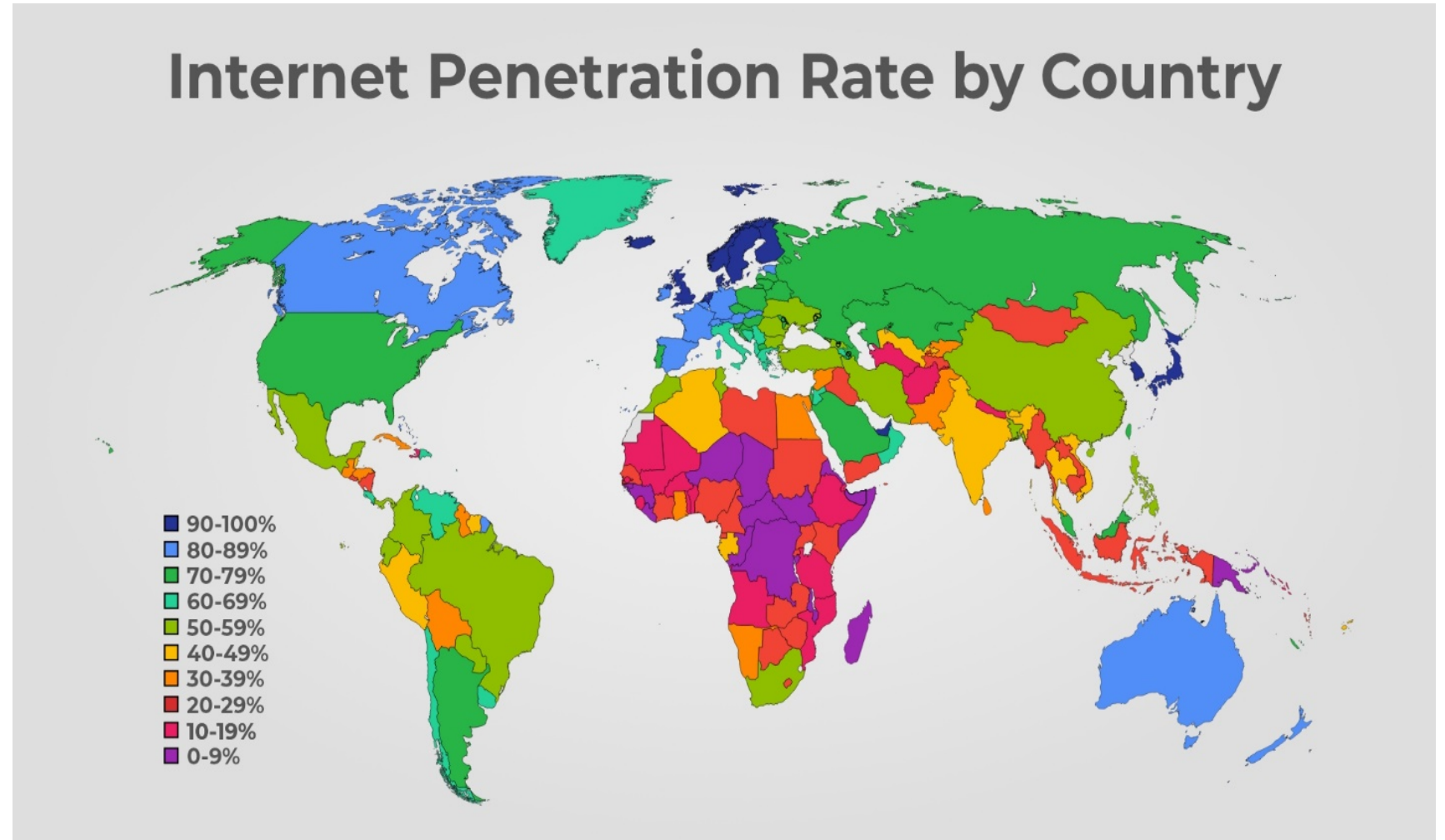


Access: the foundation for Progress

