# e-Conomy Africa 2020:
## Africa's $180 billion Internet economy future

Executive summary

# Africa's **$180B** Internet economy future
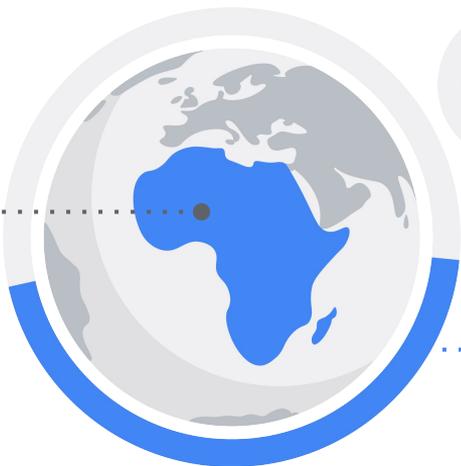
## Growing urban, mobile population

**1.3B**
people in 2019

**2.5B**
people in 2050

### Digital connectivity

**40%**
of population in 2019

**10%** increase leads to **2.5%** increase in GDP per capita

### Urbanization

**45%**
of population will be in cities by 2025

## Expanding tech ecosystem

### Tech talent

**700K**
developers in 2019

**E-commerce and fintech** are key sections driving the digital economy

### Infrastructure investments

Drives increased access to more affordable higher-speed Internet

Source: e-Conomy Africa 2020.

### Pro-innovator regulation

Including startup acts and regional harmonization, such as the African Continental Free Trade Area (AfCFTA)

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# Key takeaways

### Digital consumption growth is fueled by a fast growing urban and mobile population

A growing urban and mobile population brings tremendous potential to the economy. Internet penetration is 40% today and a 10% increase in mobile Internet penetration can increase GDP per capita by 2.5% in Africa, compared with 2% globally. Increasing Internet penetration to 75% has the potential to create 44 million new jobs.

### Tech ecosystem driven by dynamic developer and startup landscape

Tech talent in Africa is at a historical peak and continues to rise annually. There are 690,000 professional developers across Africa with more than 50% concentrated in 5 key African countries: Egypt, Kenya, Morocco, Nigeria, and South Africa. While there are challenges confronting startups in the African ecosystem, there remains an abundance of opportunities and increased venture capital inflow to the continent.

### Internet infrastructure investments are further boosting connectivity

Infrastructure drives increased access to more affordable and higher-speed Internet. Tech companies' investment in subsea and terrestrial fiber-optic infrastructure has led to rapid growth in international Internet capacity. Google's own submarine cable, Equiano, is expected to be completed in 2022.

### Pro-innovator regulation can benefit the African Internet economy

Regulatory inconsistency can hamper market access and limit investment opportunities for startups. Startup acts and regional harmonization are initiatives that are driving mutually beneficial growth. It is important for entrepreneurs, investors, and policy makers to continue dialogue, encouraging environments where digital businesses can thrive.

