, a system of carbon credits has been created. One credit is a legal certificate permitting the holder to emit one ton of carbon dioxide or other greenhouse gasses. A carbon market is a system through which carbon credits are traded or sold. However, a third-party organization must verify the carbon offset program to ensure it meets standards and the carbon credits are approved for sale or trade. Using blockchain, Shamba Network is building a solution enabling anyone, especially smallholder farmers, to access digital Monitoring, Reporting, and Verification and thus participate in global carbon markets.



Kennedy Ng'ang'a
Chief Executive Officer, Shamba Network

CONVERSATIONS, INNOVATIONS & OBSERVATIONS

TLDR; key conclusions from our conversations with organizations using blockchain for social impact projects on the African continent.

1. Africa is investing heavily in blockchain solutions for development and social impact.
2. Initiatives are in the early stages; solutions and innovations must continue to develop.
3. Blockchain technology is why these projects are possible, trustworthy, and successful.
4. Challenges at this stage of blockchain development include monitoring and evaluation, finding and/or training qualified developers, and fundraising.
5. There is a tremendous opportunity for growth over the next decade, including economic stabilization and environmental progress.

Blockchain: The Key to Success

Blockchain technology is the key to success across all three projects. The innate characteristics of blockchain – transparency, immutability, privacy, and decentralization – create a solution to a problem that has not yet been solved.

Shamba Network relies on the system's transparency and visibility so that its users can provide proof of greenhouse gas reduction. Powering its Web3 applications using data from satellites, geospatial models, and artificial intelligence, these data are saved to the chain. They can be used for measurements of greenhouse gases saved, leading to the creation of carbon credits. The project allows smallholders to participate in the global economy.

"Visibility and transparency is key," says Convexity Chief Operating Officer Deji Owonibi. "A lot of people are doing what we're doing, tracking donations, but people who donate were unsure if their

money would go to [the cause]. It is that trust gap we are fixing with blockchain."

Cambiatu places great importance on the privacy offered to its users through blockchain technology. As an organization, it does not have access to change how the AGL works because the decision-making and control of the app is decentralized, community-based, and automated via smart contracts, which means there is less risk and potential for liability. Risk is also reduced for any financial transactions that are taxable or require auditing since the data is permanently stored on chain.

Organizational Challenges to Incorporating Blockchain

Monitoring and Evaluation

Africa is thriving with opportunity and innovation and is making strides with local solutions for social and economic development. While blockchain technology has brought significant progress, it is important to acknowledge that, like any developing industry, there will be challenges and unsuccessful attempts along the way. Measuring results will inevitably pose a challenge since isolating the effects of blockchain is difficult, even impossible, in some cases. However, these organizations say that success is less related to the back-end technology and more related to the effects of the front-end product. At its core, the success of blockchain tools, apps, and currencies lies in their ability to reach and benefit a significant number of users. Therefore, it is essential to assess and understand the user base of these developments - how many people are using them, and more importantly, how many people are benefiting from them. When measuring success, organizations consider such factors as how many users have improved financial resilience due to the product, or a percent increase over time in donations for aid projects, once donors are able to transparently track their funding. They consider how many farmers and acres of regenerative farmland have produced verified carbon credits using the product.

Organizations are also developing performance management methods based on the Sustainable Development Goals they are working to attain. The Agelgil project through Cambiatu supports the attainment of SDGs one (no poverty), five (gender equality), eight (decent work and economic growth), eleven (sustainable cities and communities), and twelve (responsible consumption and production). Shamba Network aims to improve the entire ecosystem through its regenerative agriculture and carbon markets program, which targets SDGs two (zero hunger), six (clean water and sanitation), ten (reduced inequalities), thirteen (climate action), and fifteen (life on land). Convexity's many blockchain solutions touch on every single SDG.

Young infrastructure, few developers, and little funding

Still, we are in the early stages of development, using blockchain for social impact projects, and the ecosystem needs to mature. These projects require a great deal of infrastructure to keep everything running, especially when working across chains. Developing fail-proof smart contracts or cross-chain interaction mechanisms necessitates long hours and strong developers. All of this requires manpower, a challenge lamented by all three organizations. Most African developers are in the early stages of development, so finding new hands to support the organization can be tricky. Despite this, the nascent nature of blockchain development in Africa is fostering a collaborative rather than competitive environment among developers and organizations in the space. This community-driven approach creates a supportive and inclusive ecosystem that builds innovative solutions. A compounding restriction for both hiring and development is fundraising. Most ReFi and blockchain development still takes place in the Global North. Even when organizations in the Global South have the technology, the users, and the regional reputation, they have difficulties receiving funds.

Mindset and Opportunity

A mindset change is critical for funders, governments, and potential users of these new technological opportunities. For users, this is especially true when the blockchain solution creates or uses tokens. Users with no prior introduction to cryptocurrency will likely be easiest to convince, but those with a basic understanding of blockchain must come to understand that blockchain and cryptocurrency are not necessarily interwoven. Further, blockchain should not be associated with the instability and history of cryptocurrency. Tokens built and associated with these social impact projects are even more stable than local or national currencies, withstanding conflict, natural disasters, and inflation. This and the incorrect belief that transactions are untaxable, has also led to government distrust. Sensitizing users, organizations, governments, donors, and any other interactor with the technology will be critical to improving buy-in, use, and investment. The solutions created by these organizations provide a compelling and low-stakes opportunity to onboard people into the world of blockchain and Web3 in a way that can only be beneficial to the individual, community, and even the world.

The Future of Blockchain

The implementation of real-world solutions can have a profound impact in Africa, and blockchain technology, in particular, holds immense potential to combat corruption, address the effects of climate change, enhance microfinance, increase charitable contributions, and facilitate new income-generating opportunities in the Global South. Kennedy Ng'ang'a, Chief Executive Officer of Shamba Network, says blockchain offers the potential to create an entirely new economy. Using NFT trading cards, there are options to use these solutions and tokens offline, making them immune to situations where authorities order service providers to block all internet access. *"This economy can open new sources of income and opportunity for people in the Global South and will uplift a lot of people,"* says Ng'ang'a. The value of tokenization as a critical piece of this new economic system can be used to achieve

a regenerative economy, leading to social impact on a bigger scale. Bigger projects can gradually take root until, one day, there is greater stability in the livelihoods, environment, resources, and opportunity for people in the Global South.

THE BEAT OF AFRO-BLOCKCHAIN

The absence of traditional infrastructure can act as a driving force for the adoption of blockchain technology across the African continent. Earning, storing, and transacting digital money is among the most pressing needs, as projects from Rwanda and Kenya to Nigeria demonstrate.

Twenty years ago, the Nepali philosopher Kunda Dixit told the author about the advances of the internet in his country: *"We are making a technological leap forward. We are going from making potato chips to microchips."* A similar leap can be experienced all over Africa with the emergence of mobile phones in the past 10 years. In regions previously lacking landline infrastructure, individuals can now make calls, send texts, and browse the internet. From the remote bushlands of northeastern Cameroon, where phones are charged using car batteries, to the semi-arid region of South Kordofan between South Sudan and Sudan, where mothers in mobile hospitals can maintain communication with their families.

Surprisingly to experts in leading countries like Switzerland, the US, South Korea, and Japan, Africa could be on the verge of taking a significant leap forward in blockchain technologies. As with the above example, this burgeoning industry might fill in the gaps for missing infrastructure.

Digital Money for Everyone

According to [Statista, in 2017](#), only a third of adults in Africa had a bank account. There's a straightforward explanation for this: a study from Forrester Research indicates that the know-your-customer (KYC) process can cost up to CHF 6,000 for a new banking client, making most African applicants unprofitable for banks.

Not having a bank account deprives people of other services that can now be leapfrogged by blockchain: insurance, savings, investment, and money remittance. In contrast to highly industrialized countries, blockchain products face less competition with traditional industries and encounter fewer challenges related to satisfying well-served customers.

There are first successes - in Kenya, crypto-based remittance service BitPesa solves the infamous last mile by converting crypto into local fiat currencies. Also, in Kenya, all public hospitals have a data-exchange hub that is based on blockchain.

Rwanda recently signed a deal for Bitland, a blockchain-based land registry. While countries like Sweden have dabbled with land titles on blockchain, the technology's most significant advantage is of little interest in the global North: trust. In countries with relatively weak public structures, blockchain replaces trust in public officials. Unlike paper or database records pertaining to property, which are susceptible to tampering, information stored on the blockchain cannot be altered or stolen.