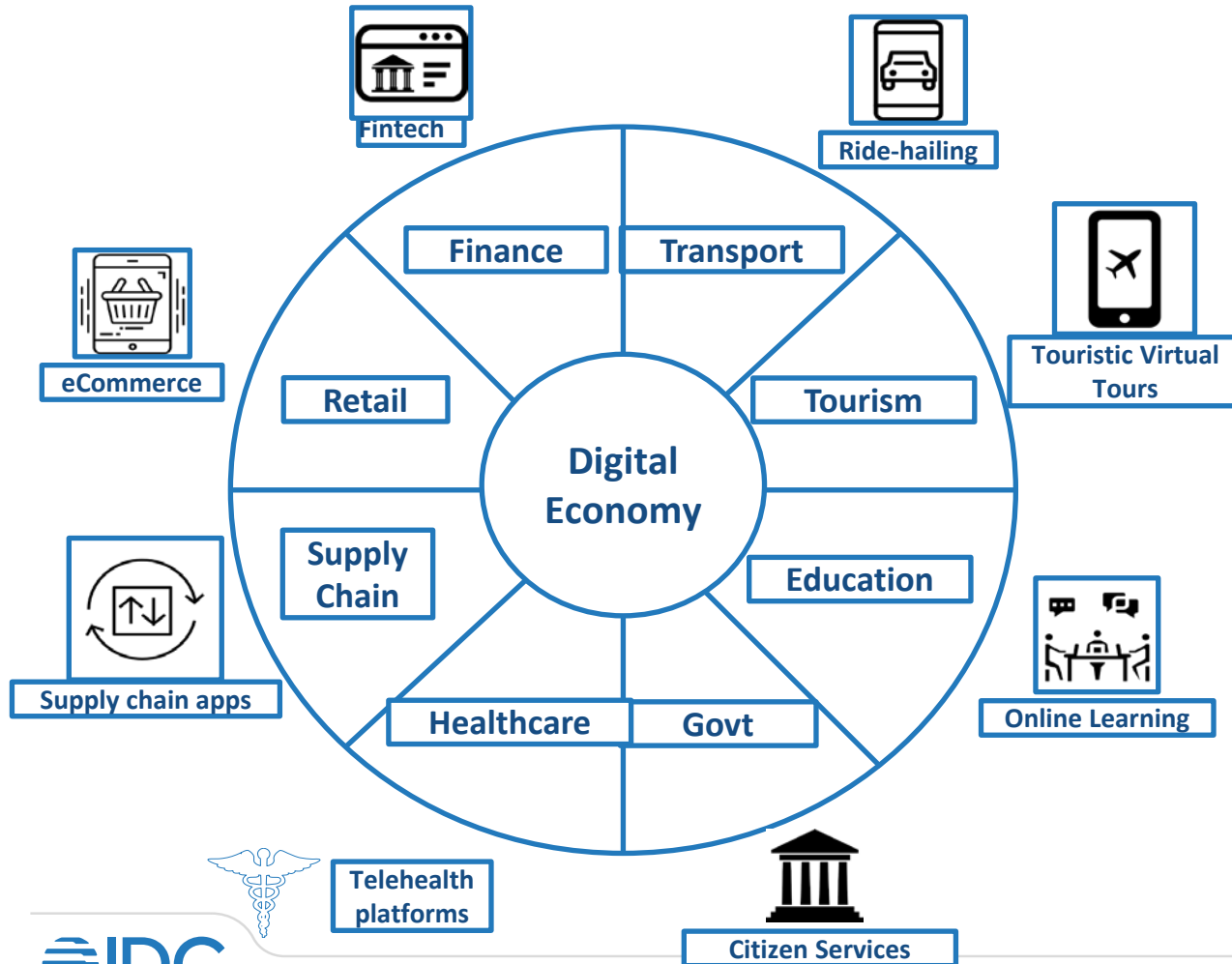
Mark Walker
Associate Vice President
June 2021