# Africa's economy has significantly expanded over the past decade



1.7%
EU-28

1.7%
LATAM

4%
Africa
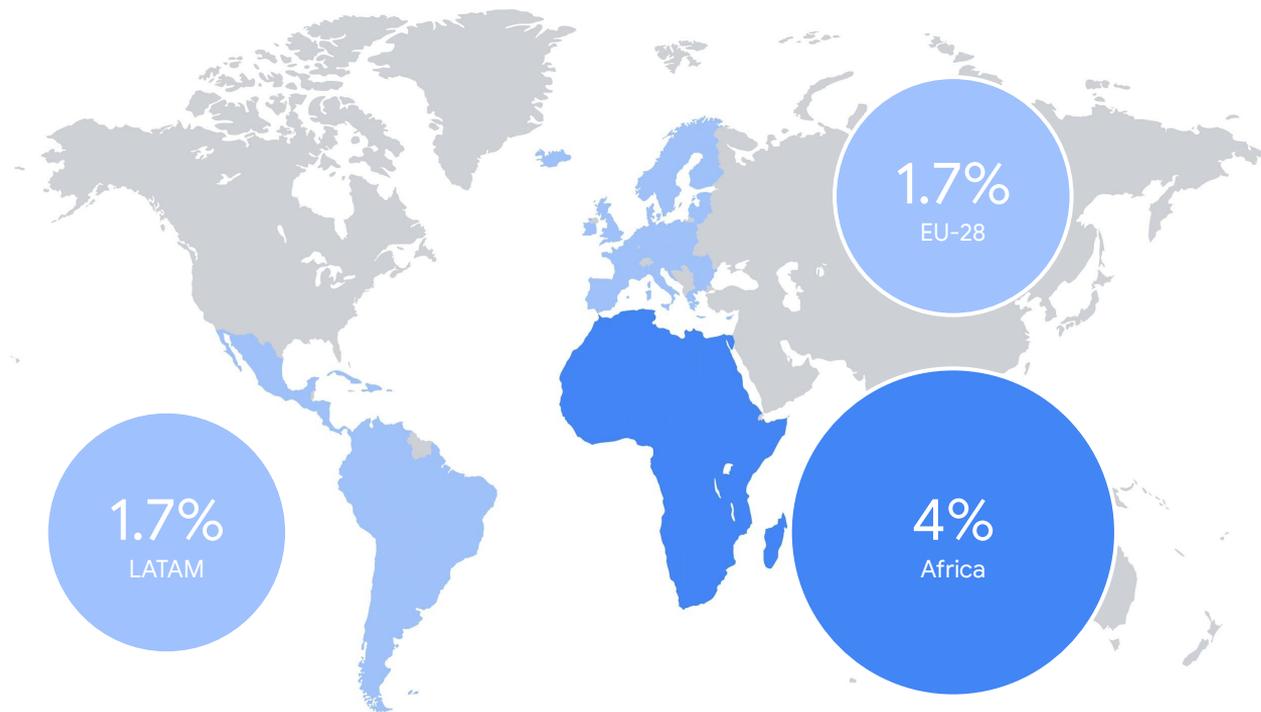
**Key takeaway:** Gross domestic product (GDP) grew by 4% per year between 2010 and 2019, more than twice that of the EU-28 (1.7%) and Latin America (1.7%) over the same period.

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# By 2025, the Internet economy has the potential to contribute $180 billion to Africa's economy growing to $712 billion by 2050

Over the next five years, COVID-19 is expected to delay economic growth both in Africa as well as the rest of the world. However, the resilience of the Internet economy, coupled with private consumption, strong developer talent, public and private investment, investments in digital infrastructure, and new government policies and regulations will continue to drive this growth in Africa.

**2020**
$115B

**2025**
$180B

**2050**
$712B

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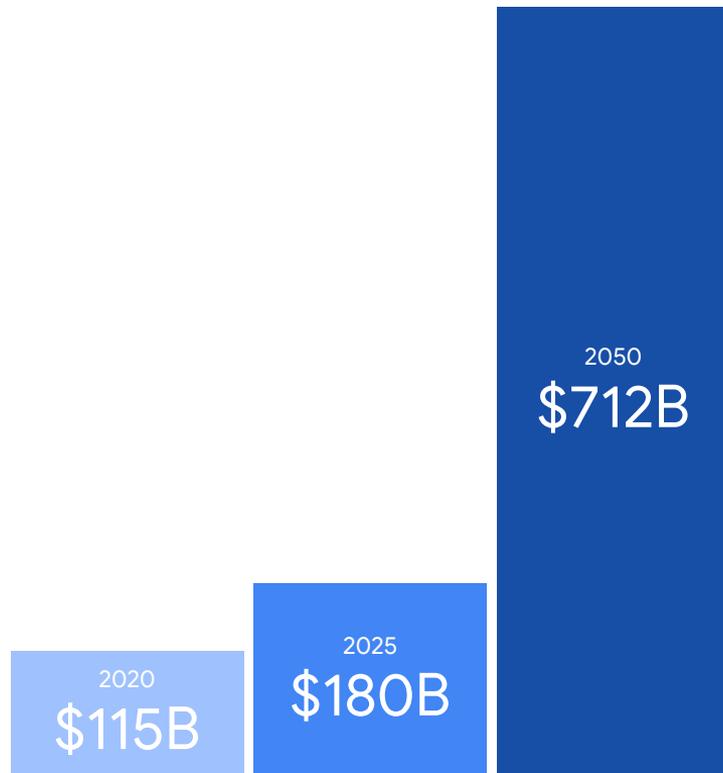
# A variety of sectors are leading the way in Africa's digital transformation

## Fintech

Startups building solutions to support the population that is financially excluded but gaining access to mobile technology. Fintech startups remain the top destination for funding, receiving 54% of all startup investment in 2019.