Entertainment on the Block

There is more to consider than just enterprise alone. Many African countries have a thriving entertainment industry. *"Afrobeats is one of the fastest growing music genres in the world - and it is growing especially fast outside of Africa,"* explains Joshua Ehizibue. *"The big American and European labels sign more and more artists from the continent, but it is still only a drop in the ocean. African musicians are mostly independent artists, and that is not by choice."*

Reacting to this growing industry and the need for African monetization solutions, Joshua founded Streamlvr. It is a blockchain-based live-streaming application that helps artists to monetize their craft. *"Fans love to support their artists, but they usually don't know that the musicians only get a fraction of the royalties. Streamlvr creates a direct connection from artist to fan,"* explains Joshua, who is - of course - a musician himself and published his craft under the name Mo'jeezy. *"A blockchain solution like Streamlvr gives people the trust they are missing with the big platforms. There are no shady deals, hidden fees, or grabbing of the majority of funds."*

Apart from technology, projects like Streamlvr have a strong political economy aspect: "No matter where in the world you live, as

a musician you have two main sorrows: how do I earn money with my craft and how do I keep the rights to my music, my intellectual property?" says Joshua and speaks from his own experience. "We need African solutions for both."

What Drives a layer-1 Blockchain

Local solutions for global problems are a key driver for layer-1 blockchain Lisk. The Switzerland-based foundation recently launched the next iteration of its grant program, the Lisk Accelerator. *"We have always been looking for projects that solve problems of the communities where the founders are from. We have onboarded projects from South America to South-East Asia,"* explains Dominic Schwenter, head of business development. *"With our new Lisk Accelerator, we'll have even higher grants and better support."*



Marcell Nimfuehr
Chief Marketing Officer, Lisk

BLOCKCHAIN IN TAX

The data race is on. We find ourselves in the thick of an era that necessitates people, processes, and technology working in lockstep within a delicate ecosystem. This ecosystem's peak operating efficacy is completely dependent on the validity, accuracy, and completeness of the supported data set.

Tax administrations are seeking access to data and at granular levels not seen historically, which prompts the cautionary prospect of real-time access by regulators to blockchains of businesses acting as support to the tax reporting process or even to that of the tax audit. With this data readily available, tax authorities could aim to supply taxpayers with pre-populated tax returns making the filing process more efficient. On the flip side of the coin, in an attempt to field the above eventualities, taxpayers should be focusing efforts on strengthening data quality controls by implementing near real-time diagnostic data analytics on source systems, ERP systems, data reservoirs, and other reporting sources as a form of pre-emptive due diligence.

One of the key advantages of blockchain is its ability to provide a secure, transparent, and tamper-proof record of transactions, offering potential solutions to revolutionize the facilitation of the aforementioned mutual data exchange. Additionally, this technology could be well-suited for tax purposes, benefiting tax authorities and taxpayers alike. It could facilitate prompt tax collection based on transaction-level data, increasing efficiency, and can alleviate the administrative burden on taxpayers by automating various aspects of the tax reporting process.

Albeit sounding extremely lucrative, implementing and regulating a highly volatile and decentralized system remains a challenge. Building the operating ecosystem, incorporating users and attached permissions, initializing processes, integrating with current systems, resolving long-standing issues legacy data quality issues, and developing a legal framework to support the new transactions are just a few of the steps involved in integrating blockchain between tax administrations and taxpayers. Blockchain

can guarantee that third-party data is reliably gathered and shared however, the technology, by design, cannot control human input errors. It is, therefore, vital to ensure accurate input data capture with an emphasis on skilled and reliable authors of that data.

The technology's potential does, however, lend itself to provide significant benefits for tax systems across the African continent, including that of compliance, reporting of consumption, and even payroll taxes. Governments have taken a noticeably proactive yet cautious approach to maximize innovation through slowly regulating and adopting the use of blockchain technology as far as possible, however, limited application has been seen to date from a tax perspective. The rise of cryptocurrencies has brought similar challenges and have taken the tax spotlight. Tax legislation in almost all African countries does not contain bespoke legislation concerning the treatment of crypto; however, in South Africa, crypto is now seen as a financial instrument and adopts tax treatment in terms of the general South African income tax principles.

Blockchain technology allows for the creation of tamper-proof digital records which can be used to automatically verify and report tax information, thereby increasing compliance and reducing costs associated with tax collection. This can create more efficient and transparent systems for tracking and reporting tax payments, specifically in the context of Value Added Tax (VAT) collections or even VAT refunds in the case of consumer cross-border transactions. Not only can this assist in eliminating the burden of reporting and filing by taxpayers, but regulators can also look to improve VAT collection with the use of smart contracts tracking the collection of taxes in real-time each time a taxable event is triggered, potentially eliminating the need for intermediaries in the process.

Additionally, the use of blockchain for transfer pricing appears to be a promising use-case.

The technology could aid in the demands for more transparency

and automation of processes shedding light on the supply chain of a multinational enterprise and could reduce the knowledge gap. Although unlikely to eliminate the informational void tax authorities face when auditing transactions with related parties, the amount of time and effort spent on tax audits by tax authorities may be greatly reduced due to a blockchain enhancing the reliability of inter-company accounting records. This could lead to a reduction in compliance costs and minimize the reporting burden.

While blockchain technology has the disruption potential to transform the way taxes are collected and administered in Africa, it is important to note that there are still many challenges that are yet to be overcome. For example, there are concerns about the cost and complexity of implementing blockchain-based systems and the need to ensure that they are secure and compliant with existing laws and regulations. Additionally, there is a need to address issues related to data privacy and security and ensure that the ecosystem is accessible to all parties.

Overarchingly, blockchain technology has the potential to provide significant benefits for the tax landscape across the African continent, however, it is important for governments and relevant stakeholders to work together to address the challenges to ensure that, if suitable to the use-case, blockchain-based systems are implemented in a way that benefits all taxpayers.

Please note, this column does not necessarily reflect the opinion of Standard Bank and does not constitute tax advice. It is recommended that independent tax advice is sought for all tax related matters.



Martin Pindak

Head: Tax Technology and Strategic Change,
Standard Bank Group

WEB 3: THE ECONOMY OF TRUST

The recent FTX failure is an example of how the absence of a Web 3 economic ecosystem enabled bad players to cause serious damage to many people and the industry. Many regulators and traditional institutions are now rethinking their stance on DLT technology, and, as a result, they are missing out on the foundational benefits that Web3 offers them and their customers. A large amount of the turmoil can be attributed to the fact that there is still a considerable gap in knowledge about Blockchain, Cryptocurrencies, the Metaverse, and Web 3, leading to people and regulators making knee-jerk decisions rather than informed choices. I want to use this opportunity to contribute to clarifying the Web 3 environment and provide some thoughts on how banks and regulators can contribute to a stable Web 3 economic environment for the future.

What is Web 3

Web 3 refers to the economic construct that can be described as the internet of value. This is like the internet in that it is a globally connected network, but where the focus is placed on:

1. Automated and transparent businesses
2. Integration of machines and sensors to enable automated interaction with the real world.
3. Everyone has access to create wealth

An example of a Web 3 business model will explain this best:

Company ("ABC") specializes in manufacturing automobiles and has implemented alternative energy production capabilities. They do not always use all the electricity they produce. A Web 3 automated business ("DLT POWER") enables ABC to install IOT devices to track electricity production and consumption. AI models use data on the DLT to predict excess energy generation. The IOT device, in partnership with DLT Power, tokenizes excess electricity produced during specific time periods and places an order to sell the electricity on an open marketplace. Homeowner XYZ purchases electricity from ABC for a specific period and promptly pays DLT

POWER using cryptocurrency or another acceptable asset. In turn, DLT POWER compensates the electricity network provider for procuring electricity from ABC and delivering it to XYZ while immediately transferring the remaining funds to ABC.

Blockchain and Cryptocurrency:

Many people still consider Blockchain and Cryptocurrency as synonyms. However, these two very different sides of the Web 3 ecosystem will become the future global marketplace.

Blockchain is the first version of a Distributed Ledger Technology (DLT). DLT enables the creation and maintenance of a ledger of transactions, like that used in modern-day accounting. The technology adds trust to the ledger enforcing the following rules:

1. There is only one version of the ledger that exists in an unlimited number of locations
2. Everyone has read access to the ledger
3. Transactions recorded on the ledger cannot be altered
4. All assets can be spent only once by the owner of an asset at a given time
5. Only the owner of the asset can spend it.

Metaverse:

Metaverse is not Web 3, but it provides a unique user experience. This will enable the creation of Web 3 businesses in the Metaverse, but many automated Web 3 businesses would function outside of the metaverse. Examples of Metaverse-based Web 3 businesses include Metaverse call centers and Bank branch operations.

