Information Communication Technology
Industry Analysis

QUICK ICT INDUSTRY FACTS SOUTH AFRICA

Computer hardware sales R35.8Billion (2023)

Services sales: R99.7 Billion (2023)

7.8% of the total value imports were ICT goods (2023)

Market value R 201.8 billion

INFORMATION COMMUNICATION TECHNOLOGY

REVENUE GROWTH R254.8 BILLION IN 2022

Software sales R66.2Billion (2023)

Market value, % of GDP 2.88% (2023)

0.6.7% of total exports were ICT products

ICT contributes 8% to the national GDP

Current Trends
Artificial Intelligence
Digital transformation
Cybersecurity
Cloud computing

Google launched its first African cloud region in South Africa, aiming to contribute USD2.1bn to GDP by 2030

Amazon committed to investing ZAR30.4bn in South African AWS infrastructure by 2029

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1. Introduction

Over the last 30 years, the South African ICT industry has received recognition for its contributions to communication services and economic growth. However, pressing challenges remain, such as more agile and flexible regulations, inclusion of SMMEs, sector change, lower data prices, connectivity, and regulation of online shopping platforms. Businesses are purchasing more cloud-based services to reduce costs and increase productivity as online sales grow. The IT services industry is expected to gain from increased demand for enhanced data services, cloud computing, and e-commerce. However, growth may be impacted by continued economic obstacles such as unemployment, currency constraints, and energy concerns. This piece will provide a trend overview of the sector and enable RBIDZ to make appropriate inputs for investment promotion strategy planning for this sector.

2. What is Information Communication Technology

Information and Communication Technology is the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical data by a microelectronics-based combination of computing and telecommunication (Shaibu, Oshiogwe, & Mbaegbu, 2014).

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3. Information Technology Value chain

The consumer electronics, computers, and communication device value chain includes raw materials and inputs, component production, final product assembly, and sales.
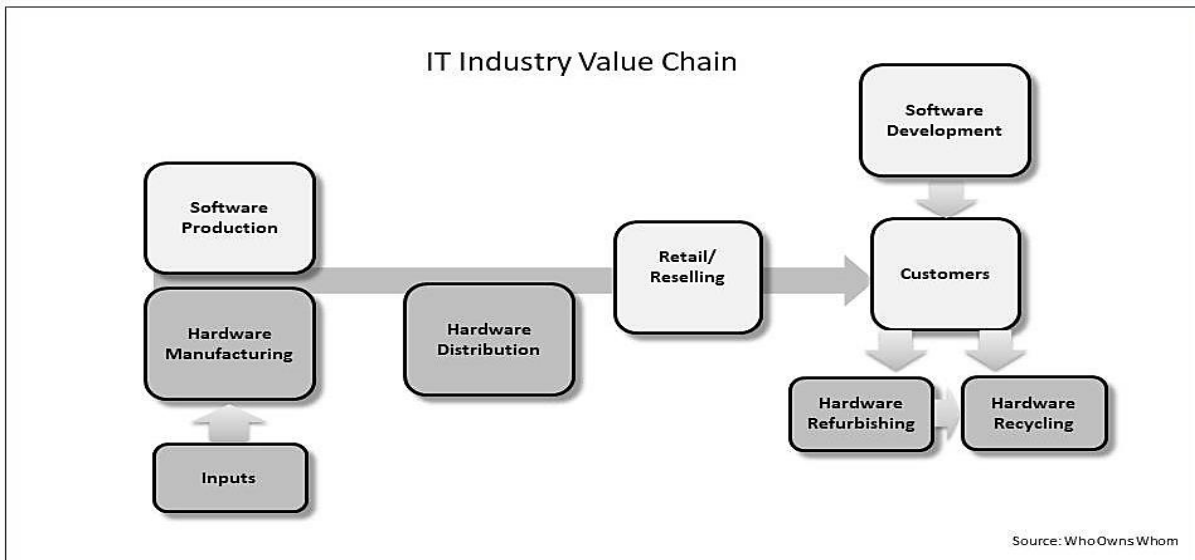
Source: (WOW, 2024)

Research, product and process development, design, marketing, and after-sales services add value to finished products outside production;