## e-Commerce

Growth driven by improvement payments landscape, rise in mobile tech, and mobile money tech adoption. In 2019, $134 million in funding was attributed to e-Commerce, indicating both an increase in funding and number of deals.

Health tech

Media and entertainment

e-Mobility

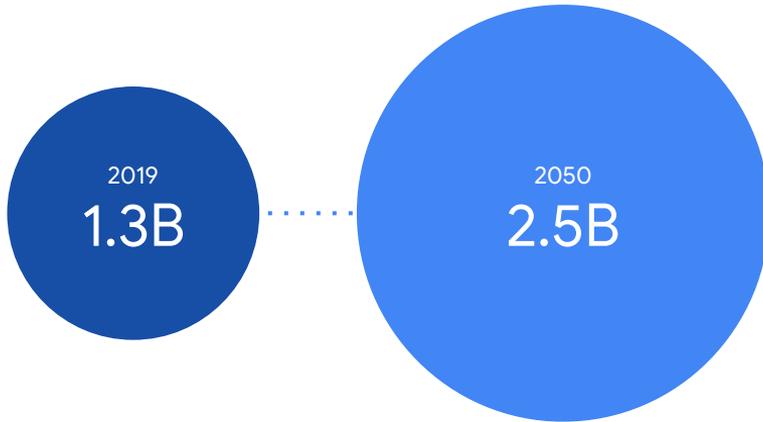B2B logistics

**Key takeaway:** Companies in the Internet economy have generally outperformed other sectors of the economy.

Source: Partech Africa Team. "2019 Africa Tech Venture Capital Report" (Partech Partners, Paris, January 2020).

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# Africa is experiencing rapid population growth and urbanization

2019
**1.3B**

2050
**2.5B**

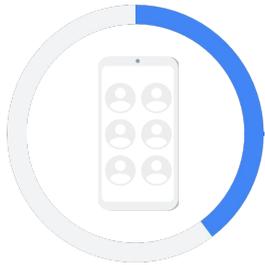**87% population growth in Africa between 2020 and 2050**

## 45%

Urban population expected to grow by 190 million people, leading to 45% of Africans living in a city by 2025

## 79%

Consumers in large urban areas spend 79% more than the national average on goods and services

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# Increase in digital connectivity will directly boost Africa's economic value

## 40%

Number of people with Internet access has grown to 522.8 million, or 40% of the population

## 11%

Over the next decade, the number of Internet users in Africa will grow by 11%, comprising 16% of total global amount
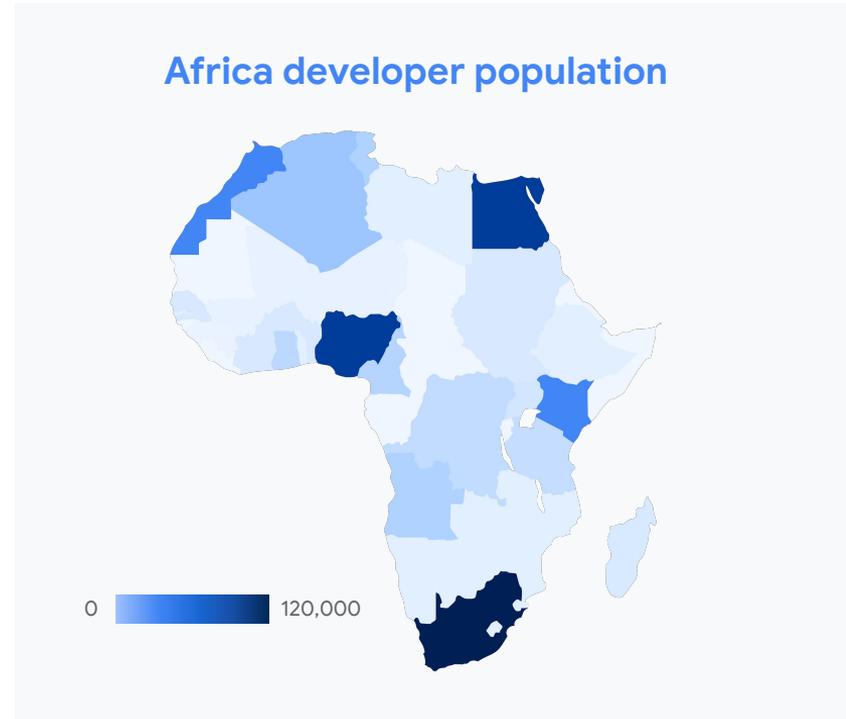
## 2.5% increase in GDP

A 10% increase in mobile Internet penetration increases GDP per capita by 2.5% in Africa, compared with 2% globally

Source: International Telecommunication Union (ITU), "Economic Contribution of Broadband, Digitization, and ICT Regulation: Econometric Modelling for Africa" (research paper, ITU Publications, Geneva, 2019).