Standard Bank and Web 3

With this context, DLT can be used in a positive way to build a Web 3 economic environment where trust is king. Regulations predominantly serve to protect individuals from malicious actors

within the ecosystem. By integrating these regulations into the automated economic framework of Web 3, the requirements of regulators can be effectively addressed.

At Standard Bank, we are working at all levels with our internal and external business partners, competitor banks, and regulators to anticipate the key features we need to develop to enable our clients to migrate their existing businesses to Web 3. We realize that Web 3 will need to co-exist with the current reality for many years to come. At the same time, we need to create a context where the full potential of Web 3 can be realized. We firmly believe Web 3 will be the economy of the future.

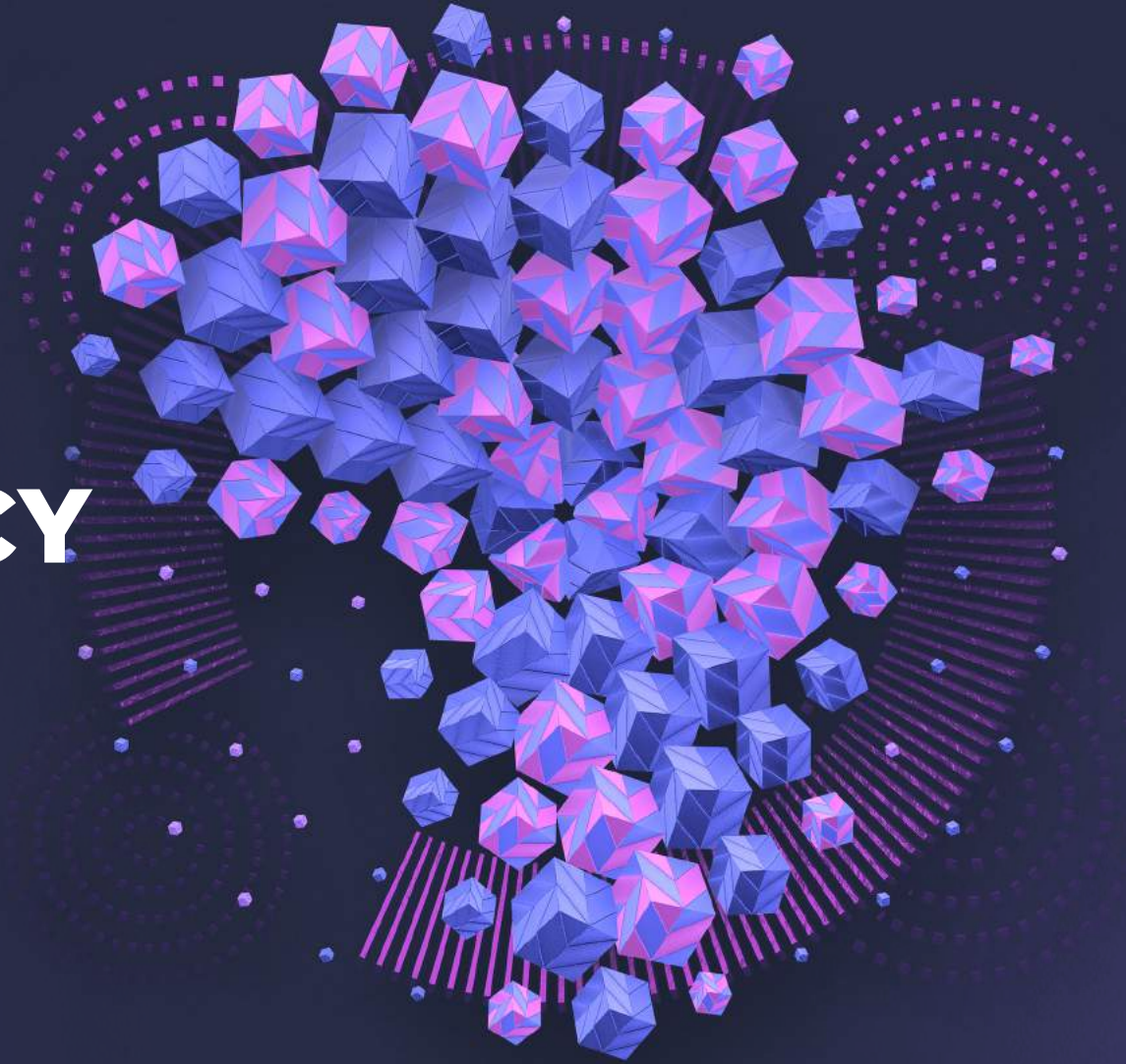


Gideon Rossouw

Business Enablement Lead, Standard Bank Group

07

CRYPTOCURRENCY REGULATIONS IN AFRICA



Cryptocurrency Regulations in Africa

REGULATORY OVERVIEW

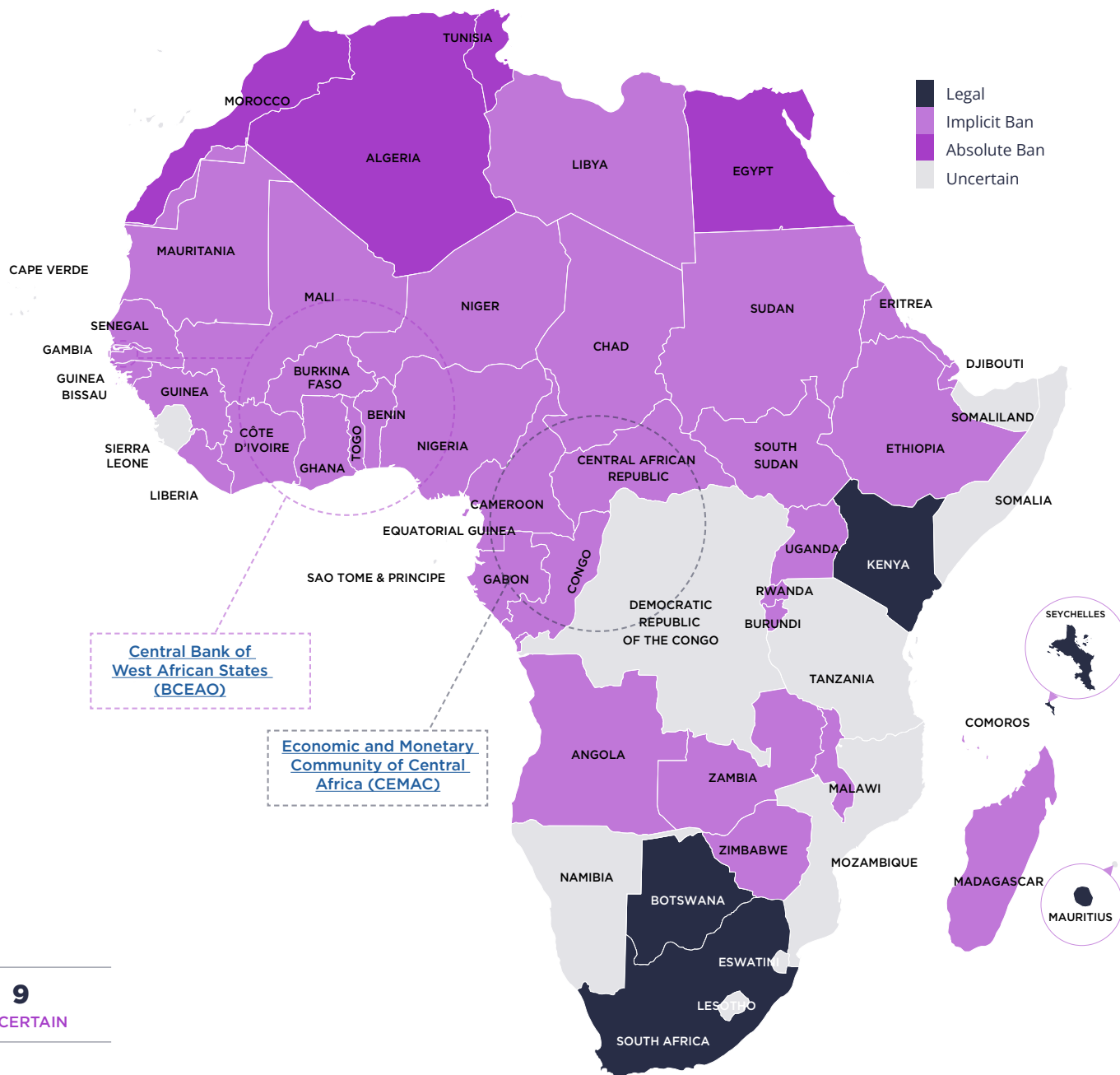
In a regulatory quagmire of apprehension and ambivalence, frontrunner countries like South Africa and Mauritius have demonstrated how a progressive stance toward cryptocurrency can be beneficial. This is the type of regulatory approach that inspires others to follow suit.

