



Market Review | Kenya

April, 2020

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Country Overview



Population & Economy

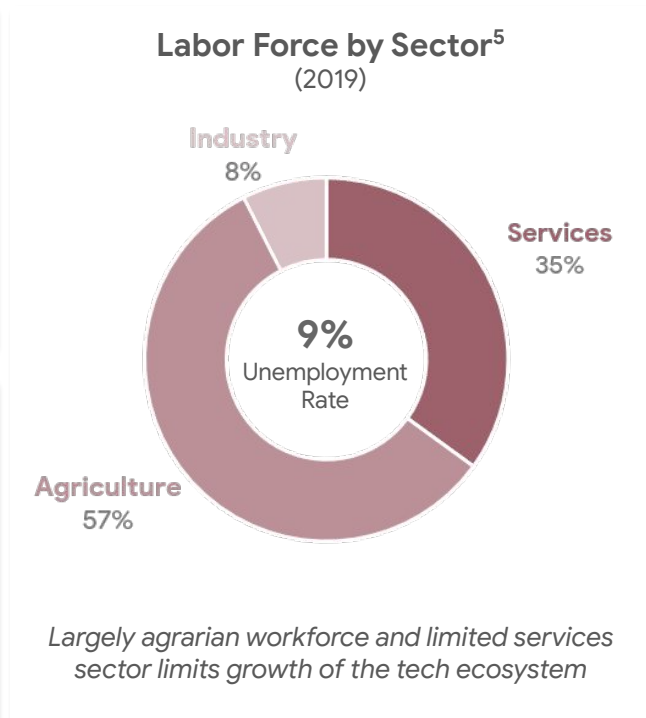
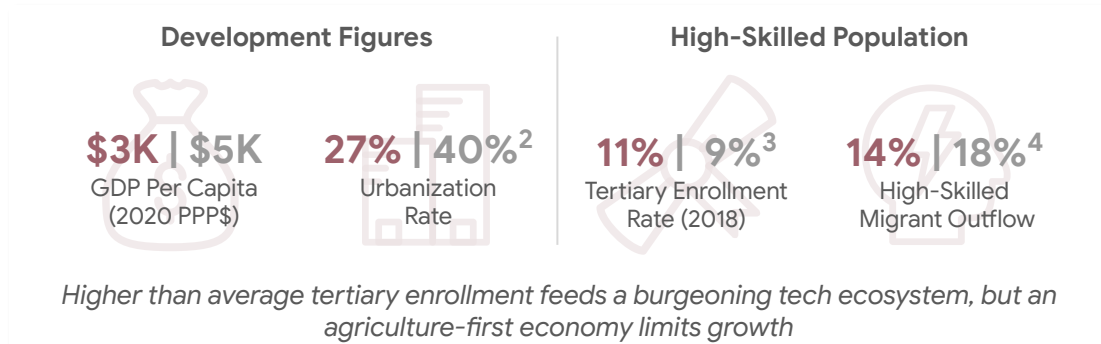
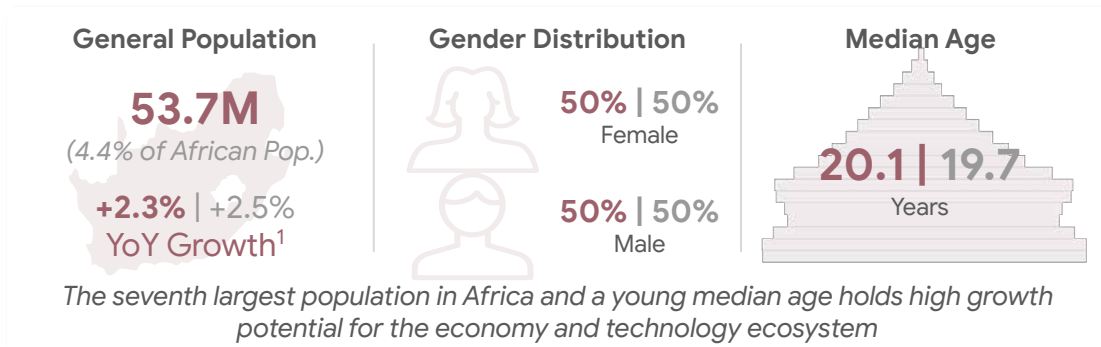