- Hardware companies fall into two categories: original equipment manufacturers (OEMs) who create their products and vendors who sell, install, and update hardware as licensed resellers or merchants.
- Hardware refurbishes, and recyclers include formal or informal collectors who gather and process e-waste before selling it to recyclers or merchants.
- Recycling involves recovering valuable materials from e-waste and reusing them as raw materials in production. Refurbishment involves importing or repairing used equipment and selling it in the secondary market.
- Software companies can be divided into three types: software and app developers who create their products, startups who build software and applications, and vendors who resell software as licensed resellers or retailers.
- Two companies offer IT services: those specializing in IT consulting and those providing broad management consulting services, including technology and software solutions like project management and system integration (WOW, 2024).

3.1 Sector Developments in South Africa

- Equinix announced a USD390mn investment to build new data centres in South Africa and Western Africa, aiming to expand its data operations and capitalize on the growing competition among data centre providers in the wider region.
- Google launched its first African cloud region in Johannesburg, South Africa, joining other tech titans like Oracle, Microsoft Azure and Amazon Web Services (AWS) to offer local African cloud services to enhance the regional ecosystem.
- Microsoft announced its plans to build a new data centre campus in the Kosmosdal area of Centurion, South Africa, as part of its efforts to expand cloud infrastructure to meet the rising demand from public and private sectors in Africa for cloud and AI.
- Africa Data Centres is set to open its second facility in Cape Town, marking a significant expansion in their South African operations with a new 20MW data centre to accommodate growing demand from government and financial service clients.
- Open Access Data Centres (OADC) plans to invest USD500mn over the next five years to expand its pan-African data centre network, including enhancing the Johannesburg facility with additional capacity and services.
- BCX and Alibaba Cloud jointly launched the Africa Local Public Cloud service in South Africa, offering local enterprises (BMI, 2024).
- Amazon committed to investing ZAR30.4bn in South African AWS infrastructure by 2029, boosting GDP and jobs (BMI, 2024).

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4. Global Trends in the ICT Industry

Given its numerous advantages, the usage of ICT has increasingly contributed to the betterment of the world. The advantages, however, may have some unforeseen repercussions if technology is not adequately deployed and controlled. (Ohaka, 2015)

4.1 Global ICT by Sub-sector

Globally, telecoms services, devices & infrastructure, and IT business services make the most sales in the sector.

Software sales remain the lowest contributor to overall industry sales.

Source: (Ohaka, 2015)

4.2 Projected Global Growth

- Globally, cloud solutions sales (software, services, solutions and infrastructure) will grow at a CAGR of 18.8% between 2024 and 2030 to reach a total value of USD2.09trn.

Globally cloud solutions to grow at 18.8% between 2024-2030 → **The global total market value is expected to reach USD2.09trn** → **US to remain the largest cloud market by far projected to grow sales by 14.9% to reach USD845bn by 2030**

- Being the home market for most of the world's largest and most influential cloud ecosystem providers, the United States is - and will remain - the largest cloud market by far, projected to see sales growing at a CAGR of 14.9% to reach USD845bn by 2030.

