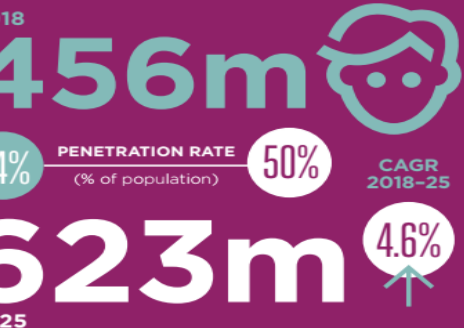
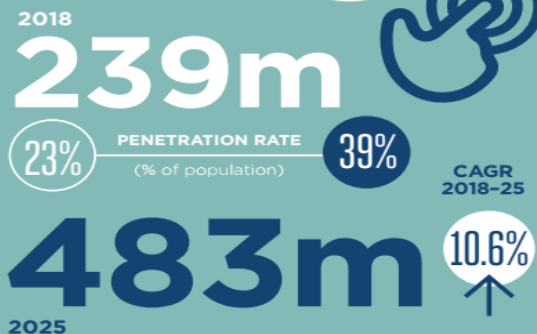


Sub-Saharan Africa

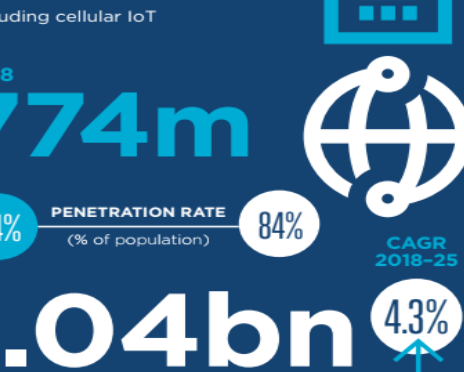
Unique mobile subscribers



Mobile internet users



M connections

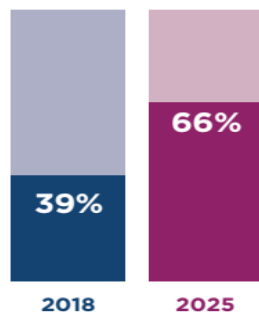


Operator revenues



Smartphones

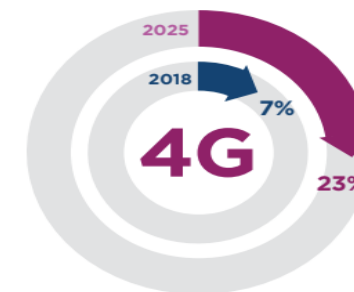
Percentage of total connections*



*Excluding licensed cellular IoT



4G percentage of total connections*



5G connections in 2025 (3% of total connections) → 28m



Mobile industry contribution to GDP



Public funding

Mobile ecosystem contribution to public funding (before regulatory and spectrum fees)



Employment




Plus 1.2 million informal jobs


MOBILE MONEY IN 2019

 **Over 1bn**
REGISTERED MOBILE MONEY ACCOUNTS

 **OVER \$1.9bn** ← by the mobile money industry
processed daily

77 Mobile money deployments have more than **1m** 90-day active accounts Compared to 27 in 2014

INDUSTRY FIRST
 **57% DIGITAL**
Digital transaction values now exceeding cash-in/out values

INDUSTRY FIRST
 **\$22bn** IN CIRCULATION
More money is circulating than exiting the mobile money system