This section provides an overview of some of the most regulatory progressive African jurisdictions. We consider the regulators' initial stance on the technology versus the current stance, what the market's response to regulations has been, and the country's Central Bank Digital Currency stance/developments. Finally, we conclude each section with an outlook for the future of regulations in the jurisdiction.

CRYPTOCURRENCY REGULATIONS

The current regulatory stance of the 54 countries in Africa:

5	36	4	9
LEGAL	IMPLICIT BAN	ABSOLUTE BAN	UNCERTAIN



Cryptocurrency Regulations in Africa

The African continent has seen a number of developments in the last year regarding the progression and clarity of cryptocurrency regulations. Year-on-year, the number of countries where the regulatory status of cryptocurrencies is classified as “uncertain” has dropped from 17 to 9 in the current edition. Although the number of countries that fall into the “implicit ban” category has grown from 27 to 36. We saw no change in the number of countries in the Absolute Ban category.

The results suggest that the regulatory approaches of African governments towards cryptocurrencies are increasingly becoming clearer in most cases. There has been more communication from officials and subsequent media coverage of those announcements than we have seen in the past. And, as detailed in the profiles that follow, there are a number of countries and governments on the path to joining the likes of South Africa, Kenya, Seychelles, Mauritius, Botswana, and Eswatini in having shown positive progress surrounding the issue of regulations.

However, there is still room for improvement. There are grey areas across the continent resulting from ambiguous - or a complete lack of - communication all-together from certain governments. Naturally, this not only hinders start-ups founded by locals within these jurisdictions, but it also impacts foreign investment negatively. The preceding success stories in this Report demonstrate that a country can enable the cryptocurrency and blockchain industry through either a clearly-communicated and consistent regulatory approach (as exemplified by South Africa and Kenya) or, at the very least, a set of guidelines for companies to follow (for example, Seychelles). Other examples include Nigeria, Ghana, and Liberia, each of which have communicated their stance to the market, meaning founders and investors considering these jurisdictions have enough information on hand with which to position and build their businesses.

This section provides an overview of some notable advancements in cryptocurrency regulations in Africa. We consider the regulators’ initial stance on the technology versus the current stance, what the

market’s response has been, and the Central Bank Digital Currency developments. Finally, we conclude each profile with an outlook for the future of regulations in each country.

A. REVISITING LAST YEAR’S COVERAGE

In the 2021 report, South Africa, Nigeria, Mauritius, Kenya, Ghana, and Seychelles were profiled.

In the past year, significant advancements have occurred in each of these countries concerning cryptocurrencies, despite the fact that they have not been recognized as legal tender.

Nigeria

To date, cryptocurrencies are not recognized as legal tender in Nigeria, and [banks are banned](#) from engaging in cryptocurrency transactions. However, cryptocurrencies have not been declared illegal, nor are there any cryptocurrency-specific laws or legislation in Nigeria. As a result, cryptocurrencies are still widely traded in Nigeria across peer-to-peer networks, even as cryptocurrency exchanges are locked out of the banking system.

This market dynamic is likely to change as soon as the Securities and Exchange Commission of Nigeria begins building a [framework](#) for cryptocurrency regulation. The initial result of this process became evident in May 2022, as the Nigerian Securities Exchange Control issued a New Rules on Issuance, Offering Platforms and Custody of Digital Assets [document](#). The document outlines how banks and other financial institutions can use digital assets, and how cryptocurrency service providers operate in the country.

The plan is to formalize the newly released rules in a Finance Bill, which will also lead to more clarity around how cryptocurrencies are taxed in Nigeria (cryptocurrencies are currently [taxed](#) as capital gains, but may be subject to additional taxation schemes as well under [PITA](#)).

Mauritius

Mauritius has not seen the developments other countries have in the last year due to them already having considerably advanced regulations towards cryptocurrencies. Mauritius is viewed as a leader in cryptocurrency regulations on the African continent, having released its first cryptocurrency license in 2021. In Mauritius, virtual asset providers can obtain an operational license from the Financial Service Commission, while Security Token Offerings (STOs) have a depicted [framework](#) to follow.

The country has continued to set an example as it progresses in its endeavours relating to cryptocurrency laws and regulations to benefit its economy.

Kenya

In November of 2022, the Kenyan Capital Markets Law was [amended](#), resulting in people who own or deal in cryptocurrencies needing to provide Kenya’s Capital Markets Authority with information on their activities for tax purposes. This marked the first step towards Kenyan authorities implementing financial regulations in the local cryptocurrency market, and for the first time, the regulations provide Kenyans with clarity as to the tax liabilities they might encounter when investing in cryptocurrencies.

Although not fully implemented at the time of writing, the bill will classify digital currencies as Securities. It will require a centralised electronic register of transactions of digital currencies to be kept and maintained. The bill covers both cryptocurrency mining and trading activities.

Most importantly, consumer protection elements are to be implemented via the bill. These elements will dictate; how cryptocurrencies are promoted in Kenya, measures that will [“protect investors from financial loss arising from the failure of a licensed broker or dealer”](#), and guarantees regarding privacy.

The amended bill is a sign of the progressive steps Kenyan authorities continue to take toward cryptocurrencies.

Ghana

December 2022 saw the Bank of Ghana [announce](#) that it will begin to develop a framework for the regulation of the digital asset industry. This marks a key development in a country where residents were [warned](#) to avoid all cryptocurrency transactions as recently as 2022.

The Bank of Ghana engaged in the study and monitoring of cryptocurrency and its associated technologies and models, such as blockchain, decentralised finance, and stablecoins. The Bank is also reviewing global market developments and regulatory standards and is setting up various regulatory bodies that will play a role in crafting the country's cryptocurrency regulations as well as implementing them.

Despite this [process](#) being underway, cryptocurrencies are not categorised as currency but rather as Digital Assets. There is no indication as to when the framework will be complete.

Seychelles

In the 2021 Report, it was reported that the Financial Services Authority (FSA) and the Ministry of Finance were collaborating to determine whether to regulate cryptocurrency businesses. At the time, no specific regulations for cryptocurrencies or cryptocurrency-focussed businesses were in place, other than them having to comply with AML and CFT considerations.

Today, the regulation of virtual asset providers and ICOs is relatively friendly, although specific legislation is still [not](#) in place. Exchanges can obtain a cryptocurrency licence in the form of a Forex licence under the provisions of the country's [Securities Act](#).

South Africa

In the 2021 Report, it was concluded that crypto was legal in South Africa, due to a lack of drafting or enforcement of legislation declaring the trading of cryptocurrencies unlawful. At the time of the 2021 Report's publishing, South African legislators had simply expressed an intent to begin regulating crypto in a 'phased and structured manner', with this process having occurred in 2022.

South Africa has taken great strides to accomplish regulatory

oversight and clarity, that will enable crypto and blockchain-based businesses to operate and thrive within its legal jurisdiction, by regulating cryptocurrencies and other forms of crypto and digital assets like other recognised Financial Products.

See the 2022 Profiles section for the in-depth profile on cryptocurrency regulation in South Africa in 2023.

B. 2022 PROFILES

There have not been any substantial developments in terms of regulations in Africa since the 2021 report, at least not to the extent of those mentioned above.

Nevertheless, the following is a summary of the gradual advancements and appreciated regulatory transparency from several countries that have made strides over the past year.

BOTSWANA

1. Is it legal?

Legal

Botswanan Finance Minister Peggy Serame [announced](#) that a bill to regulate trading in cryptocurrencies and digital tokens had been passed in the country early in 2022.

Under the new laws, entities, and people offering cryptocurrencies or digital tokens in Botswana must be licensed and adhere to a list of conditions. License-holders will need to protect users' assets and "[prevent market abuse and provide measures for the acquisition of a beneficial interest in their business](#)." White papers are also required to be gazetted by anyone advertising token offerings.

The principal objective of the bill was to tighten AML measures, according to Serame.

Botswana has not recognized cryptocurrencies as legal tender.

2. Market Overview

a. Market Developments

Due to the fact that cryptocurrencies are now regulated in Botswana, the beginning of 2023 saw a [further clampdown](#) on unregistered service providers in the country. This has been a growing trend since the implementation of the [Virtual Assets Act](#) on February 22, 2022.

b. Central Bank Digital Currency

The Bank of Botswana is [exploring the introduction of a CBDC](#). Central bank spokesperson Seamogano Mosanako said that "*the assessment is looking at the impact of a digital currency on price and financial stability, monetary policy transmission, regulation and oversight of the financial payments system as well as promotion of financial sector development*".

The speed at which the assessment is being done in Botswana is aligned with research being performed by the Bank of International Settlements and the International Monetary Fund.

