5G and IoT in an African Context
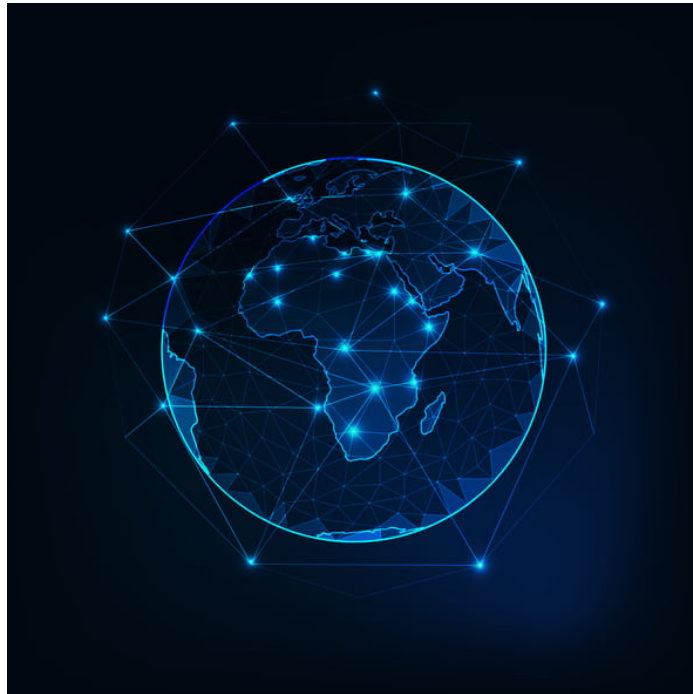
Brought to you by Africa Tech Festival and Omdia

Introduction

Click below for an introduction to the report

Contents

- Business and social drivers towards IoT and 5G

- Mapping the ecosystem for B2B 5G –IoT apps are at the fore

- Enterprise 5G IoT strategies and competitors

About the Researchers:

Connect the dots across the entire tech ecosystem to better predict and shape your business outcomes

Omdia is the new global technology research powerhouse, established in 2019 with the combination of the Informa Tech's research brands (Ovum, Heavy Reading, and Tractica) and the acquired IHS Markit technology research portfolio.

Omdia combines the expertise of more than 400 analysts covering 150 markets and thousands of technology, media, and telecommunications companies, publishing over 3,000 research reports a year, reaching over 14,000 subscribers.

Omdia helps businesses make better technology choices: saving money, saving time and managing their technology risk. For technology vendors and service providers, Omdia drives top and bottom-line growth through improved market strategy, product investments, and go-to-market effectiveness.
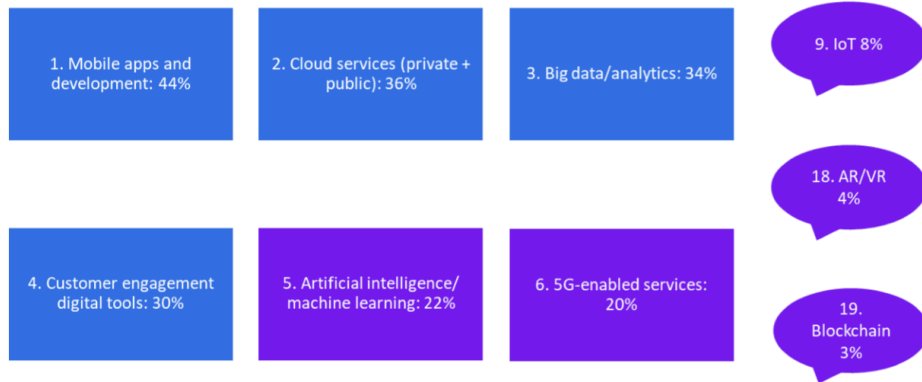

Brought to you by Informa Tech

Digital technologies in demand in Africa now: 5G and IoT not yet priorities

Click below to read more

Digital technologies in demand in Africa now: 5G and IoT not yet priorities

- African businesses are conservative, and in that way are like many businesses globally.
- The priority is squarely on the fundamentals: cloud, mobile, and doing more with data, as well as improving the customer experience.
- 5G and IoT are secondary to these priorities.