Brave new World

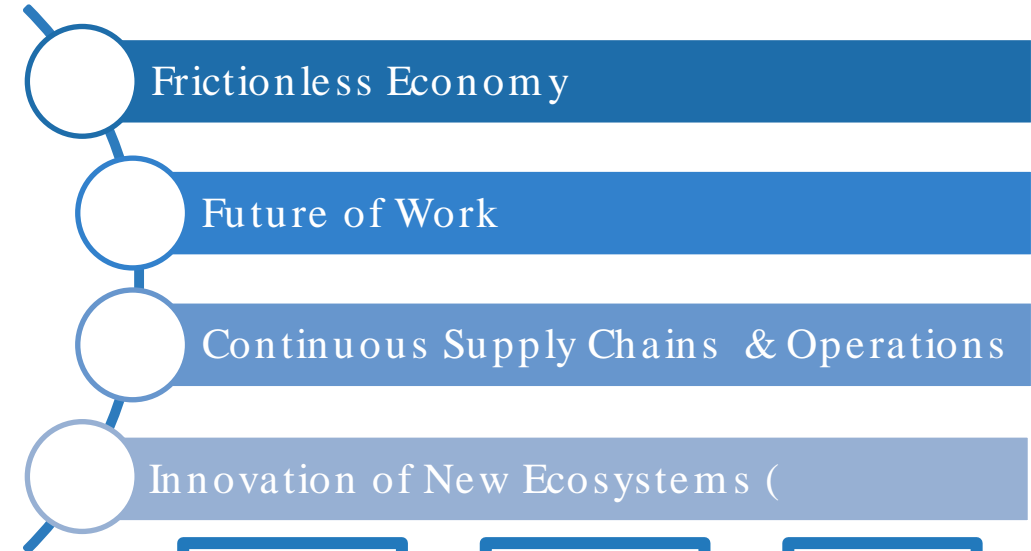


The Digital Future has arrived

Industries undergoing transformation



New Paradigms Post-Covid



Digital
Ecosystem
Models

Citizen Services

Data
Monetization

Access boosts economic activity



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



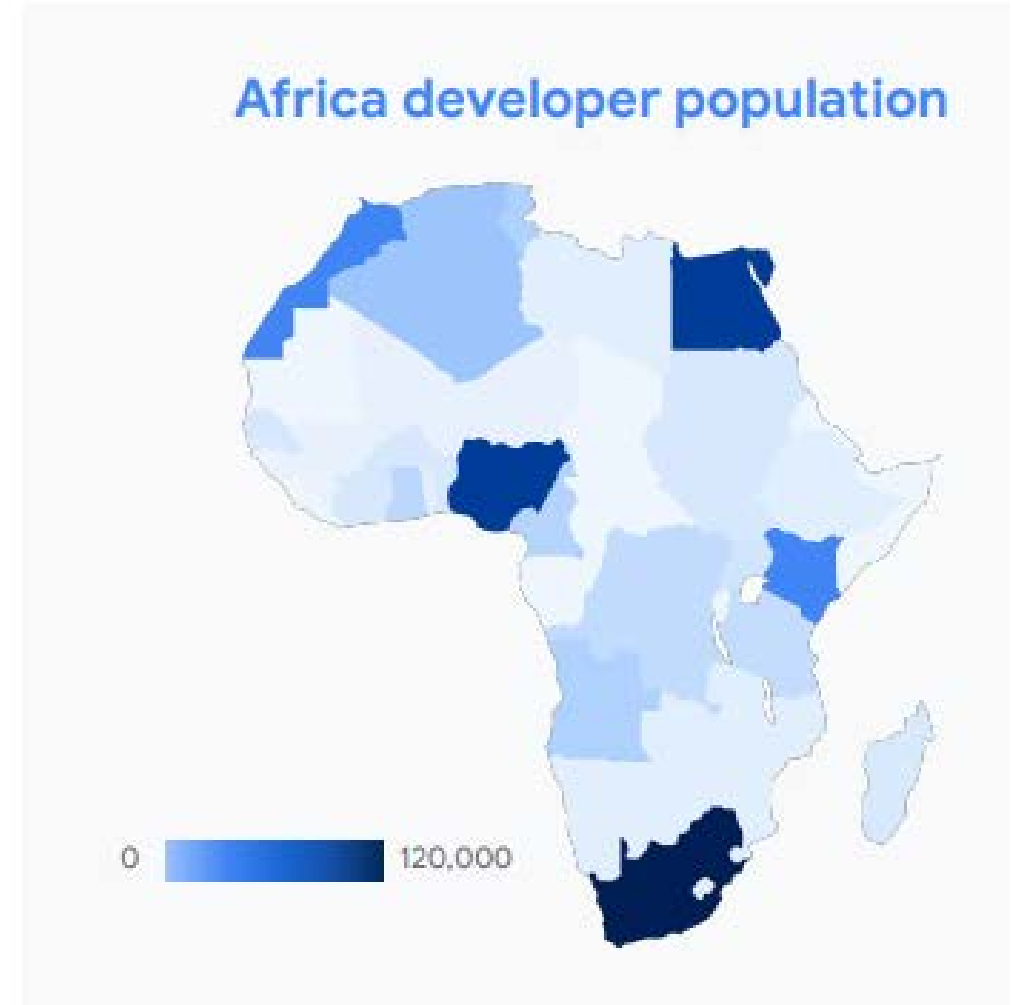
2.5% increase in GDP

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).