3. Outlook

Botswana is well on its way to creating a safe and secure environment for cryptocurrency investors. Exchanges have to meet minimum capital requirements to ensure their liquidity remains high and that they service customer withdrawals during market sumps or highly volatile periods.

ANGOLA

1. Is it legal?

Implicit ban (previously Uncertain)

[Angola has warmed to cryptocurrencies](#) and is actively developing legal instruments to regulate cryptocurrencies in the country.

Angolan authorities announced in April 2022 that they were working on [regulations for virtual assets](#). The regulation is expected to cover financial operations that include cryptocurrencies,

stablecoins, and NFTs.

The move to regulate was initiated off the back of the recommendations of the International Finance Action Group and driven by the fact that the National Bank of Angola believes the decentralized finance market is here to stay.

Angola has not recognized cryptocurrencies as legal tender.

2. Market Overview

a. Market developments

There were no apparent, recent market developments to mention for this jurisdiction.

b. Central Bank Digital Currency

Angola is considering launching a [CBDC](#).

3. Outlook

The generally-held view is that, due to the openness of the National Bank of Angola towards cryptocurrencies, companies will soon be offering cryptocurrency services in Angola.

SOUTH AFRICA

1. Is it legal?

Legal (previously Legal)

The regulatory status of cryptocurrencies in South Africa is considered legal because the South African Reserve Bank (SARB) has issued guidance on virtual currencies, indicating that they do not consider them to be illegal.

Additionally, the FSCA, in collaboration with SARB, has published a position paper detailing its recommendations for a regulatory framework for cryptocurrencies. By actively engaging with the crypto sector and providing guidance on its legality, South Africa

demonstrates its intent to create a structured and regulated environment for cryptocurrency usage, allowing individuals and financial institutions to engage in crypto activities, subject to forthcoming regulations.

2. Market Overview

a. Market developments

FSCA SA Ruling

At the crux of South African regulations is the ruling of the FSCA that crypto assets are to be treated as financial products, with the [ruling](#) becoming effective on 19 October 2022.

As such, cryptocurrency, digital assets and related services are now regulated as per Section 1(h) of the [Financial Advisory and Intermediary Services Act](#) (FAIS).

Therefore, all individuals or companies providing advisory and/or other intermediary services relating to cryptocurrency/digital assets [have until 30 November 2023 to apply for a financial service provider license](#) or be registered as a representative of an entity that has obtained or applied for such a license. Any entity assessing such a license in the context of crypto assets is legally termed a CASP (Crypto Asset Service Provider).

The draft for this legislation commenced on 20 November 2020, solidifying South Africa's place as Africa's most progressive and crypto-forward legislator. The implication for typical crypto exchanges or similar businesses (including OTC trading desks) is that most will fall within the required criteria to necessitate obtaining an [ADLA license](#) before 30 November 2023. This is a form of licensing for Authorised Dealers with Limited Authority (specific financial service providers) in the South African legislative jurisdiction that may cost significant fees to acquire in many cases.

Despite this high cost of doing business on SA soil, the tighter legal controls over KYC and AML procedures, as well as taxation of digital assets and their related transactions, will ensure that South African crypto businesses can continue to remain relevant and compliant in some of the most stringent jurisdictions globally for years to

come, even as regulation evolves. Furthermore, the [position paper released by the FSCA](#) highlights CTF (Counter-Terrorism Financing) and other unmonitored cross-border transactions as two areas of priority that will be addressed adequately with all future legislation in this sector. The time frame spanning until end November 2023 will serve as a grace period for any business requiring licenses to provide crypto-related financial services, under the condition that said business has commenced the application process.

Interestingly, the draft legislation being brought into effect within the FAIS, makes provisions to exempt certain so-called 'ecosystem-participants', such as miners, stakers, validators, delegators, nodes and any other entities that engage in activities that aim to secure the underlying decentralized networks of various blockchain protocols.

Within the legislation, digital assets and cryptocurrency are designated a non-Central-Bank-issued, non-exchange-traded, digital unit of value. This has various effects on the specific legal outlook toward crypto in SA, including the clear distinction that no cryptocurrency will be viewed as legal tender. While the SARB has engaged in research, and expressed public interest in, various stablecoin-adjacent technologies like permissioned CBDCs, no currently existing centralized or decentralized form of digital asset will be viewed as such. One thing to note is that regulators within the FSCA referred to digital assets specifically as crypto assets and not cryptocurrencies, to avoid confounding terminology.

b. Central Bank Digital Currency

South Africa has not stated any intent to create a CBDC for now, however SARB conducted a small-scale exploration into CBDCs through the [Project Khokha 2](#) initiative in April 2022.

3. Outlook

As a result of the regulatory clarity imparted by the FSCA's ruling, it is clear that South Africa has adopted a crypto-friendly stance, which welcomes crypto and blockchain-based businesses to establish operations, serve customers and engage in economic activity in the country.

ZAMBIA

1. Is it legal?

Implicit ban (previously Uncertain)

Felix Mutati, Minister of Technology and Science in Zambia, along with the Securities Exchange Commission and the Bank of Zambia, [announced](#) that the country is testing blockchain-based technology to regulate cryptocurrency in the country. This means that cryptocurrency investors and service providers will soon have clarity as to the future path the Zambian government will take towards the industry. Previously, there were no regulations that prohibited the use of cryptocurrencies in the country, however there was no regulatory clarity either.

Zambia has [partnered](#) with [DLTLedgers](#), which will create a blockchain-based system to regulate and monitor cryptocurrency transactions in the country. This system will have several benefits for the Zambian government in that it will assist in protecting citizens from bad actors, make the taxation of cryptocurrencies more effective, and will strengthen the country's AML and counter-financing for terrorism.

Zambia has not recognised cryptocurrencies as legal tender.

2. Market Overview

a. Market developments

There were no apparent, recent market developments to mention for this jurisdiction.

b. Central Bank Digital Currency

Zambia is [currently exploring a CBDC](#) with the aim of cutting transaction costs and boosting participation in the formal financial system. The Bank of Zambia earmarked a possible implementation of its CBDC in the 4th quarter of 2022 but missed the deadline.

3. Outlook

Zambia has stated its goal to become a technological hub in Africa

and sees cryptocurrencies as playing a role as it builds out the sector. Minister Mutati said in February 2023 that *"through digital payment platforms, people will become much more included in digital finance services; hence, cryptocurrency will be a driver for financial inclusion and a change maker for Zambia's economy."*

NAMIBIA

1. Is it legal?

Uncertain

Namibia has been classified as "Uncertain" as it finds itself between having previously [banned](#) the banking sector from providing services to cryptocurrency exchanges to [allowing cryptocurrency payments](#) in the country.

The bank of Namibia announced in September 2022 that it has included "virtual assets and virtual asset service providers under its Fintech Innovations Regulatory [Framework](#) in a phased approach, through its [innovation hub](#)."

A key element of the announcement pointed to the fact that retailers and dealers may accept cryptocurrency as payment as long as they are "willing to participate in such an exchange or trade". However, cryptocurrencies are still not recognized as legal tender.

This is a major departure from the Bank of Namibia's previous stance, which was that it did not recognize, endorse, or suggest the ownership, usage, and exchange of cryptocurrencies for individuals, in the not-so-distant past.

2. Market Overview

The Bank of Namibia has created a regulatory sandbox to consider the amendment of laws pertaining to Virtual Assets and Virtual Asset Providers in its jurisdiction. Changes to current laws and regulations will happen in a gradual manner through the Bank's Innovation Hub.

a. Market developments

There are already tangible results from the process, as the [first](#) Bitcoin ATM went live in a Windhoek mall in 2022, operating in compliance with the Namibian Financial Intelligence Centre. As users of the service convert their Namibian Dollars to Bitcoin and Ethereum (and back), they will "essentially self-bank," [according to a representative](#) of Crypto Kiosk Investment, Aminah Nauyoma-Ndeulita.

b. Central Bank Digital Currency

The Bank of Namibia is planning to launch its own [CBDC](#). The BoN governor, Johannes Gawaxab, said that *"If CBDCs are explored and implemented with due care and caution, they could hold immense potential benefit for a more stable, more widely available, and less expensive means of payment than private forms of digital money"*.

3. Outlook

Off the back of the major developments concerning cryptocurrencies in Namibia, namely the progress around regulations, the fact cryptocurrencies can be used as a form of payment, and the development of its CBDC, Namibia is poised for growth in the crypto asset industry.