Technology investment priorities in the next 12 months (choose top 2)

1. Mobile apps and development: 44%	2. Cloud services (private + public): 36%	3. Big data/analytics: 34%
4. Customer engagement digital tools: 30%	5. Artificial intelligence/ machine learning: 22%	6. 5G-enabled services: 20%

9. IoT 8%

18. AR/VR 4%
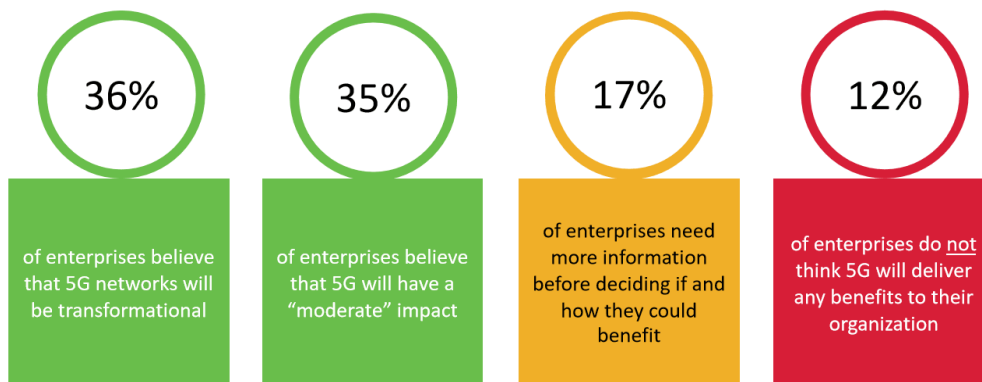
19. Blockchain 3%

Expectations for 5G

Click below to read

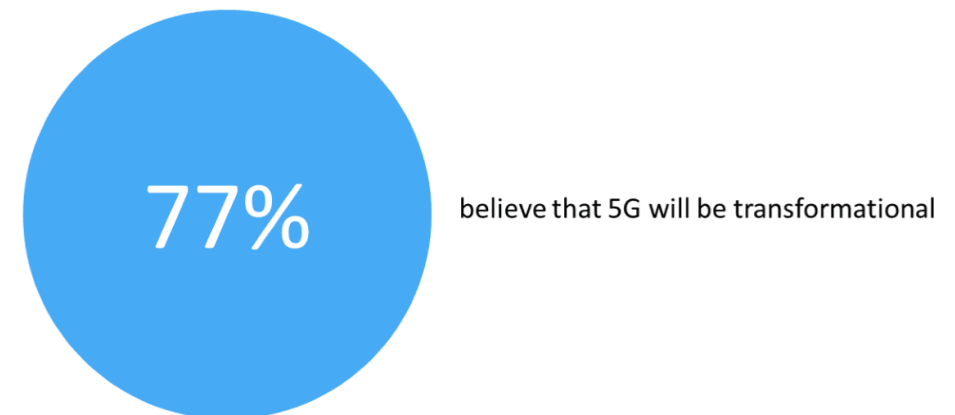# 5G: Global expectations are muted (global findings)

- Globally, about 71% of businesses think 5G will have a moderate or transformational impact.
- It is clear that it will take more time to convince businesses outside of Africa of the transformational potential of 5G, but already we do see the number of 5G enterprise deals and partnerships growing.

How transformational do you consider 5G to be?

36%
of enterprises believe that 5G networks will be transformational

35%
of enterprises believe that 5G will have a "moderate" impact

17%
of enterprises need more information before deciding if and how they could benefit

12%
of enterprises do not think 5G will deliver any benefits to their organization