Technology Infrastructure



Government Involvement

Kenya's large and young population holds potential for ecosystem growth



A lack of high-speed internet challenges tech ecosystem growth

Infrastructure Indicators

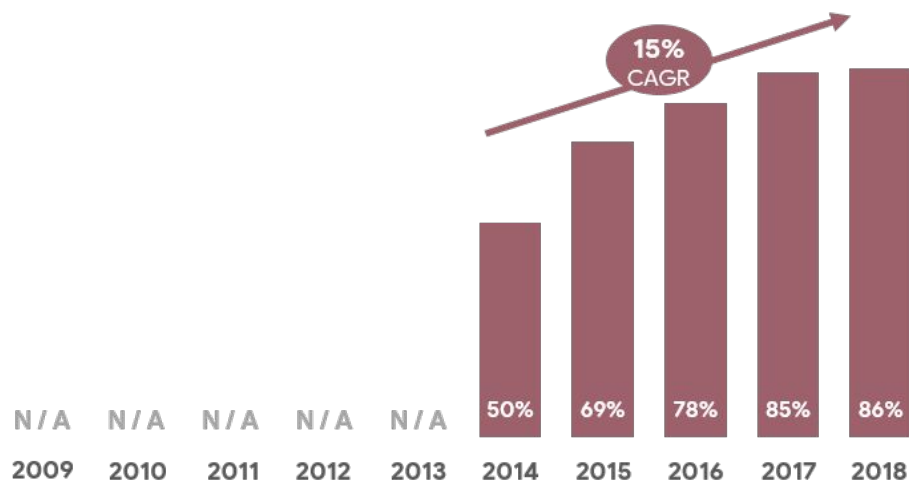
Above / Below Global Average | Global Average

20% 59%	96 69
Internet Penetration (FY20E)	Mobile Phone Subscriptions per 100 People
21.3 30.5	\$2.73 \$8.53
Mobile Internet Download Speed (Mbps)	Cost of 1GB Mobile Internet (PPP\$)
18.1 74.3	\$54 \$50
Fixed Internet Download Speed (Mbps)	Monthly Cost of 5GB Fixed Internet (PPP\$)
N/A¹ 1,620	64% 89%
Servers shipped (FY20E)	Population with Access to Official Electric Grid

Infrastructure-related constraints around connectivity and electricity slow growth

Population Covered by at Least 3G (2018)

(90% global average)



3G coverage in Kenya has witnessed strong growth over the last 5 years to approach the global average

Kenyan government enacted policies to attract foreign investment and improve digital literacy, but launched few efforts to incent startup creation

Notable Government Policies



2019 data protection law requires **GDPR compliance across the private sector**, a shift that is expected to encourage foreign tech investment



Ajira program **encourages Kenyans to access digital job opportunities** and the 2019 Finance Act provides a 3-year tax holiday to participants

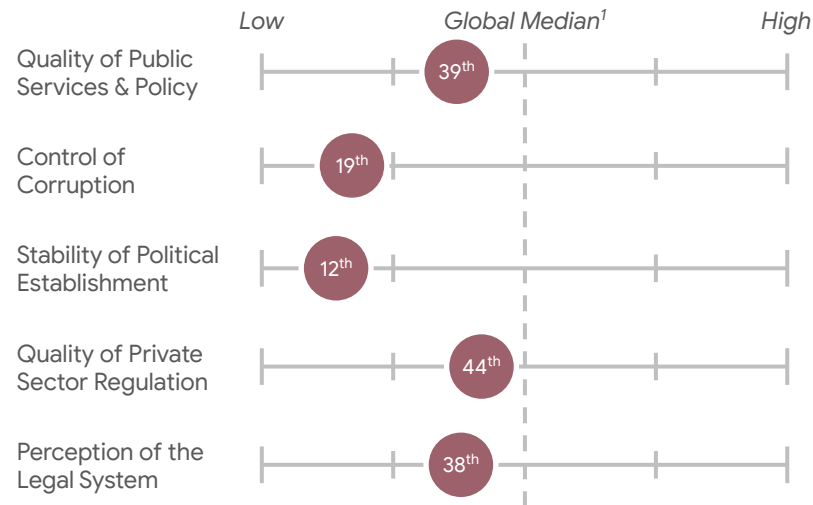


Through the 2015 Enterprise Kenya initiative, the government has pledged to **directly invest in incubators, tech hubs, and local startups**