TAX

SOUTH AFRICA

Although South African tax legislation does not contain bespoke rules for the taxation of crypto assets, the definition of “financial instruments” under the Income Tax Act 58 of 1962 (ITA) includes crypto assets. As such, crypto assets are not treated as currency but rather as an asset subject to tax in terms of the general South African income tax principles. It follows that any provisions in the ITA that apply to “financial instruments,” such as equity shares or unit trusts, will also apply to crypto assets. A crypto asset may also include other non-currency assets such as non-fungible tokens, security tokens, and utility tokens.

Profits on crypto asset transactions will be treated either as capital or as revenue transactions, depending on the taxpayer's intention. For example, the trading of crypto assets as part of a scheme of profit-making will be taxed on revenue account however if a long-term holding view is applied, a capital position could be argued. It is important to note that any assessed losses incurred by individuals, taxed at the highest marginal rate, will be ringfenced, meaning that such losses may only be set off against income derived from crypto trading in future years of assessment. The tax treatment of other types of transactions, such as mining, staking, or pooling of crypto assets, will similarly be determined with reference to the aforementioned capital/revenue and general income tax principles.

It is likely that providers of services in relation to crypto assets will be required to submit third-party data to the South African Revenue Service (SARS), similar to the way in which financial institutions are required to. This would make these transactions more transparent and easier for SARS to enforce tax compliance. To the extent that the service provider in respect of crypto assets is a financial institution that currently has third-party reporting obligations (e.g. a bank), the crypto transactions are required to be reported to SARS.

In terms of the Value-Added Tax Act 89 of 1991, the issue,

acquisition, collection, buying or selling or transfer of ownership of any cryptocurrency, is deemed to be financial services, which is exempt from VAT, unless the services are supplied to a non-resident, in which case these services may be zero-rated.

Fees and commissions payable in respect of cryptocurrency transactions are generally subject to VAT at the rate of 15% but may be zero-rated if supplied to a non-resident.

MAURITIUS

Mauritius does not have specific tax legislation governing cryptocurrencies. It is therefore envisaged that the existing domestic tax rules will apply as contained in Section 51 of the Mauritian Income Tax Act 1995 (“MITA”). Similarly, expenditure incurred in relation to this income will be deductible for corporate tax purposes in terms of section 57 of the MITA.

The table below provides the prevailing tax rates applicable to individuals. Resident individuals are taxed on their worldwide income on a remittance basis, while non-resident individuals are taxed only on their Mauritian-sourced income.

	RATE OF INCOME TAX
An individual having an annual net income -	
(a) Not exceeding MUR 700,000	10%
(b) Exceeding MUR 700,000 but not exceeding MUR 975,000	12.5%
(c) Exceeding MUR 975,000	15%

NIGERIA

Currently, Nigeria does not have specific tax legislation governing cryptocurrencies. Taxation of cryptocurrencies is thus governed by the existing domestic tax legislation. The government has announced that it intends to introduce new laws under the Finance Bill 2022. The proposals include plans to tax cryptocurrencies, capital gains from digital assets like lottery, gaming (sports betting), and cable undertakings. The Bill is yet to be assented by the president.

KENYA

Kenya does not have a specific tax legislation for cryptocurrencies. Taxation of cryptocurrencies is thus governed by the existing domestic tax legislation.

Income Tax - According to the Income Tax Act, Cap 470, all Kenya resident persons must account for tax on income earned in or derived from Kenya. This means that any profits and gains from trading or investing in cryptocurrency must be reported as part of the gross income for the year of income that the gains are realized and be taxed at the rate of 30% for resident players in the crypto business. Costs/expenses incurred in respect of trading or investing in cryptocurrency are allowable as a tax deduction.

Digital Services Tax (DST) - The Finance Act 2020 introduced DST payable by a non-resident person without a permanent establishment in Kenya whose income is derived from or accrues in Kenya through a digital marketplace.

A digital marketplace is defined as an online platform that enables users to sell goods or provide services, goods, or other property to other users and digital marketplace provider means a person who provides a platform that enables the direct interaction between buyers and sellers through a digital marketplace, website or other online applications.

Based on these provisions, the online platform provided for purposes of selling/buying cryptocurrency may qualify as a digital marketplace, and the platform providers of the online platforms may fall within the definition of a digital marketplace provider and may be subject to DST.

In the case of a digital marketplace provider, the commission or fee paid (not the value of the transaction) for the use of the platform is the income that is subject to DST.

The DST Regulations provide the parameters for determining the income that is derived from Kenya and, therefore, subject to DST. The DST rate is 1.5% of fees earned and is due at the time of the transfer of the payment for the service to the platform provider.

Crypto platform providers not having a permanent establishment in Kenya are required to register, file and pay DST on a monthly basis on fees/commissions earned on all Kenyan-derived transactions by the twentieth day of the month following the end of the month that the digital service was offered.

Value Added Tax (VAT) - VAT is imposed on supplies made over a digital Marketplace. Digital marketplace is defined as 'online platform which enables users to sell goods or provide services.'

The annual turnover threshold of KES 5m (approx. USD 41,600) for VAT registration does not apply to suppliers of imported digital services/supplies. This means that all digital suppliers will be required to register for and account for Digital Services VAT regardless of their annual turnover. The applicable VAT rate is 16% of the fee/commission earned.

A crypto platform provider without a permanent establishment in Kenya will be required to register, file and pay Digital Services VAT on a monthly basis on fees/commissions earned on all Kenyan-derived transactions by the twentieth day of the month following the end of the month that the digital service was offered.

GHANA

Ghana does not have specific tax legislation governing

cryptocurrencies. It is therefore envisaged that the existing domestic tax rules will apply as contained in the Income Tax Act 2015 ("Act 896"). Act 896 provides that resident companies and non-residents with a permanent establishment ("PE") in Ghana are taxed on their worldwide income at a rate of 25%. Similarly, expenses incurred in the production of income are tax deductible.

The table below indicates the annual income tax bands and rates generally applicable to the chargeable income of resident individuals for 2022:

CUMULATIVE INCOME (GHS)	CHARGEABLE INCOME (GHS)	RATE	TAX PAYABLE
4 380	4 380	0%	0
5700	1 320	5%	66
7 260	1 560	10%	156
43 260	36 000	17.5%	6 300
240 000	196 740	25%	49 185
Exceeding 240 000		30%	

Please note, this column does not constitute tax advice. It is recommended that independent tax advice is sought for all tax related matters.

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A NEW WAY TO PROVIDE UNIVERSAL ACCESS TO DIGITAL ASSETS

Currently, about 114 countries globally are evaluating whether to launch a central bank digital currency (CBDC). While some countries, including China and Nigeria, have launched their CBDC, most others are still in a pilot phase or, like South Africa, have conducted a feasibility study. Despite it being early days, three key challenges in targeting a market estimated at \$30 trillion per year have become clear.

First, for a CBDC to be used as legal tender, we must ensure that everyone can access and use it. More than half the world's population does not own a smartphone and have thus far been excluded from blockchain and digital assets. Second, if we want users to trust the new payment instrument, we must protect their privacy while at the same time ensuring compliance with know-your-customer and anti-money-laundering regulations. And, third, we must ensure a good user experience or a CBDC will simply not be adopted.

Just tackling the first challenge is a tall order since there isn't even a way for users without smartphones or computers to access a blockchain-based CBDC. Tackling the privacy problem is no less daunting, given blockchain's reliance on transparency. But the benefits of doing so will exceed far beyond the CBDC use case and apply to all digital assets. None of this will matter, though, if we do not address user experience first, as the lackluster uptake of CBDC in Nigeria and the Eastern Caribbean has shown.

Universal Access and Privacy, Two Sides of the Same Coin

The University of Cape Town (UCT) was recently named one of ten Algorand Centres of Excellence and received a generous grant from the Algorand Foundation for our work on CBDCs and privacy. For years our group has been focusing on turning research into practical innovation and in particular, our work on privacy has

proven fruitful. In October 2021, we started Nautilus, a privacy-as-a-service startup that combines blockchain and trusted execution environments to create a new kind of digital asset wallet.

The first product we launched is a digital asset wallet for people without smartphones. It is based on the idea that even if you don't own a smartphone, you are likely to know someone who does. Think about a spaza shop owner or a taxi operator. They handle cash on a daily basis and are likely to have a smartphone. This makes them ideal bridges between their community and digital assets. Once a user registers, the wallet creates a private key just like any other wallet, but the big difference is that the Nautilus wallet processes all data in a trusted execution environment. User data is encrypted both in transit and at rest, and not even Nautilus has access to it. Because we use a TEE, our users can audit the code that handles their private keys, giving them the security of self-custody without limitations and at greatly reduced risks.