But Africans are much more positive about 5G's transformative potential

- In sharp contrast, African businesses are big believers in the potential 5G has to radically transform their business operations, products, services, and customer engagement.
- We believe this result showcases a willingness among African organizations to embrace new technologies. Translating this into uptake is the challenge.
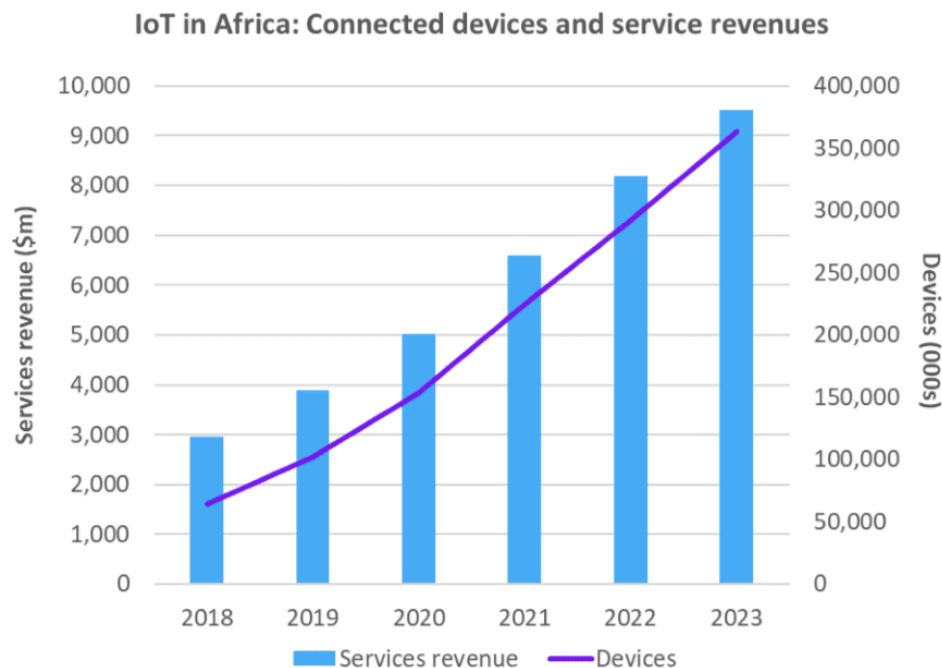
77% believe that 5G will be transformational

IoT in Africa through 2023

Click below to read the overview

African businesses are keen on 5G, but IoT is certainly not one of the applications we anticipate will drive 5G uptake in an African context

In much of the world, 5G is seen as a catalyst for massive machine type communications and an exponential growth in machine-to-machine connectivity.

Will 5G and IoT dovetail in Africa and stimulate the uptake of 5G services?

IoT in Africa: Connected devices and service revenues

While this appears a standard chart at first glance, behind it are some interesting data. It provides the answer to the question above: "no".

1. Only 16% of IoT revenue is accounted for by connectivity. The game is elsewhere: platform, applications, integration, and management.

2. Less than 1% by 2023: the number of IoT connects that are 5G.

3. And Africa is only 1% of the global market!
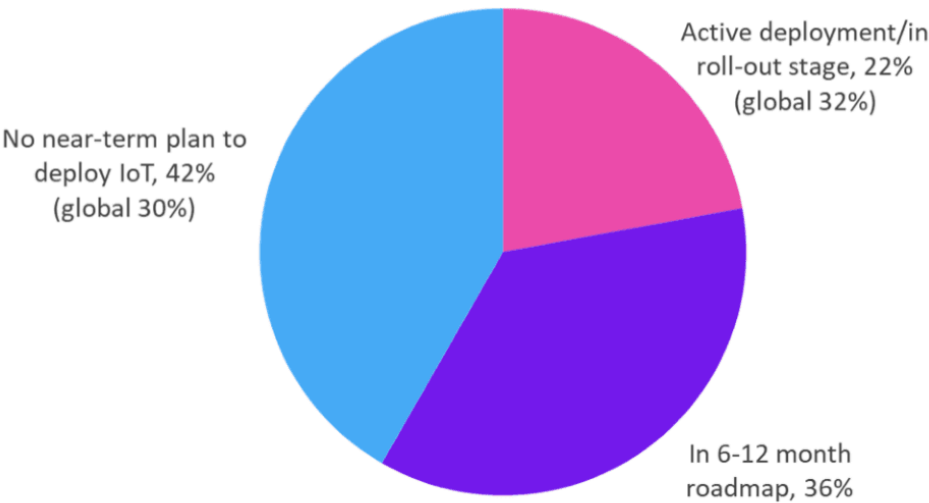
Large South African enterprises are "behind" their global peers

The results of an Omdia enterprise survey of South African firms reveal that they are 31% less likely than their global peers to have an IoT system in active deployment or at rollout stage. 42% of firms in Africa claim no IoT plans against a global average of 30%.

Why is this the case? Our next finding explains.