2016 Digital Literacy Program has delivered over 1M devices to public schools to **encourage digital literacy among underprivileged youth**

Governance Indicator Percentiles



*"Kenya has an easier process to do business than in other African countries, which is key to all of our success."
-Investor, Global*



Developer Population



Demographics



Education



Employment



Experience

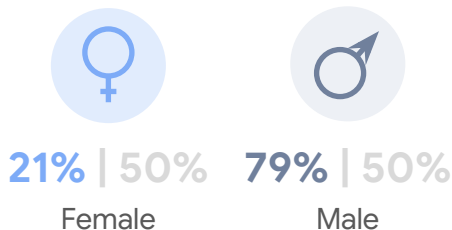
The developer population skews young; nearly 9 in 10 coders are currently below the age of 35

Developer Population (FY20E)

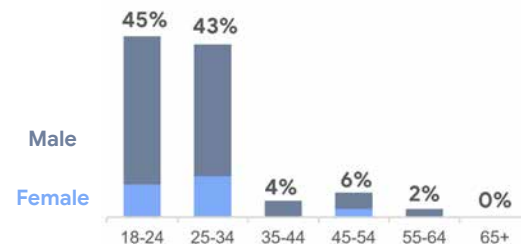
60,000
0.75%
of Non-Agricultural Labor Force

Gender Breakdown^{1,2}

Developer Pop | Kenya General Pop



Age Distribution^{1,2}



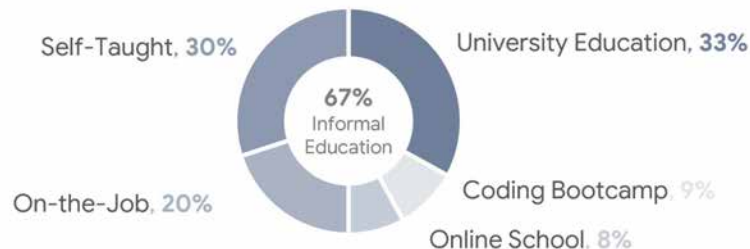
Top Locations for Developers

- Nairobi County** (Nairobi)
- Coast Province** (Mombasa)
- Central Region** (Nenyuki)

Activities¹

34%
Of all coders
code as a hobby
in their free time

Technical Education



Informally trained coders are more likely to be male, slightly older, and proficient in Java

FORMAL EDUCATION

University³

33%¹

Gender²



75% 25%

Top Industries

- 1 Comms., Media, Technology
- 2 Cons. Products & Services
- 3 Financial Services

Median Age

18-24

Avg. Monthly Salary

\$1,300

Full-Time

N/A

INFORMAL EDUCATION

Bootcamp, online courses, on-the-job, self-taught

67%¹

Gender²



81% 19%

Top Industries

- 1 Comms., Media, Technology
- 2 Cons. Products & Services
- 3 Financial Services

Median Age

25-34

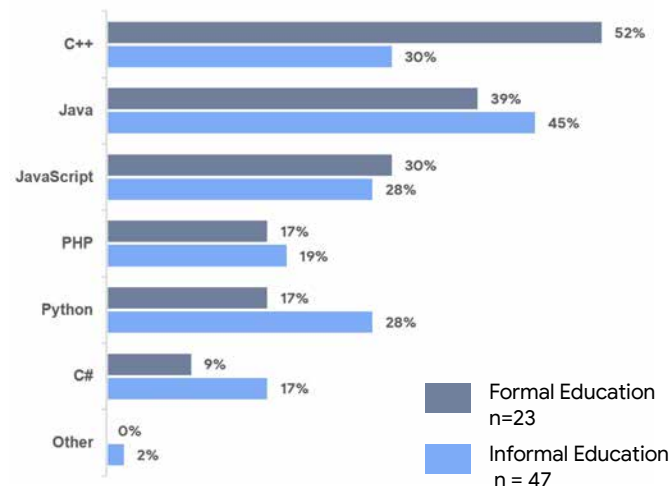
Avg. Monthly Salary

\$1,500

Full-Time

9%

LANGUAGE PROFICIENCY by EDUCATION



“Kenya, similar to Nigeria and South Africa, is a long-term growth market, and when compared to other countries, it has more experienced software developers.”