5.1 Risks: African Continent

The Q123 update of the Middle East and Africa IT Risk/Reward Index is marked by a few changes that pushed the average regional score to 51.1 points out of a possible 100. Q123 marks the second consecutive quarter of decline for the region's IT index as inflation weighs on enterprise operating costs and consumer spending power. Ghana emerged as this quarter's underperformer, its score falling by 5.5 points due to weakening consumer spending and a lack of real wage growth.
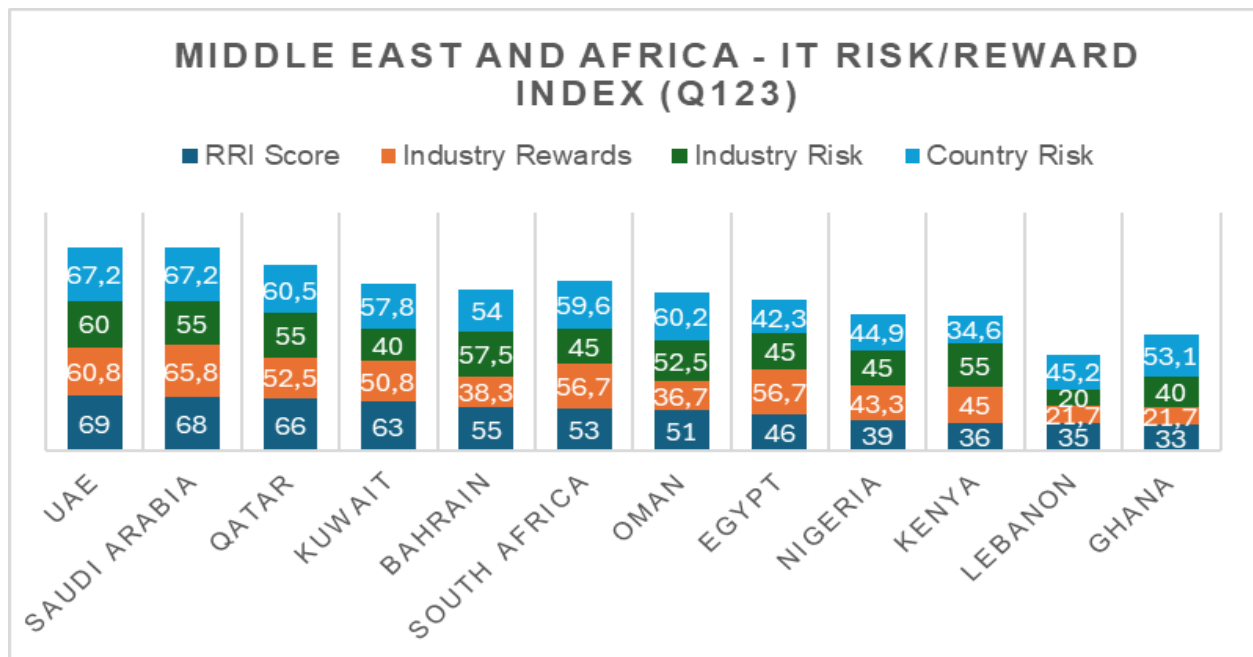
Source: (BMI, 2024)

- Kuwait remained in the top five, with its overall IT RRI score increasing by 2.2 points, which made it the outperformer this quarter.
- Ghana's 5.5-point reduction in total RRI score dropped it to last, previously in 10th place.
- South Africa is number 6 on the risk-reward IT index, which, on average, makes it one of the most attractive investment destinations after the Middle Eastern countries.

5. South Africa's ICT Industry

The following figure represents the provincial distribution of companies that have recently been profiled by WOW and is not representative of all companies in the industry. Still, it gives a picture of the spread of ICT in the country. The company's headquarters remain concentrated mainly in the Gauteng region and Western Cape.

5.1 The geographic spread of ICT companies in South Africa

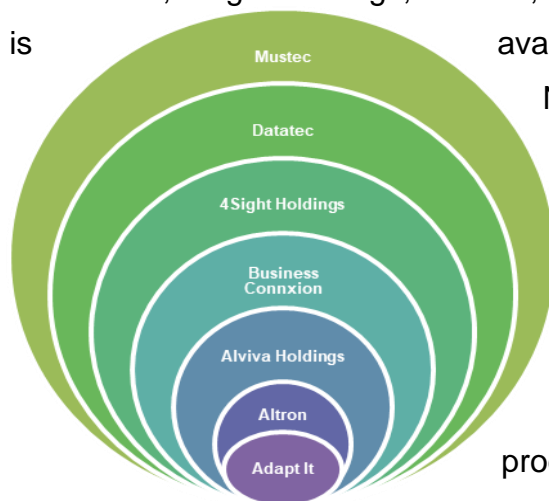| Gauteng	Western Cape	KwaZulu Natal	Eastern Cape
72 companies	22 Companies	2 Companies	1 Comoany

5.2 Notable players

Some prominent industry players include Adapt It, Altron, Alviva Holdings, Business Connexion, 4Sight Holdings, Datatec, 4Sight Holdings and Mustek. Very little information is available on Dimension Data since it became part of Nippon Telegraph and Telephone Corporation in 2010.