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# Tech talent is young and growing fast, with 690,000 professional developers across Africa today

| Country | Professional developers | % total of Africa |
|---|---|---|
| South Africa | 120K | 17% |
| Egypt | 85K | 12% |
| Morocco | 45K | 7% |
| Nigeria | 85K | 12% |
| Kenya | 60K | 9% |
| Ghana | 15K | 2% |
| Rwanda | 5K | 1% |
| Ethiopia | 20K | 3% |
| Tanzania | 15K | 2% |
| Uganda | 10K | 1% |
| Ivory Coast | 10K | 1% |
| Rest of Africa | 220K | 32% |
| **Africa total** | **690K** | **100%** |

**Africa developer population**



0 ▭ 120,000

Source: Google/Accenture, "Africa Technology Ecosystem, Africa," April 2020.

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# Top 2 developer training pathways are through university programs and self-taught

Developers use a mix of both formal and informal education channels to gain skills and access well-paying jobs, and many developers view a career in software development as an avenue for social mobility.

Google aims to train 100,000 developers across Africa in 5 years through Google Developers Training, with the commitment through 2022.

**Developers by education**

University
33%

Self-taught
31%

On-the-job
16%

Online school
10%

Bootcamp
10%

Source: Google/Accenture, "Africa Technology Ecosystem, Africa," April 2020.

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# Women comprise one in five of the total population of developers in Africa

## African and U.S. developer gender distribution

**U.S. junior developers (less than 6 years experience)**

| Male 85% | Female 15% |
| --- | --- |
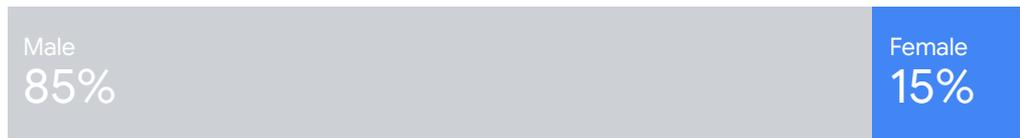
**African developers**

| Male 79% | Female 21% |
| --- | --- |
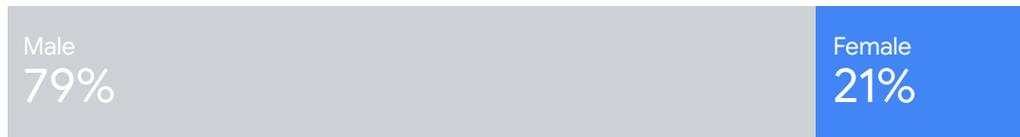
**Leading African educators**

SHE IS THE CODE

Developer & entrepreneurial training to females in Ivory Coast; 1K+ graduates

witU Women In Technology Uganda

Tech & entrepreneurship training for females of all ages across Uganda

**Key takeaway:** While this number is still low, the growth of the ecosystem has begun creating many opportunities for women coders, especially in Egypt, Morocco, and South Africa

Source: Google/Accenture, "Africa Technology Ecosystem, Africa," April 2020.

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# Venture capital investment in Africa reached an all-time high in 2019