IoT adoption among South African enterprises/public sector

No near-term plan to deploy IoT, 42% (global 30%)

Active deployment/in roll-out stage, 22% (global 32%)

In 6-12 month roadmap, 36%

Note: South Africa, n=470
Source: Omdia IoT Enterprise survey 2019

Reality bites: The challenges of IoT deployment in South Africa

There are significant barriers to IoT deployment in Africa. The data reveals that security, poor network quality, and lack of available expertise are hampering digitalization.

Ensuring data, network, and device security	39%
Concerns over service reliability or network coverage	38%
Lack of internal IoT expertise	33%
Lack of investment budget	30%
Concerns about integration with legacy IT and networks	29%
Complexity of integrating with business processes/OT	23%
Ensuring data privacy or governance	19%
Ability to derive business value from IoT data	19%
Developing a clear IoT business	18%

Open full table in browser:
https://informa.turtl.co/story/africa-tech-festival-iot-and-5g-in-an-african-context/page/5/2

It's early days for B2B buyers in Africa

1. Despite what they claim, enterprises do <u>not</u> <u>understand</u> the full potential of IoT, let alone 5G IoT

2. South African enterprises are behind their global peers

3. <u>Security and reliability</u> issues trump concerns about tech maturity

Source: Omdia

© 2020 Omdia

Businesses are looking for transformation first, but for technology which enables it second.
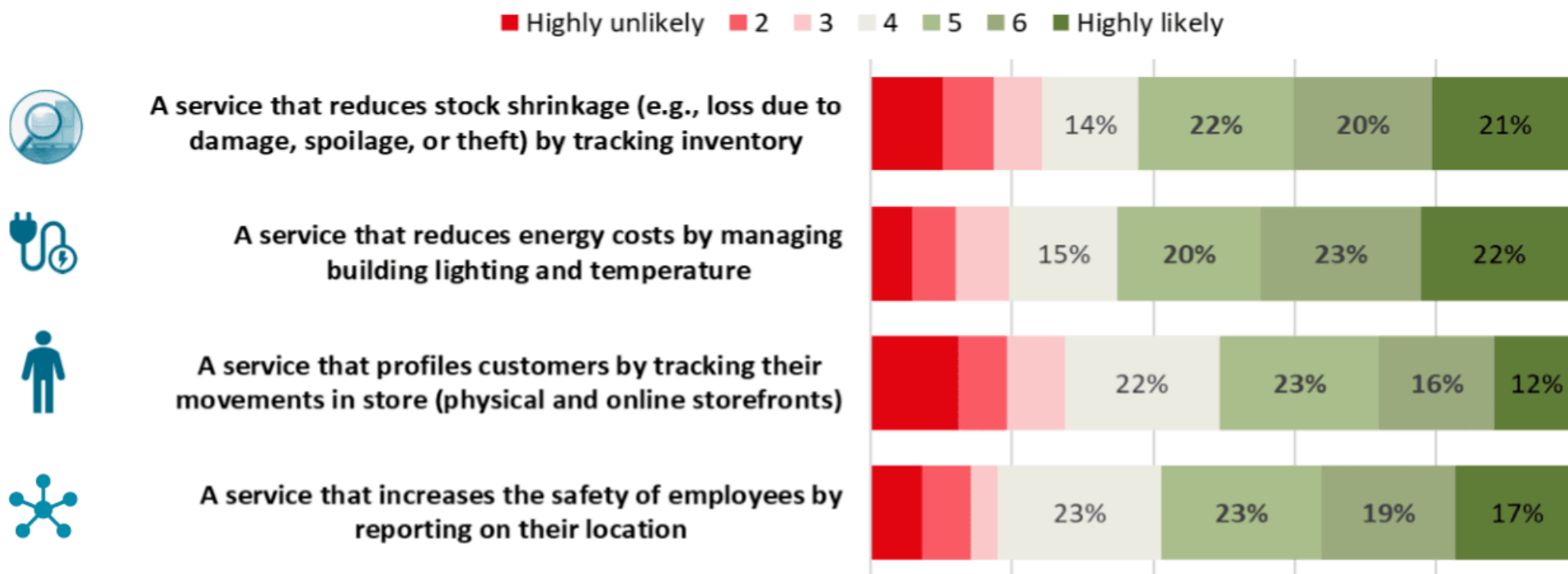
Mapping the ecosystem for B2B 5G

Click below to read more

Not just for big business: South Africa's SMEs are interested in IoT propositions

South African SoHos and SMEs: Would you consider buying the following services?