And boosts employment

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%



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

Healthcare Access

Tele-health, Data-driven Services and Intelligent Automation



Remote/ Tele-Health

- Remote consultation; Telemedicine;
- Virtual doctors
- Remote health monitoring; wearables



Data-driven Healthcare & Life Sciences

- Patient Information Exchange Platforms (e.g. Malaffi)
- Epidemic insights Life science analytics



Intelligent Automation

- AI-enabled customer interaction; AI-supported diagnosis
- Robotic surgeries & pharmacies
- IoT-based tracking – medicine, assets, delivery

Tech
Investment
Focus Areas

63%



AI/RPA/Robotics

63%



Mobile Apps

50%



Cybersecurity

63%



Digital
Employee
Experience

Education Access

Unprecedented Digital Acceleration and Shift towards Blended Learning and Platforms



Blended & Personalized Learning

- Blend of physical & online – secure access, online learning tools, smart classrooms etc.
- Personalized / individualized, adaptive learning - AI-enabled



Digital Platforms & Ecosystems

- Ecosystems for collaboration & information exchange
- Digital platforms that enable ecosystems – API-based



Tech-enabled Operational Transformation

- Cloud-first strategies
- Campus digitization
- Back office automation



Emerging Tech Skills Dev, Research, Innovation

- Emerging tech courses & teaching (AI, Data Science etc.)
- Research & innovation capacity on emerging tech

90%

Of Education CIOs say that COVID accelerated or brought forward their digital initiatives' roadmap by at least 1 year

Banking & Financial Service Access

Accelerated Shift towards Digital, Virtual and Data-driven Financial Services



Digital Finance

- Digital channels; digital-only banks; branch digitalization
- Open banking, fintech partnerships
- Industry ecosystems; digital wallets, trade finance platforms.



Virtual Finance

- Cloud, Rationalization of IT
- Trust, Automation (RPA, AI/ML)
- App Modernization; Microservices, DevOps, Open APIs



Data-driven Finance

- Alternate data sources; data from external partners
- Data-driven products and advisory
- Data-driven risk management; evidence-based compliance

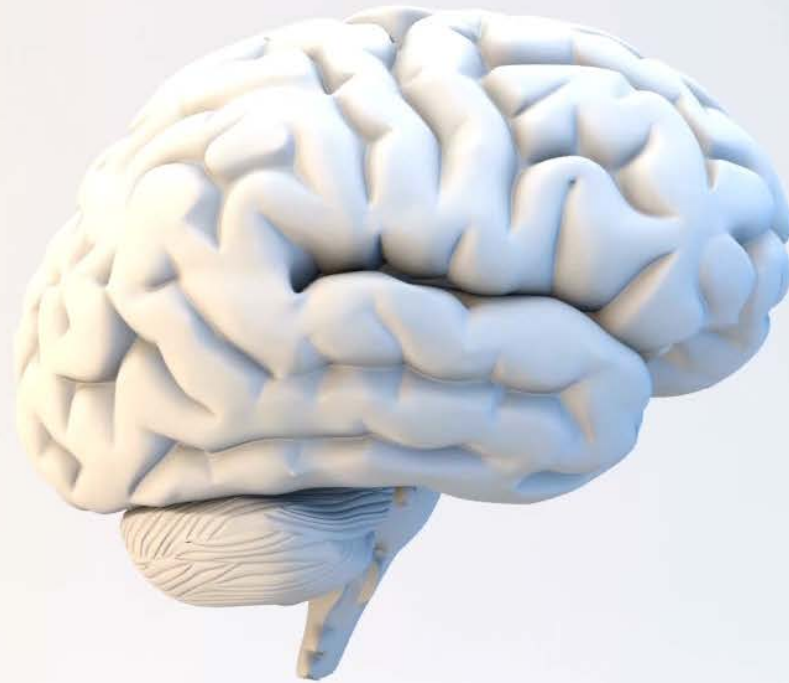
80%

Of bank CIOs indicated that their digital initiatives' roadmap was brought forward by 1-2 years by the pandemic