-Business Lead, Cross-Continent Educator

Question: How did you primarily learn to program or code?



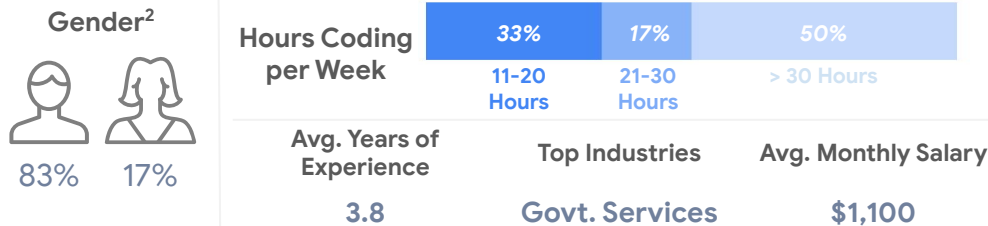
Sources: Accenture Surveys, Accenture Analysis

Notes: Source data directional due to small N (N/A used if fidelity of data is too low), Survey was partially distributed by GDGs; 1. n=74; 2. Does not include those who refrain from answering, 3. Only universities with ICT programs are included in this analysis

Kenyan tech ecosystem predominantly part-time and freelance coders

FULL-TIME ROLE

14%¹

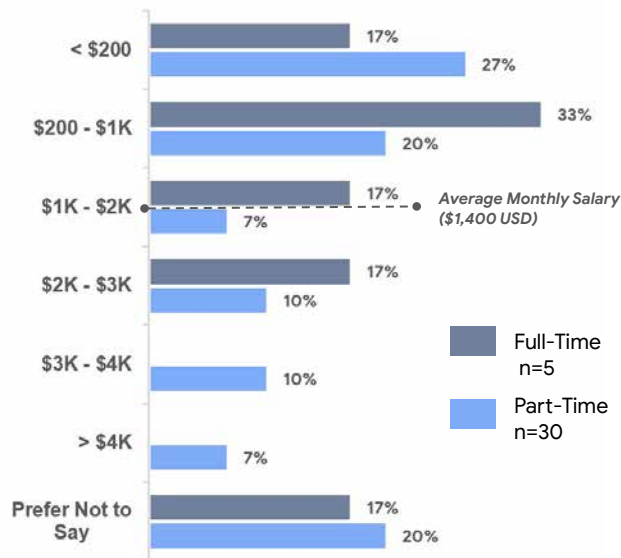


PART-TIME or FREELANCE ROLE

83%¹



MONTHLY BASE SALARY FROM CODING



Question: How do you spend your time coding or programming?