## Venture funding in Africa (in U.S.$ M)
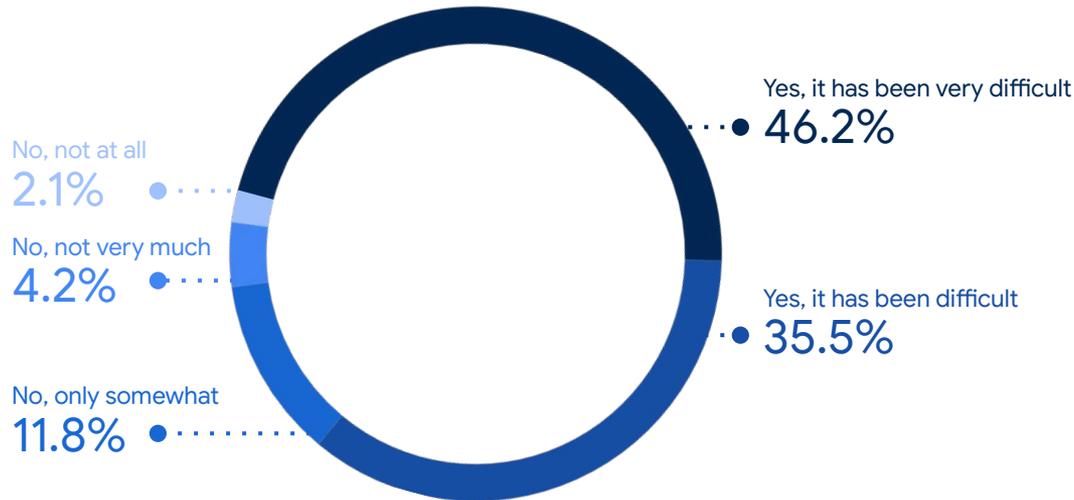


● Funding  ● Deals
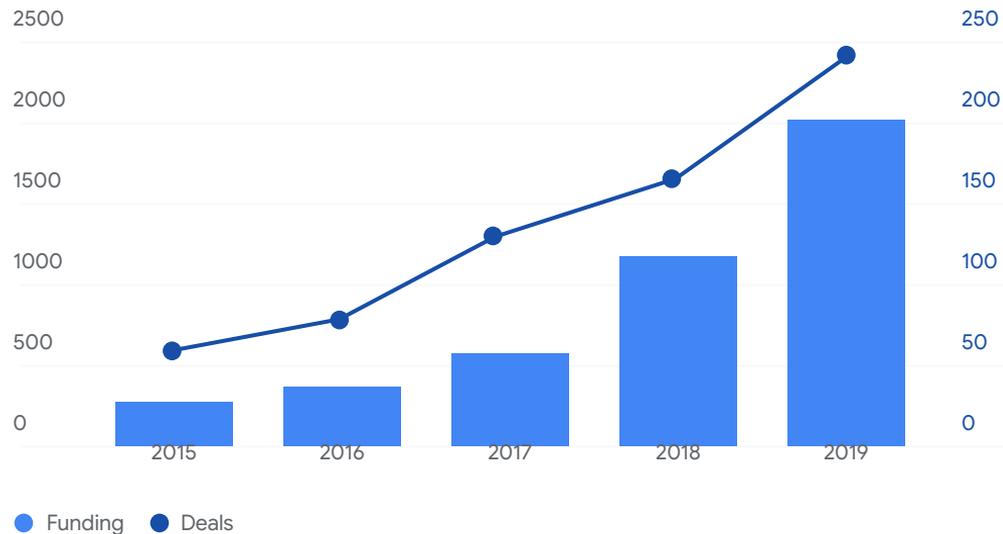
**Key takeaway:** The first half of 2020 closed with $493.5M of total funding.

The full impact of COVID-19 is yet to be realized, and as investors become more risk averse, the landscape will likely shift away from early and seed stage investments towards companies that are more established with clearer paths to profitability.

Source: Partech Africa Team. "2019 Africa Tech Venture Capital Report"
Briter Bridges, "State of Funding in Africa, Quarterly Bulletin".

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# Access to early stage and pre-seed funding is still lacking across most of the continent