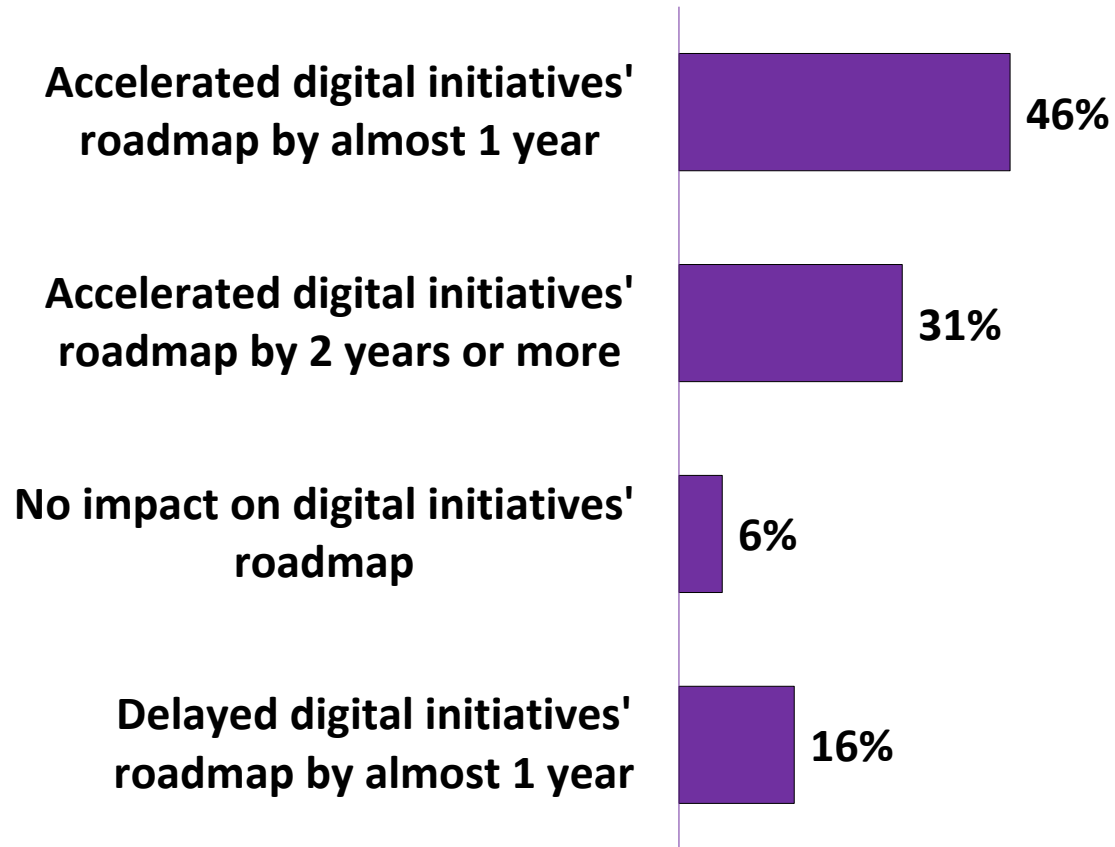
45%

Of bank CIOs indicated Data Excellence is a key strategic IT capability for investment

New world needs specific Technology



Digital Acceleration



What impact did COVID-19 crisis have on your digital initiatives' roadmap?

Accelerated DX Investments Create Economic Gravity.

- digital destiny with 65% of global GDP digitalized by 2022
- \$6.8 trillion of direct DX investments from 2020 to 2023.

Accelerating sub-Saharan African Digital Experiences.

- By 2022 **80%** of enterprises will have launched DX initiatives to reinvent engagement and interaction
- Transformed relationship between partners, competitors, suppliers, employers and employees.