 **290**
MOBILE MONEY DEPLOYMENTS
 **95** ARE LIVE IN COUNTRIES

SUB-SAHARAN AFRICA
50m
NEW REGISTERED ACCOUNTS 

Source: GSMA

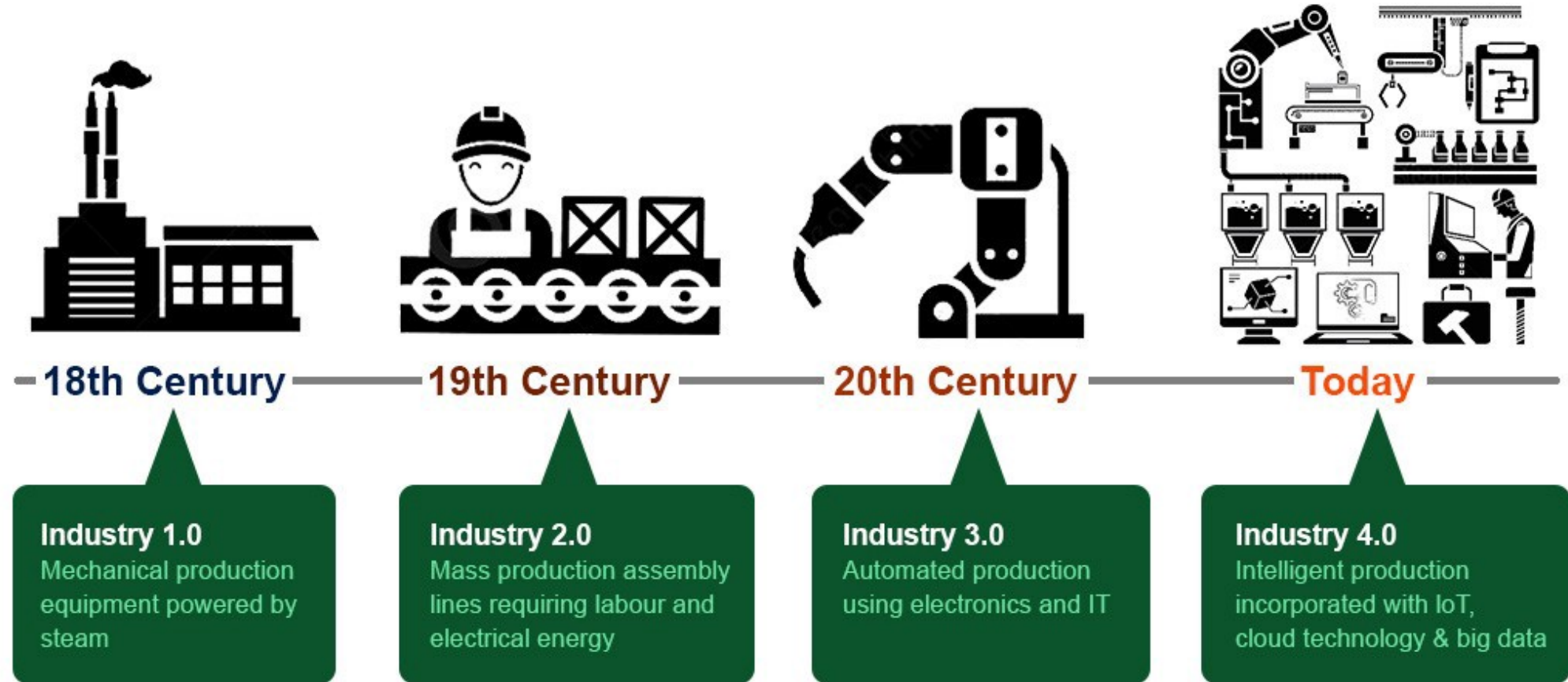
Sub-Saharan Africa is responsible for more than half of mobile payments by value

in Africa

Unlocking the potential of the 4IR in Africa



Industry 4.0





Industry 4.0: smart factory can be a game changer in Africa

Advantages

- 1 Flexibility
- 2 Improving productivity
- 3 High quality
- 4 Efficiency
- 5 Cost saving
- 6 Manufacturing conditions

Traditional factory

Diverse production lines for different products
Handle orders from clients one by one and send them to different manufacturing teams

Robots with low level human-machine interface
Isolated production models

Solve manufacturing problems when detecting faults
Quality evaluation after production

Low level inter-connected ERP
Traditional engineering method
High-cost R&D centers

Demand for low cost labor
Machine operated by workers
Non-autonomous value chain analysis

High training cost for employee to ramp up
Noise, pollution, toxic materials in manufacturing sites

Technologies

- 3D printing
- Flexible manufacturing
- Advanced robots
- Industrial internet
- Big data
- Simulation
- Industrial internet
- Cloud
- Simulation
- Advanced robots
- Vertical integration
- Horizontal integration
- Augmented reality
- Cloud
- Cyber security