Females better represented among junior coders

JUNIOR DEVELOPER

Less than 6 years of coding experience

74%¹

Gender²



Open Repository Contributions



Once a year
Once every 6 months
Once a month
Once a week
Have never contributed

Top Languages

1. Java
2. JavaScript
3. C++

Top Industry

Comms/Media/Tech

Avg. Monthly Salary

\$1,000

Full Time

6%

SENIOR DEVELOPER

Over 6 years of coding experience

26%¹

Gender²



Open Repository Contributions



Once a year
Once every 6 months
Once a month
Once a week
Have never contributed

Top Languages

1. Java
2. C++
3. Python

Top Industry

Comms/Media/Tech,
Industry

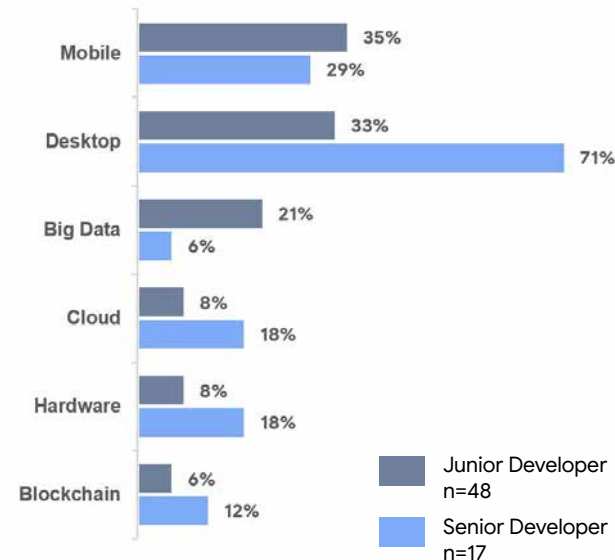
Avg. Monthly Salary

\$2,400

Full Time

6%

DEVELOPER PLATFORMS OF CHOICE



Question: How many years of professional coding or programming experience do you have?



Technology Ecosystem



Innovators (*focus areas*)



Innovators (*fundraising*)



Investors



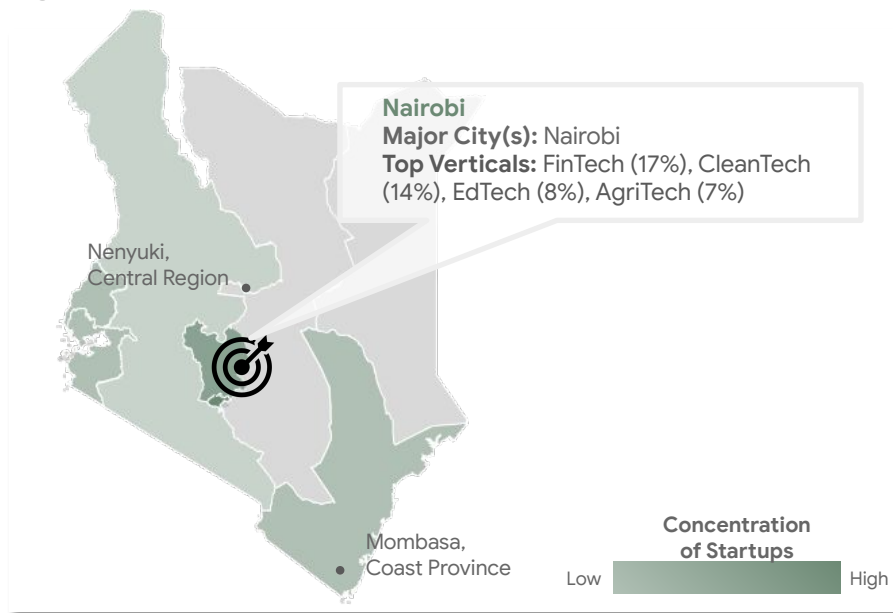
Educators



Enablers



Fintech, cleantech and agritech drive the tech ecosystem; edtech viewed as a growth opportunity by local entrepreneurs



Breakdown by Top Verticals



17%
FinTech



15%
CleanTech



9%
AgriTech



8%
E-Commerce



7%
EdTech



6%
AI, Big Data,
Cloud

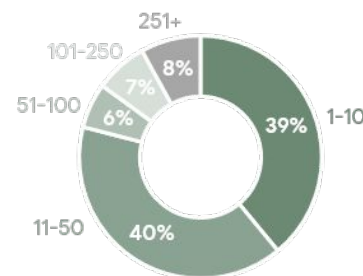


6%
HealthTech /
Biotech



32%
Other

Headcount & Founder Demographics (2020)



30%

Startups with **at least one woman founder**; of which cleantech, fintech & edtech are leading verticals