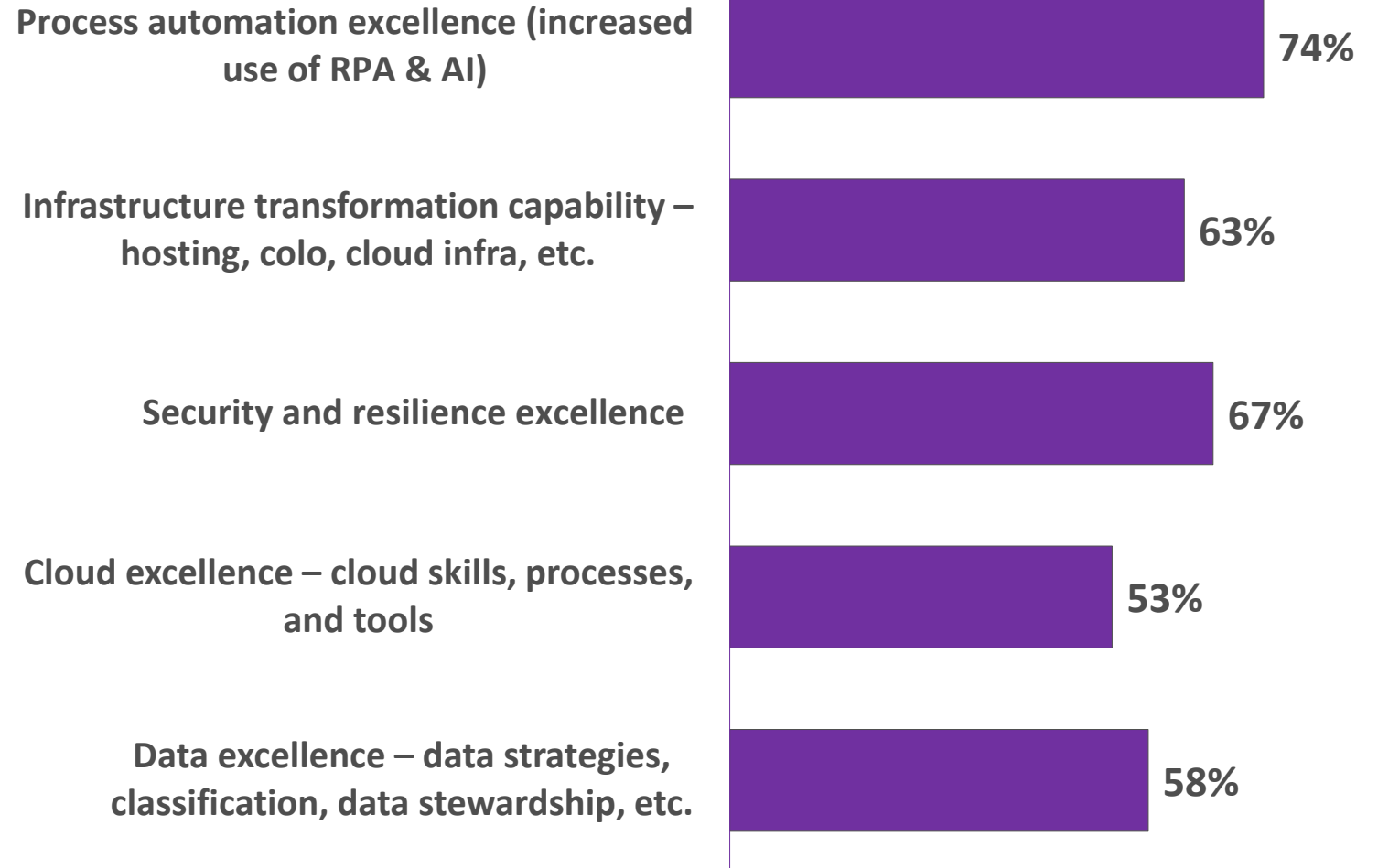
Business Model Reinvention across African Enterprises

- By 2021, at least **50%** of organizations will launch new lines of business driven by DX investments.
- Technology will enable organizations to fast-track transformation programs to future-proof their businesses.

Digital First Approach underpins African ICT investment

- "Digital first" prevails: **75%** of enterprises will invest heavily in business process transformation during 2021
- Transformed business processes will drive customer engagement, employee productivity, and business resiliency, as well as reshaping the workforce.

Key technology priorities



Which of the following strategic IT capabilities are you investing, or planning to invest, in the next 12-18 months?