Legend: ■ Highly unlikely ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ Highly likely

Service	4	5	6	Highly likely
A service that reduces stock shrinkage (e.g., loss due to damage, spoilage, or theft) by tracking inventory	14%	22%	20%	21%
A service that reduces energy costs by managing building lighting and temperature	15%	20%	23%	22%
A service that profiles customers by tracking their movements in store (physical and online storefronts)	22%	23%	16%	12%
A service that increases the safety of employees by reporting on their location	23%	23%	19%	17%

Note: n=306
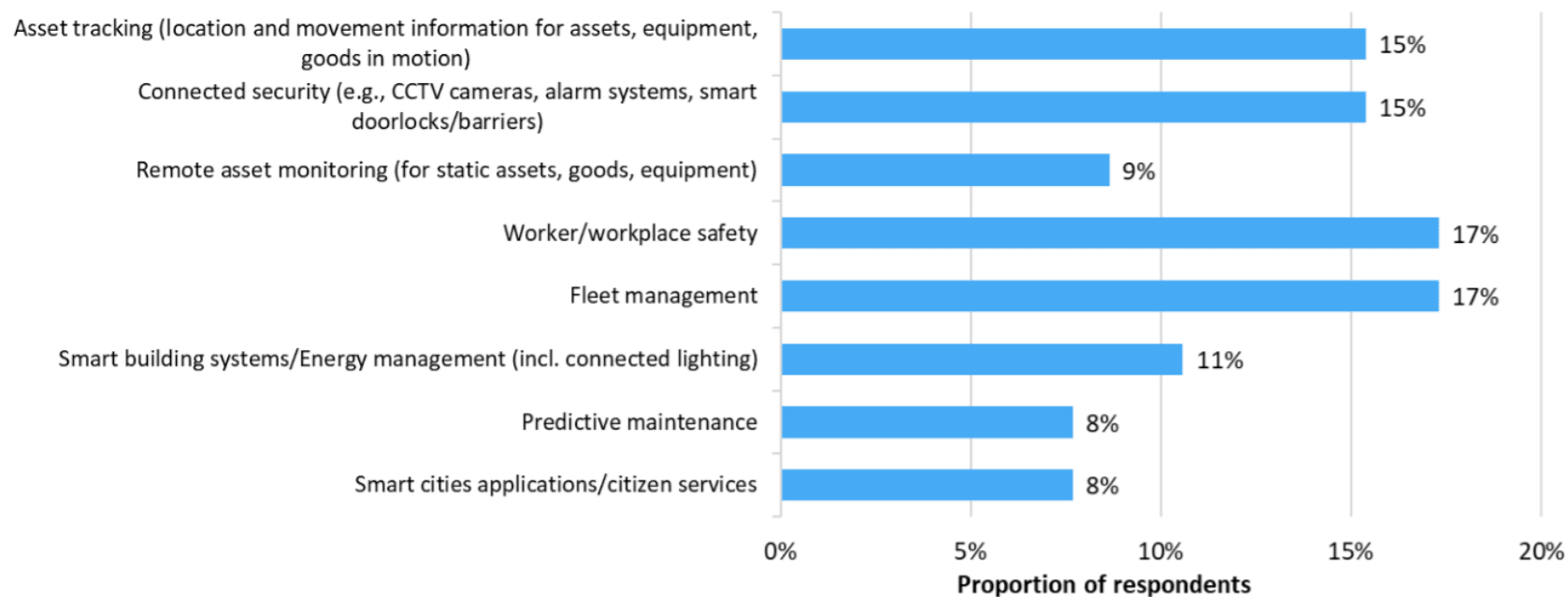Source: Omdia 2018/19 SoHo and SME Insights Survey

© 2020 Omdia

The right use case can generate high interest. Energy management and asset protection resonate strongly.

South Africa: most important application category for IoT

Everywhere the focus is on human and non-human assets and security: workers, fleet, asset tracking, security. But in South Africa, these come at the expense of enhanced "experiential" apps such as smart cities, buildings.

Q17: What is the most important category of applications you are using IoT for, in your organization (in other words, which is the 'anchor' or main type of IoT application you're deploying)?