Our system design also makes it possible to provide new usability features that can drastically improve the user experience. For example, the Nautilus Wallet allows users to search for a payment recipient using their phone number or to create recurring payments. The TEE design makes it possible to balance privacy and auditability and restrict who can access personal information and what kind of personal information can be accessed. Since not even Nautilus can overwrite these restrictions without our users noticing it, we can provide users a level of privacy that, while not as good as cash, is far superior to existing digital payment channels like EFTs.

Africa as a Laboratory for the Future

Challenges that exist everywhere in the world are often pronounced in Africa. While this often makes it difficult for African startups, it also means that Africa can serve as a laboratory for

the future where the solutions we find in the African context can scale to the global level. The wallet has an integration with both Algorand and XRP and is currently being used in two national CBDC pilots. We believe that guaranteeing universal access while maintaining users' privacy is key to ensure widespread adoption of a retail central bank digital currency.

To sign up for an early demo of the Nautilus platform, go to <https://nautilus.io>



Co-Pierre Georg

Director, UCT-Algorand Financial Innovation Hub & CTO, Nautilus

ADAPTING TO CHANGE: HOW THE PROFESSIONAL SERVICES SECTOR CAN NAVIGATE THE DIGITAL ASSET LANDSCAPE

As the digital asset economy experiences unprecedented growth, the professional services sector must navigate unique challenges to meet consumer demands for trust and transparency. Blockchain technology presents new opportunities for third-party assurance, but auditors must adopt innovative technologies and best practices to ensure the highest levels of confidence in digital assets. This article explores the critical role auditors play in the African blockchain ecosystem and examines solutions such as TrustReserve's Real-Time Reserves, powered by Moore Johannesburg.

The African blockchain ecosystem is undergoing rapid expansion, with trust and transparency becoming increasingly vital. The professional services sector needs to begin to adapt to the evolving landscape of digital assets and user expectations, and a unified approach is essential for establishing industry standards that enable consumers to trust their service providers. TrustReserve, powered by Moore Johannesburg, is a pioneer of this drive.

Emerging Challenges

Public blockchains and digital assets have transformed the concepts of trust and transparency, introducing new hurdles and requirements for third-party assurance. Traditional audit methods often struggle to meet consumer demands for more frequent, accessible, and reliable transparency and verification while adhering to strict technical and professional standards. Auditors must comprehend blockchain-specific controls and risks, understand underlying technologies, and devise appropriate solutions for the industry.

Blockchain Technology's Potential

Blockchain technology provides tamper resistance, decentralized

trust, and auditability. However, public blockchains may not always achieve the trust levels associated with traditional financial products. To overcome these challenges, auditors need to embrace cutting-edge technologies that facilitate comprehensive audit evidence collection, more frequent reporting, and broader report availability. This can be achieved by promoting trust, privacy, and transparency through strong digital hygiene and leveraging cryptographic techniques inherent to blockchains. Solutions such as Moore Johannesburg's TrustReserve, which is able to provide Proof of Reserves and Real-Time Reserves, can further enhance consumer trust in digital assets, supplemented by beneficial regulatory frameworks.

Best Practices and Innovations

Independent auditors lend credibility to reported liabilities and reserve assets, adhering to professional conduct codes, auditing standards and being subject to peer review, professional licensing, and regulatory oversight.

Auditors must establish best practices to instill customer confidence, stimulate adoption, and unlock the potential of blockchain technology. As the digital assets industry matures, auditing cryptocurrency transactions and balances should be a standard aspect of auditors' expertise. TrustReserve, powered by Moore Johannesburg, offers a suite of technology solutions that harness the power of blockchain, including Proof of Reserves, Real-Time Reserves, and Oracle Services.

TrustReserve: Real-Time Reserves

Powered by Moore Johannesburg, TrustReserve's Real-Time Reserves is one of the services on our innovative platform that offers continuous evidence collection and high-frequency reporting

in accordance with international standards. It fosters trust and transparency in stablecoins, asset-backed tokens, and digital asset exchange-traded products by bridging the gap between on-chain liabilities and off-chain assets. With unmatched attest reporting frequency, it bolsters user confidence, provides real-time insights for management, and complies with international and domestic regulatory requirements.

In the digital asset economy, auditors play a vital role in promoting trust and assurance through evaluations and reporting. By adapting to the changing landscape and leveraging innovative technologies, auditors can enhance transparency and foster confidence in the cryptocurrency market. TrustReserve's technology solutions, such as Real-Time Reserves, exemplify Moore Johannesburg's commitment to addressing the growing need for improved trust and transparency in the digital asset ecosystem.

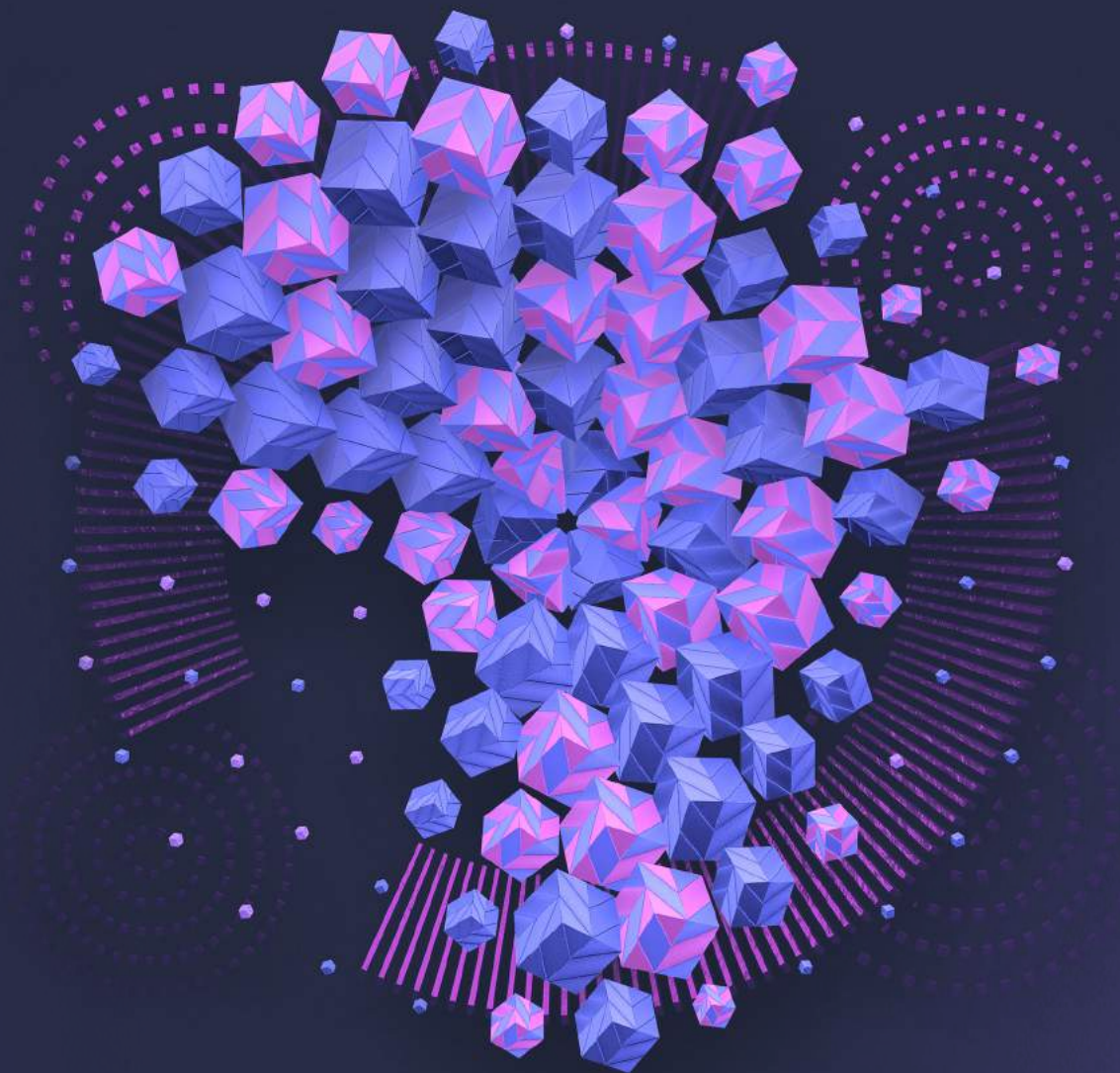


Dale Russell

Director & Head of Blockchain and Digital Assets Moore Johannesburg

08

CONCLUSION



Conclusion

This brings us to the end of our annual exploration into Africa's promising, untapped, and noteworthy world of blockchain activities. Since the last edition of our report, it has become even more evident that Africa continues to establish itself as a destination where promising blockchain startups can prosper.