Source IDC CIO Survey Dec 2020 South Africa; N = 43; 100+ employees only

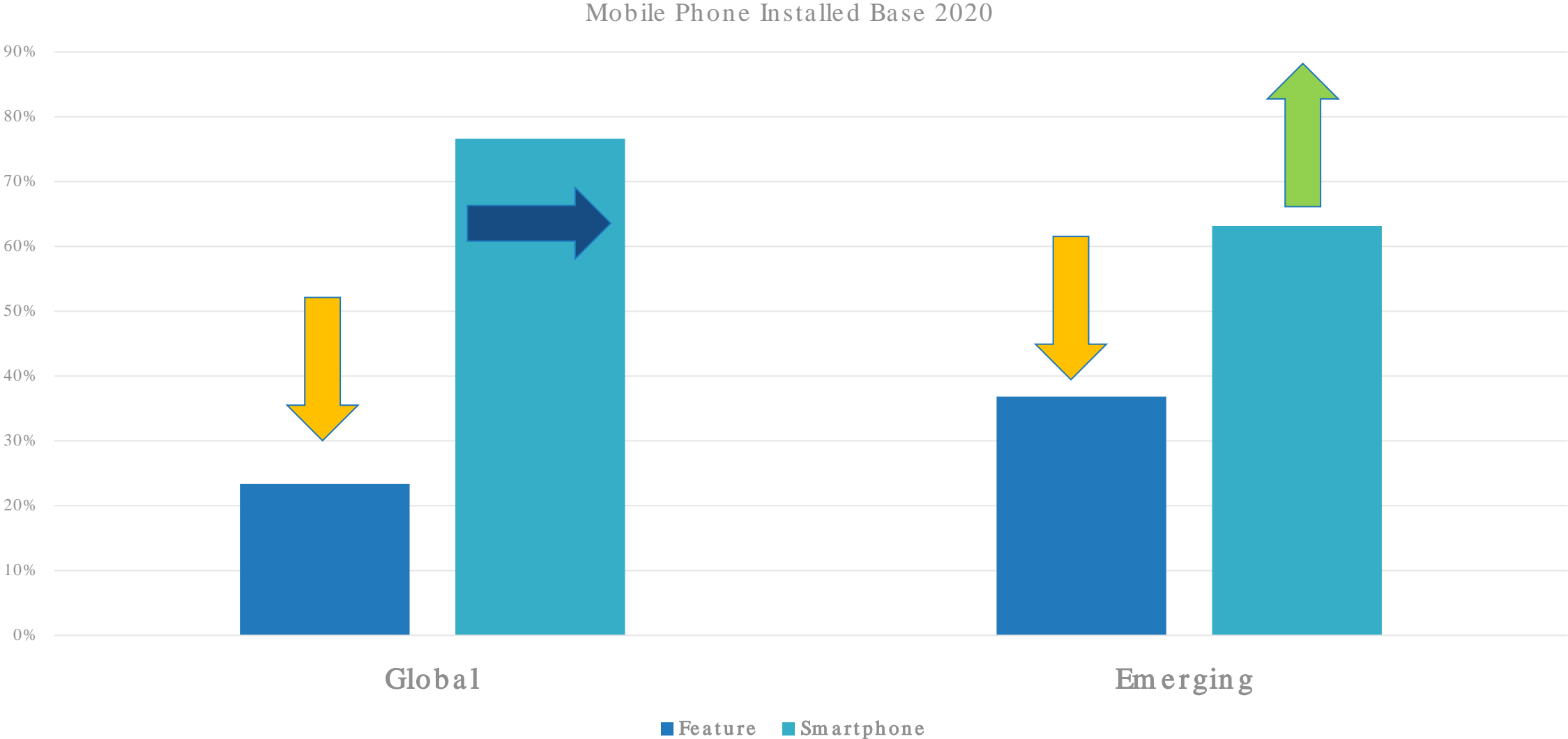
Tech-led Innovation Tops META CIO's Agenda For 2021



Q. On which of the following emerging technologies/solutions and services are you planning to significantly increase your spending in the next 12 months?

Source: IDC CIO Survey Dec 2020. META

Mobile Phone Dynamics



IT Infrastructure Spend to grow @3.5% CAGR to \$12.3B by 2024



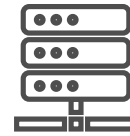
Public Cloud Infra

Hyperscale Investments in META
Enterprise Public Cloud Adoption



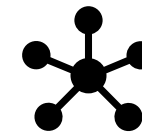
Hybrid Cloud Infra

Benefits of Hybrid workload model
Data Sovereignty, Compliance



On Premise Infra_aaS

Cost Agility & Life Cycle Management
Analytics & Speed of Transformation



Network at the Edge & NaaS

Remote workstyle, Edge data-Apps on cloud
AI enabled Edge for Insights in real time