**Has it been difficult for your startup to gain access to funding?**

Yes, it has been very difficult
**46.2%**

No, not at all
**2.1%**

No, not very much
**4.2%**

Yes, it has been difficult
**35.5%**

No, only somewhat
**11.8%**

**Key takeaway:** In a 2019 survey, 82% of African startups reported difficulties in accessing funding. Key issues include insufficient seed funding, limited follow-on funding, and a lack of angel investors.
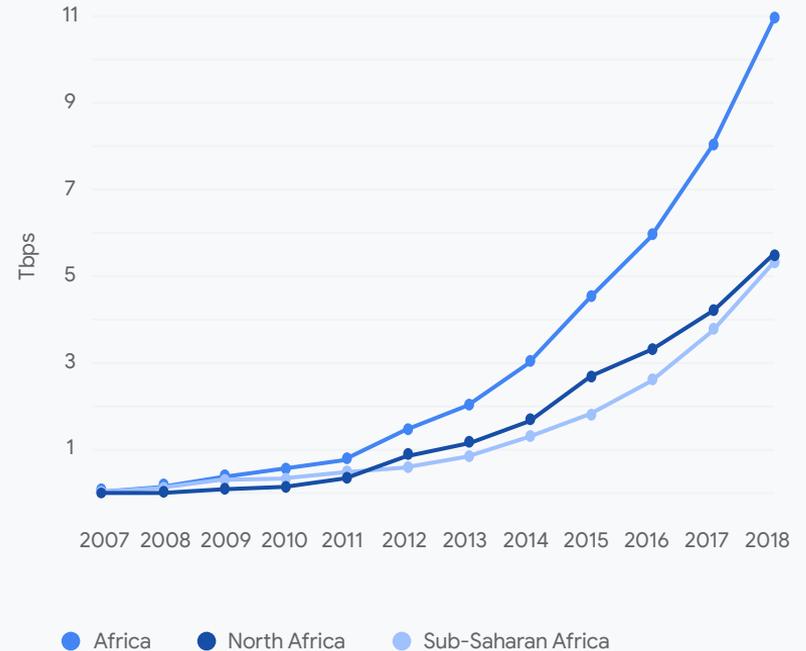
Source: Google/Accenture, "Africa Technology Ecosystem, Africa," April 2020.

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# Ongoing investment in subsea and terrestrial infrastructure will enable increased access to more affordable and higher-speed Internet

Digital infrastructure is the backbone of the Internet economy around the globe and Africa.

International Internet bandwidth has increased by a factor of 10 over the past decade, to 12 terabits per second (Tbps).

## International Internet bandwidth, 2007–2018



Tbps

11
9
7
5
3
1

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

● Africa   ● North Africa   ● Sub-Saharan Africa

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# Technology companies are continuing to improve African connectivity by expanding their undersea cable networks

The first phase of Google's new submarine cable, Equiano, is expected to be completed in 2022, connecting Portugal and South Africa.

The cable is expected to have 20x the capacity of the last cable built to serve the region, allowing for more latency-sensitive products to function and be developed.

Source: Google.



Lisbon, Portugal

Lagos, Nigeria

**Equiano cable route**

Cape Town, South Africa

Branching unit

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# Government support is increasingly crucial to the success of startup ecosystems and developer populations



**Regulatory inconsistency** can complicate or impede market access and limit investment opportunities for startups, impacting startup viability and investment decisions.



Startups in many Africa countries must navigate **complex regulatory environments with multiple regulators and agencies**. As businesses move and grow into new countries and new markets, they need to scan each regulatory framework separately.



Given the technology-related regulatory challenges governments are facing, it is important for **entrepreneurs, investors, and policymakers to continue dialogue,** encouraging environments where digital startups and businesses can thrive.

# Startup acts and regional harmonization are initiatives that are driving mutually beneficial growth

**Startup acts**, such as the Tunisian Startup Act, sends a strong signal that the government recognizes the importance of entrepreneurship and will incentivize it.
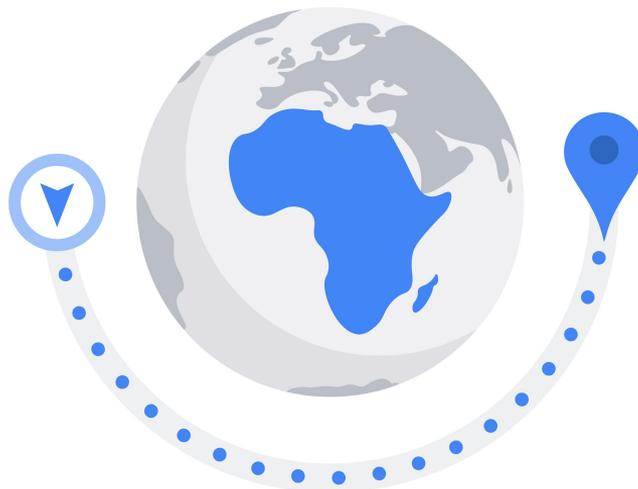
**Regional harmonization**, and infrequent regulatory changes, are key to startup success. The African Continental Free Trade Area (AfCFTA) agreement is one major milestone toward harmonization for digital businesses.

# AfCFTA has the potential to unite a market of 1.3 billion people and a combined GDP of **$2.6 trillion**

The AfCFTA aims to reduce tariffs on 90% of all goods and facilitate free movement of goods, services, capital, and people.

It will enable Africa's regional economic communities to become more integrated and easier to access, including the ability for startups to scale across Africa seamlessly.

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