Smart factory

To produce goods on demand and in time
No shift time or cost to change final product classification of a flexible production line

Automated production process reduce time
High inventory turnover and efficient supply chain management

Detect possible faults before production using big data analysis
Use simulation for quality improvement

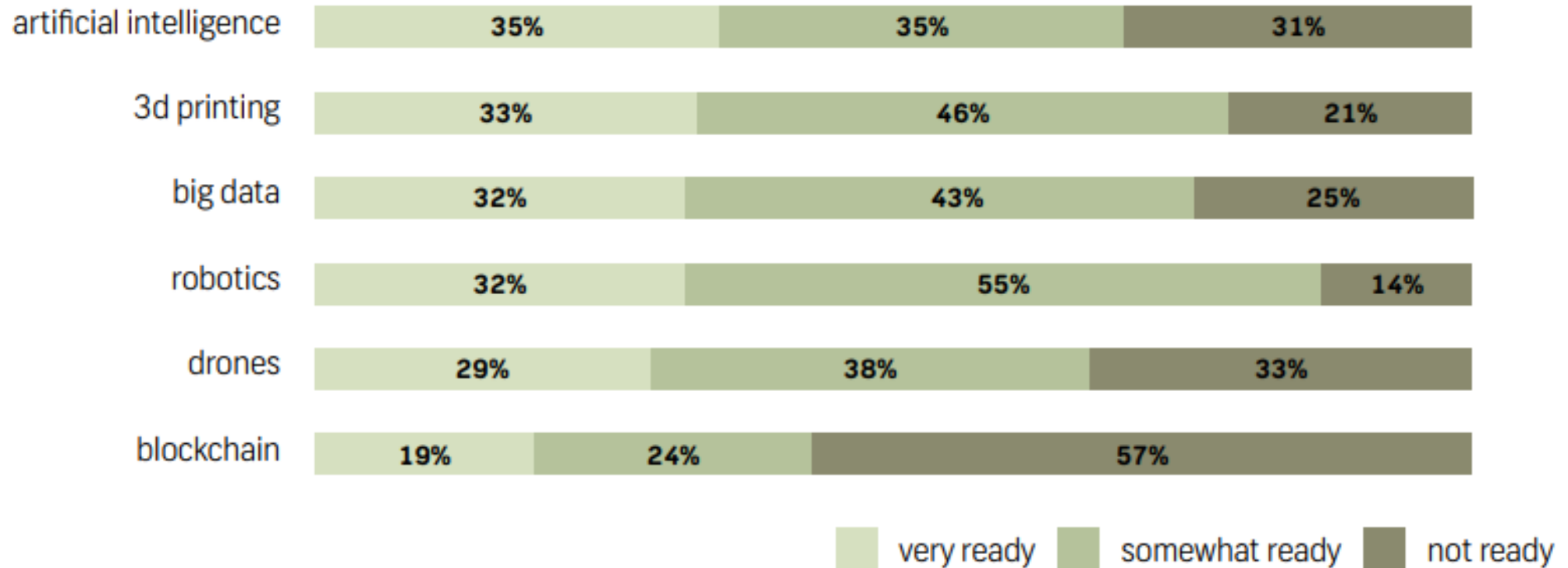
Optimized value chain management
Simulated production processes
Virtualized R&D

High level M2M connection
Low level human intervention
Advanced human machine interface

Cloud based employment training
More comfortable manufacturing environment
Real-time diagnosis and repair

the data economy

stakeholders' assessment of Africa's readiness to take up technologies



Enabling Factors



HUMAN CAPITAL



**GOVERNANCE,
POLICY AND
REGULATIONS**



**ENTREPRENEURIAL
AND INNOVATION
SUPPORT ECOSYSTEMS**



**ACCESS AND
DIVERSITY OF
FINANCING**



INFRASTRUCTURE





AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE
DE DÉVELOPPEMENT

Study on Unlocking the Potential of the Fourth Industrial Revolution in Africa

<https://4irpotential.africa/>