Infrastructure Growth Drivers



Start or significant increase in new Tech spend plan by CIO's for 2021



Enterprise Server
@0.4% CAGR thru 2024

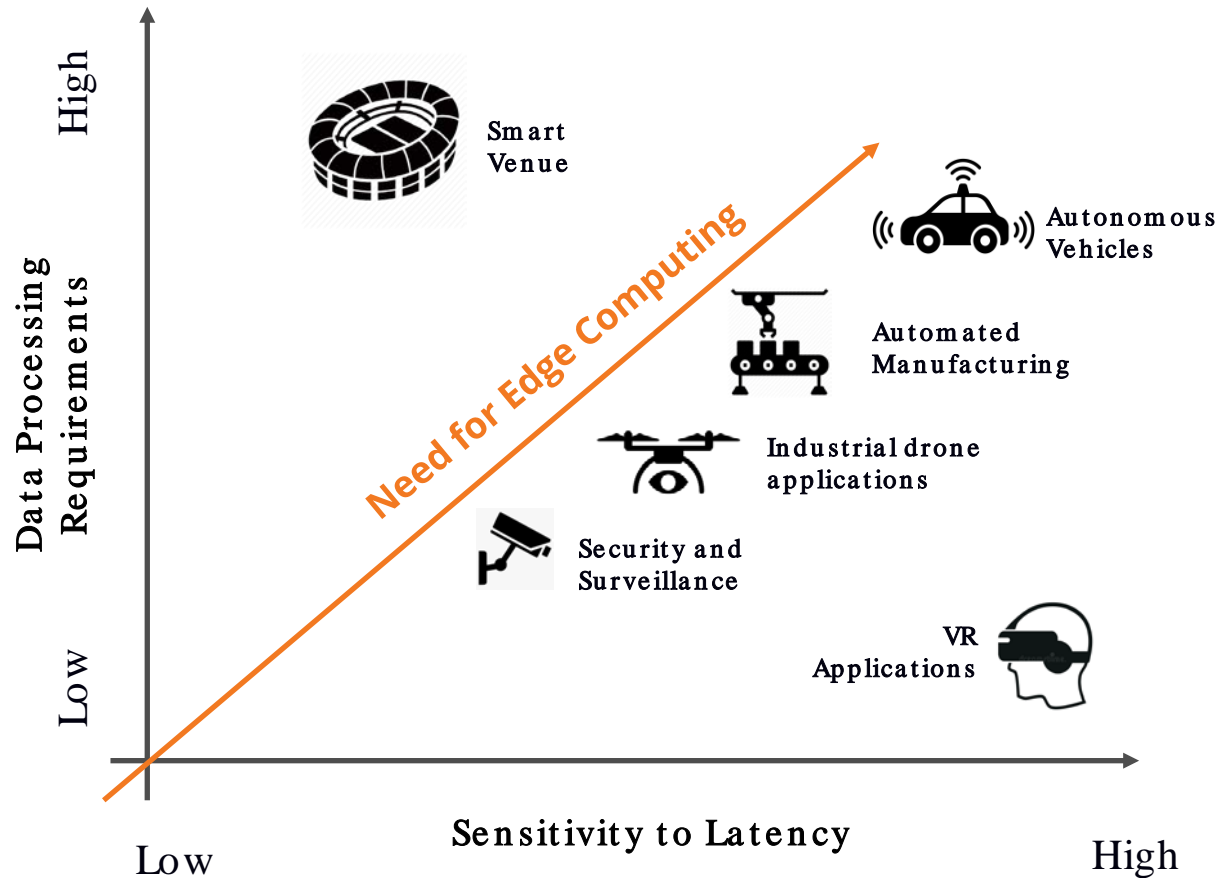


Network equipment
@0.6% CAGR thru 2024



External Storage systems
@2.7% CAGR thru 2024

The Confluence of 5G, IoT and Edge on the Horizon



The evolution of 5G to unlock additional potential of IoT and edge computing applications.

While 33% medium to large organizations have currently deployed IoT, an additional 38% are planning to adopt in the next 12 months

26% medium to large organizations are planning to adopt 5G in the next 12 months

26% medium to large organizations are also planning to adopt Edge Computing in the next 12 – 18 months

Key Success Factors

ACCESSIBLE

- Connected
- Ease-of-use
- Teachable
- Scalable

RESILIENT

- LoB fit for purpose
- Commercial Impact
- Strategic alignment
- Utility Value



TRUSTWORTHY

- Secure
- Stable
- Skilled
- Supported

AFFORDABLE

- Budgeted
- Value for Money
- TCO
- RoI



Thank you

Mark Walker
mwalker@idc.com



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