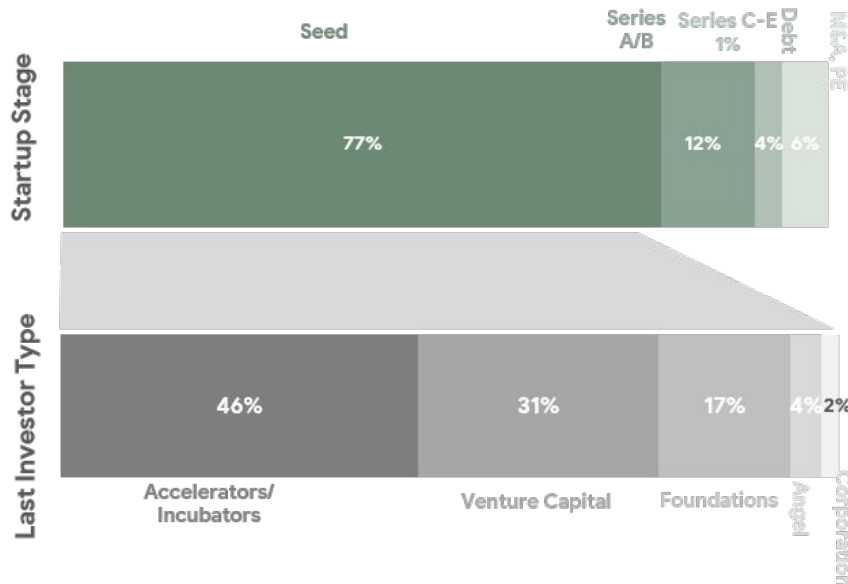
"The Kenyan government has launched programs to improve literacy and is also working with edtech startups focused on providing mobile solutions to accomplish that."

- Enabler, Global



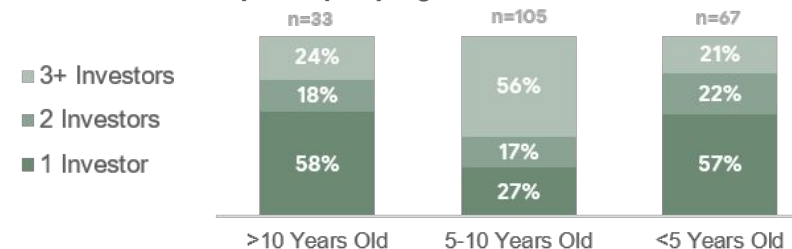
More than 75% of startups are in the seed round of funding and largely depend on accelerators and incubators for funding

Distribution of Startups by Stage (2020)



Approximately 9 in 10 startups are in seed or series A/B rounds indicating an ecosystem primed for growth

Investor Count by Company Age (2020)



Large percentage of recently established startups have 3+ investors, which indicates a maturing ecosystem

Innovator Characteristics

43%

of the startups primarily focus on the B2B market



31%¹ of the startups operating in Kenya are headquartered internationally



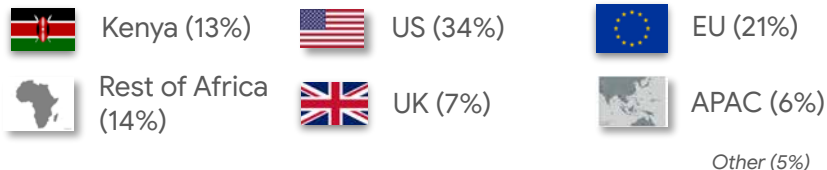
17% of the startups are part of the agriculture, forestry and fishing sector



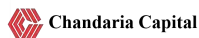
Venture capitalists, particularly American and European firms, play a leading role

Investor Geography

Investors



Leading Kenyan Investors



Chandaria Capital is a VC investing in seed & series A/B rounds. They help secure funding, provide mentoring and marketing/sales support. They invested in Ilara Health, Savannah Brands & Kobo360.



Safaricom runs the Spark Fund to support growth of mobile-tech startups with \$55K - \$200K in venture funding. Portfolio includes mSurvey, Eneza, Lynk.

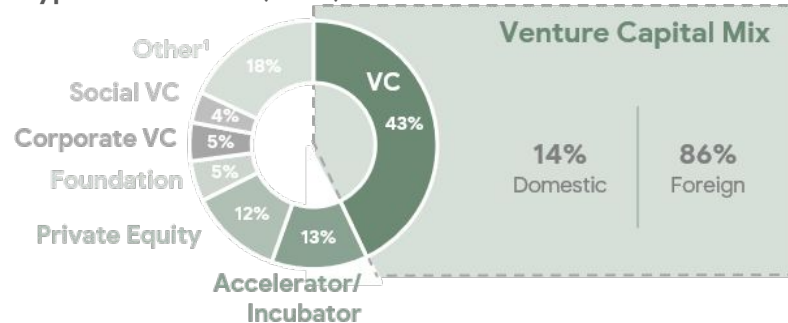


Zephyr Acorn provides VC funding to early stage, high-potential startups in East Africa. Portfolio includes 4G Capital, Asoko Insight, Connect Health, Yum

"Kenya is amongst the top countries in the continent to see private equity investments. The overall investment flow in Kenya has greatly increased in 2019."