The continental market as a whole has shed some of its cautions. It is actively moving the crypto debate forward in a way that is becoming ever more conducive to startups experimenting and building useful products using blockchain technology. From an investor perspective, the quality of the products being developed, along with the size of the market and a steadily lengthening track record of successful execution by budding entrepreneurs, is helping to instill confidence in funders to invest in blockchain startups in Africa.

The blockchain industry experienced significant global growth in 2022, with blockchain-specific funding metrics increasing across the board. Despite facing economic and socio-political challenges, the industry broke records yet again, with a total of 1,828 deals, representing an almost 30% increase from the previous year. This growth is especially impressive considering it surpassed the previous all-time high by 4%.

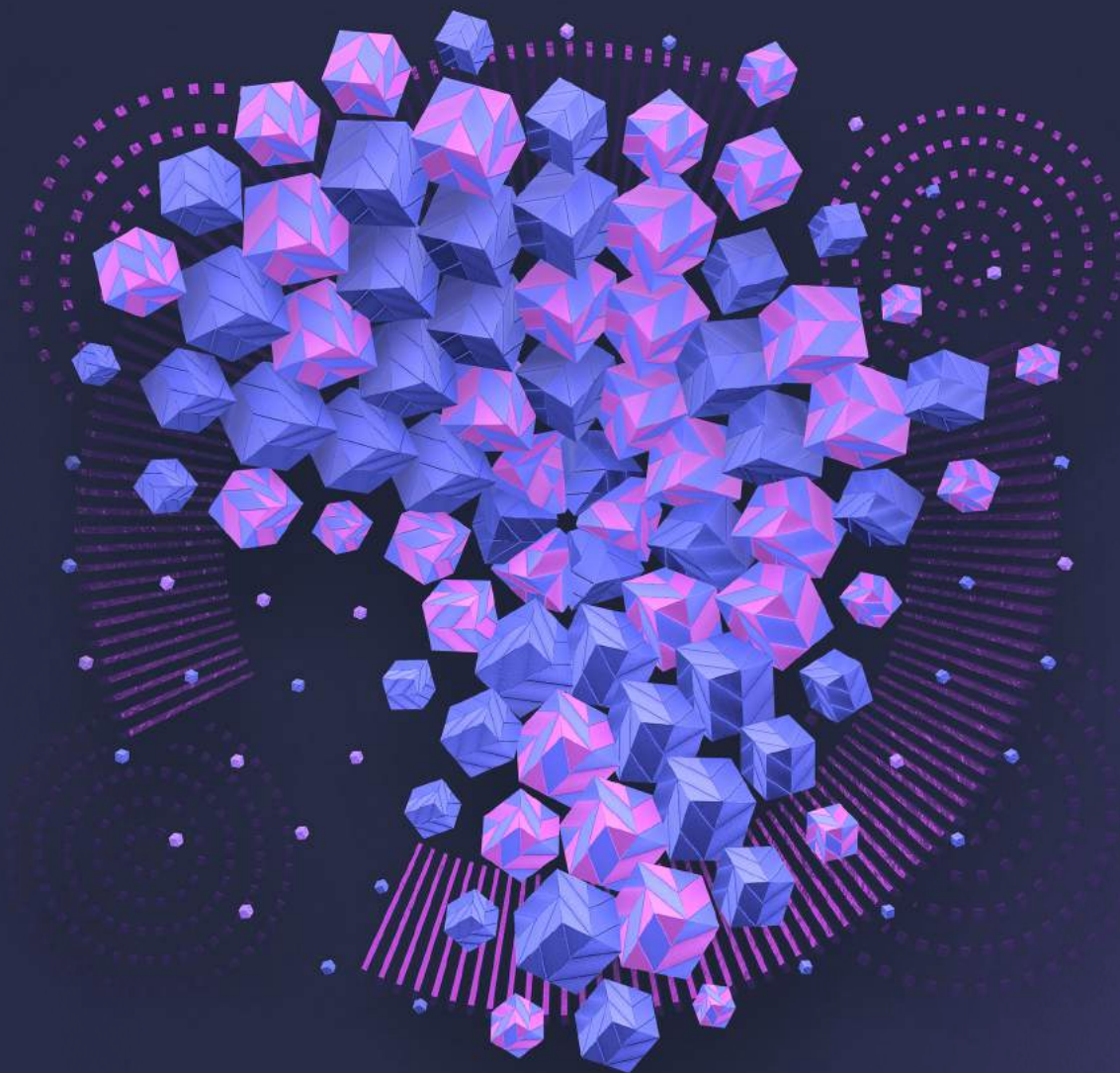
Among all global regions, Africa emerged as one of the most dynamic, with blockchain companies achieving the highest growth rate. In 2022 alone, African blockchain startups raised an impressive \$474 million, marking a staggering 429% year-on-year increase in funding. This growth enabled Africa to gain ground on some of the more established regions and gather momentum consistently.

Blockchain funding in Africa accounted for an all-time high of a 15% share of total sector-agnostic venture funding, highlighting the continent's emergence as a promising investment destination for blockchain-based startups. The African blockchain funding landscape is promising, with 27 companies collectively raising \$551 million between the beginning of 2022 and the end of Q1 2023 across 32 deals.

With the potential to disrupt traditional industries and create entirely new business models, the African blockchain industry is understandably experiencing rapid growth, with investors readily embracing it. The data indicates that the transformative potential of this technology for business operations is undeniable. As investors continue to express confidence in the blockchain industry's sustainability and prospects, we can anticipate further growth and investment in Africa in the coming years.

09

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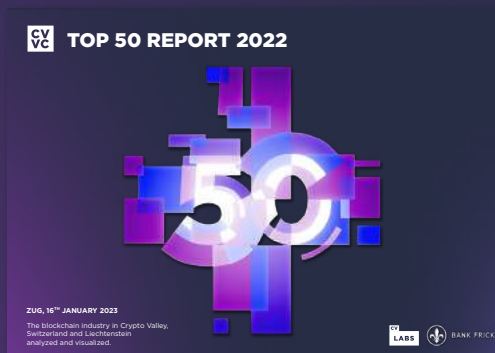
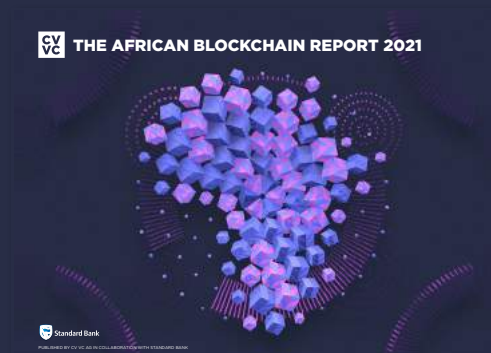
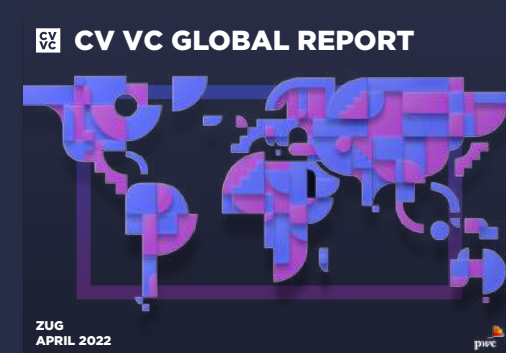
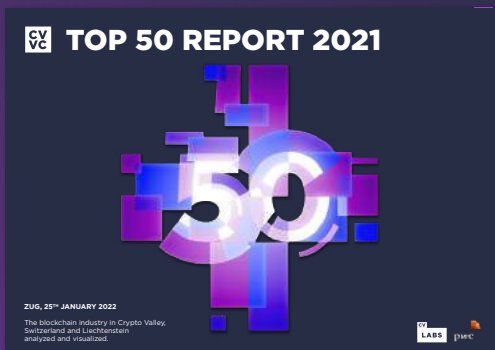
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As a private venture capital company, CV VC offers seed funding and an acceleration program to global tech teams in exchange for equity or tokens. In addition, CV VC provides blockchain industry consulting and advisory to corporates and governments. As amid the founding fathers of Crypto Valley which is the birthplace of Ethereum and home to the largest herd of blockchain unicorns, CV VC & CV Labs is the hub of Crypto Valleys' acumen and a global force driving the dynamics of Web3.

CV VC has already invested in over fifty blockchain startups and is renowned for its entrepreneurial spirit, epitomized by its founders and board members who represent its ethos - Founders for Founders. These include industrialist Alex Wassmer, entrepreneurs Mathias Ruch and Florian Kohler, investment banker Olaf Hannemann, financial expert Ruth Salvisberg, former Finnish Minister Anne Berner, and Philipp Rösler, ex-Vice-Chancellor of Germany & Managing Director of World Economic Forum.



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