Category	Proportion of respondents
Asset tracking (location and movement information for assets, equipment, goods in motion)	15%
Connected security (e.g., CCTV cameras, alarm systems, smart doorlocks/barriers)	15%
Remote asset monitoring (for static assets, goods, equipment)	9%
Worker/workplace safety	17%
Fleet management	17%
Smart building systems/Energy management (incl. connected lighting)	11%
Predictive maintenance	8%
Smart cities applications/citizen services	8%

Note: South Africa, n=104
Source: Omdia IoT Enterprise Survey 2019

© 2020 Omdia

South Africa: key IoT applications by industry

Transport

1. **Asset tracking**
2. Fleet management
3. Vehicle safety/security

Manufacturing

1. **Predictive analytics**
2. Production quality monitoring
3. Asset tracking

Healthcare

1. **Remote patient monitoring**
2. Predictive analytics
3. Asset tracking/geofencing

Energy

1. **Smart metering**
2. Smart grid
3. Predictive analytics

Public sector

1. **Asset tracking**
2. Fleet management
3. Environmental monitoring

Retail/hospitality

1. **Customer experience**
2. Inventory tracking
3. CCTV

Industry-specific approach and business awareness is more than essential: this is why telcos aren't "winning.

Stop thinking 5G or IoT, start thinking business goals.

Commerce
"Thrive online"

Mission
Digital visibility and flawless e-commerce for everyone

Challengers
GoDaddy
Go-Jek
Rakuten

Technologies
E-commerce transactions, payments, identity, social messaging, digital marketing, hosting/cloud, AI & analytics, CRM, virtual assistants

Workspace
"Brilliant productivity"

Mission
Inspiring environments for digital workers

Challengers
Office Depot
The We Company
The Related Companies

Technologies
Collaboration, workforce management, cybersecurity, AI and automation, environmental control, Wi-Fi, private wireless (including 5G)

Industrial
"Secure critical infrastructures"

Mission
Real-time intelligence for mission-critical operations

Challengers
ABB
Schneider Electric
Vinci Energies

Technologies
Cybersecurity, Industrial IoT, SCADA, digital twins, private wireless (including 5G) and fiber, edge computing, cloud, AI, analytics, RPA

Source: Omdia

© 2020 Omdia

Although their B2B targets may differ, competitor clusters do reflect perennial enterprise concerns: the need for market visibility, increased employee productivity, and to secure efficient operations.

Unlock Your Free Visitor Pass for Africa Tech Festival

Click 'read on' now.

AFRICA TECH FESTIVAL

November 9 - 13, 2020 | Virtual Event

CLICK HERE TO BOOK YOUR PREMIUM PASS

UNLOCK YOUR FREE VISITOR PASS

SEE THE SPONSORSHIP OPPORTUNITIES

Prepare for the Fourth Industrial Revolution With Virtual Africa Tech Festival.

The Largest Virtual Gathering Of Individuals And Organisations Using Enterprise Technology.

The Largest Festival of Digital Transformation In Africa.

Africa Tech Festival is the new name for a week of world-class tech events including AfricaCom, AfricaTech, the AHUB, AccelerateHER Africa and the AfricaCom Awards.

This year, we have decided to proactively transform AfricaCom, AfricaTech and all our co-located conferences into fully-virtual events in 2020. Taking place together over a week, from 9th – 13th November, these events will

become known as the Virtual Africa Tech Festival.

Virtual event features include:

- **100+ hours of premium conference content delivered by inspiring, visionary speakers**

- **AI-powered matchmaking to enable efficient, targeted networking**
- **Africa's largest virtual expo with interactive booths and technology-themed expo tours**

- **Integrated video chats, interactive polls, Q&As and virtual boardroom sessions**

- **A larger, more geographically diverse audience than ever before**

- **Virtual Resource Hub hosting a range of industry reports, analysis pieces and interviews**

Access premium content dedicated to AI, IoT, blockchain, fintech, cloud, data centres & security, a virtual exhibition featuring 100+ tech pioneers and a host of interactive networking opportunities.

Thank you for reading.

The Largest Virtual Gathering Of Individuals And Organisations Using Enterprise Technology. The Largest Festival of Digital Transformation In Africa. Register For Free! 5G. IoT. AI. Digital Transformation. Shows: 5G Africa, Fintech Africa, Digital Transformation.