- Investor, Lagos

Type of Investors (2020)



Areas of Focus



27% of foreign investors only invest in seed or early stage vs 67% of local investors



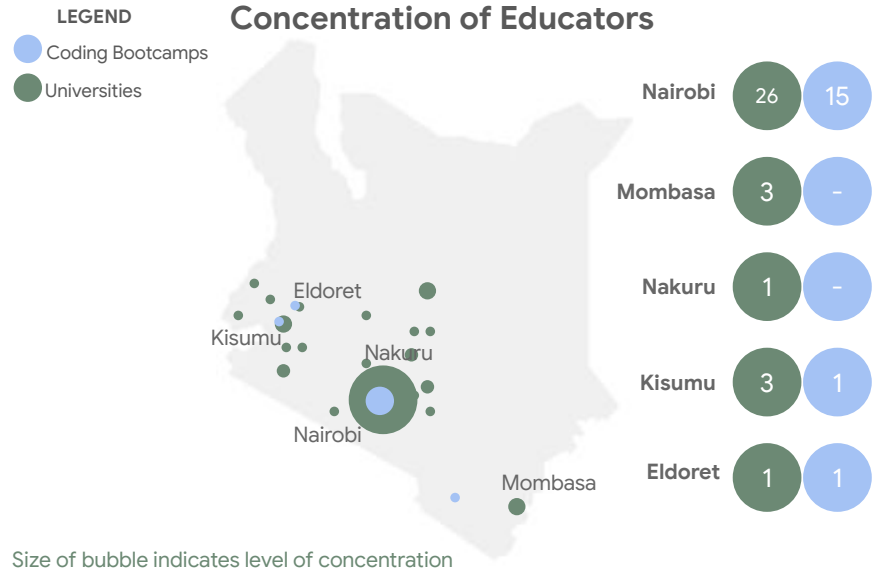
19% of investors active in Kenya solely invest in software



51% of investors active in Kenya invest in fintech startups

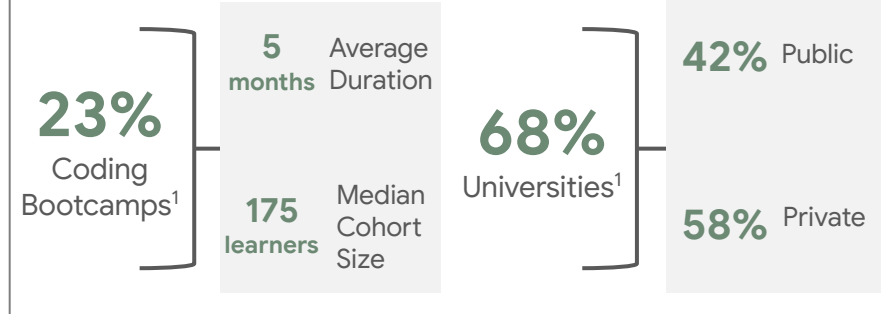


Nairobi is the center of formal and informal coding education with 76% of universities and over 85% of coding bootcamps



"We look at Nairobi as a good place to recruit talent because it has a base of strong universities and we consider it a long-term growth market."
- Entrepreneur/Recruiter, Nairobi

Educator Type Breakdown



Case Study: Strathmore University

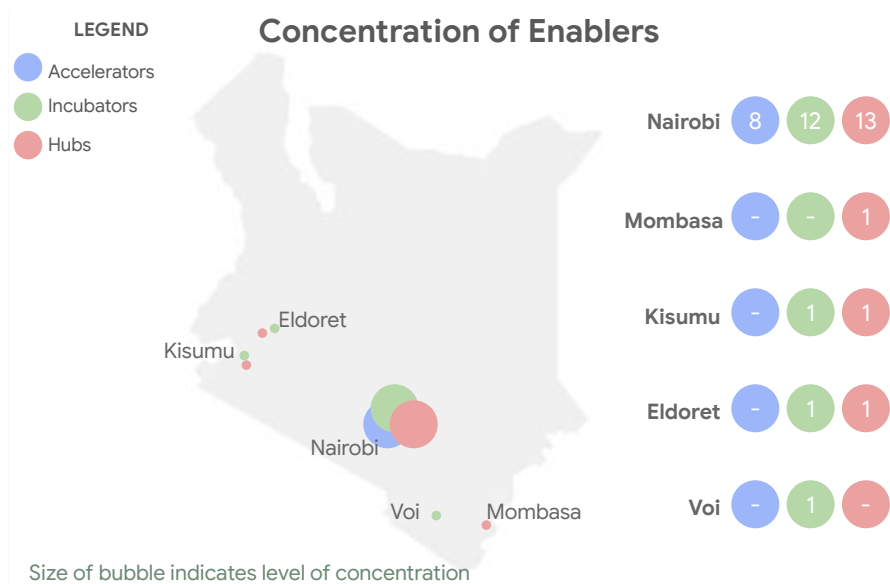
Overview: Uses a triple-helix model, exposing students to academia, industry, and government learnings. Its research centers cover topics across mobile, cybersecurity, entrepreneurship, and more. Includes multiple incubators that **launched 300+ startups**.

Programs (sample):





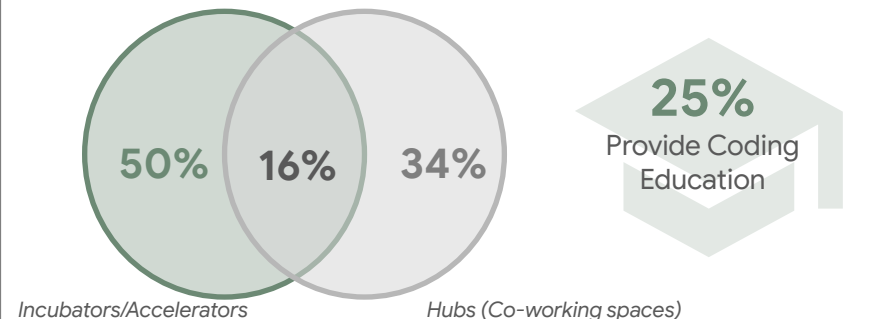
Nairobi is the epicenter for incubators, accelerators, and hubs



"The presence of accelerators and hubs has really taken off in Kenya just as it has in Nigeria. We will start seeing them pop up outside of Nairobi as they continue to expand."

- Investor, Global

Incubators/Accelerators vs Hubs



Case Study: Growth Africa

Overview: A cohort-based accelerator where entrepreneurs sharpen their business acumen through mentorship support, networking opportunities, peer to peer sharing, and access to local and international investors. They have launched **over 220 startups**.

Investor Network (sample):

NOVASTAR⁺
VENTURES

ACUMEN
CHANGING
THE WORLD
TACKLES
POVERTY

AHL VENTURE
PARTNERS

ascent

MERCY
CORPS



Supporting Materials

Glossary

Term	Definition
Countries Analyzed	South Africa, Egypt, Morocco, Nigeria, Kenya, Ghana, Rwanda, Ethiopia, Uganda, Tanzania, Ivory Coast
African Startup	A company that meets the following criteria: <ul style="list-style-type: none"> • In growth stage of funding (e.g., seed round, series A - F) • Technology-focused • Headquartered in Africa or driving the majority of its revenue in Africa
Tech Ecosystem	The network of people, organizations and institutions that enable innovation
Innovator	African startup (see definition above)
Investor	Provides funding in the tech ecosystem (e.g. venture capital, corporate venture capital, angel investors, government funding, private equity)
Educator	Provides technical training or education (e.g. university, bootcamps, online courses, on-the-job training)
Enabler	Provides support in the form of work space, training, education, mentorship or funding (e.g. accelerators, incubators, work hubs)
Professional Developer	An individual that is employed in a job that involves coding and spends 5 or more hours per week coding
Junior Developer	An individual with less than six years of coding experience
Senior Developer	An individual with six or more than six years of coding experience
Formal Education	Universities or secondary schools that provide information communication technology (ICT) curriculum
Informal Education	Bootcamps, online course, self-taught or on-the-job curriculum to teach coding skills
Female Founded Startup	Startup with at least one female founder