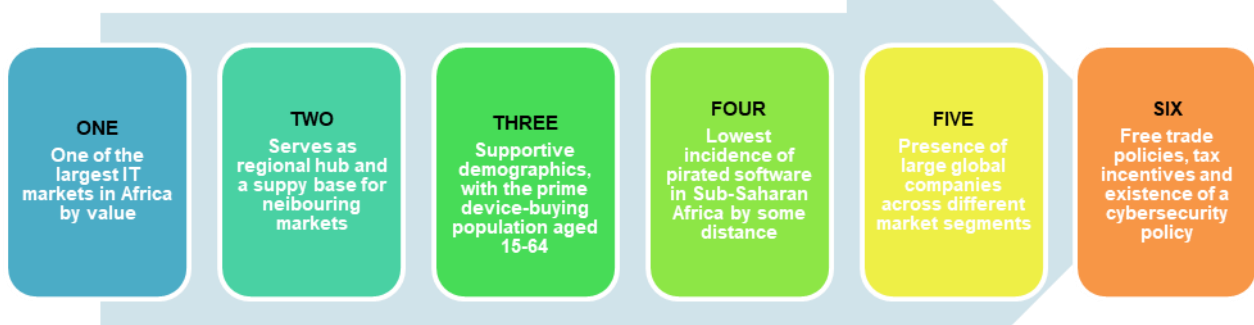### 5.3 Hardware Manufacturing, Distribution and Retail

- Altron, which owns car tracker Netstar and provides hardware and technological products, has a market value of R4.3 billion as of January 8, 2024.

- In 2023, it sold its ATM hardware and support business divisions to focus on assisting businesses in planning for and implementing their technology needs in areas such as the cloud, data analytics, IoT, and security.

- In the automobile tracking market, Netstar competes with MiX Telematics and Cartrack.

- Mustek (which had a market capitalization of R767 million on January 8, 2024) and its subsidiary Rectron, as well as Alviva-owned businesses Pinnacle and Tarsus Distribution, are among the top hardware distributors (several of which also

distribute software).

- Mustek, which offers names like Acer, Asus, Samsung, and Lenovo, also assembles some IT equipment it imports. It also provides server and maintenance services and security through companies like Sizwe Africa and Khauleza IT. Frontosa, Esquire Technologies, and Syntech are among the smaller distributors.

5.4 Why South Africa remains a target for   information communication technology investments

| ONE	TWO	THREE	FOUR	FIVE	SIX
One of the largest IT markets in Africa by value	Serves as regional hub and a suppy base for neibouring markets	Supportive demographics, with the prime device-buying population aged 15-64	Lowest incidence of pirated software in Sub-Saharan Africa by some distance	Presence of large global companies across different market segments	Free trade policies, tax incentives and existence of a cybersecurity policy

Source: (BMI Report, 2024)

- South Africa's electronics and information   technology industry is cutting-edge and quickly growing.
- Many foreign tech behemoths have a local presence in South Africa. This list contains IBM, Unisys, Microsoft, Intel, Systems Application Protocol (SAP), Dell, Novell, and Compaq.
- It functions as an administrative and commercial hub for neighbouring countries (ASG, 2024),
- Cloud computing services are becoming increasingly popular in the business sector, and South Africa's well-developed network infrastructure is projected to benefit the country's premier IT firms.
- South Africa's high entrepreneurship rate is excellent news for its most successful digital companies since it indicates a more significant demand for cloud-based services in the coming years.

6. Trade Statistics

In 2021, of the total imported goods by South Africa, 7.8% were ICT goods, which included computers and peripheral equipment, communication equipment, consumer electronic equipment, electronic components, and other information and technology goods. (Suresha, K, 2019).

- The value of imported ICT goods has declined from 2000 to 2021, from 12.3% of the total imported goods to 7.8%.
- About 0,67% of the total exported goods by South Africa were ICT-related goods.
- The value of the exported ICT goods over this period shows a decline from just over 1,7% of the total exports to 0,67% in 2000 and 2021.
- South Africa remains the net importer of ICT products.

6.1 ICT products trade
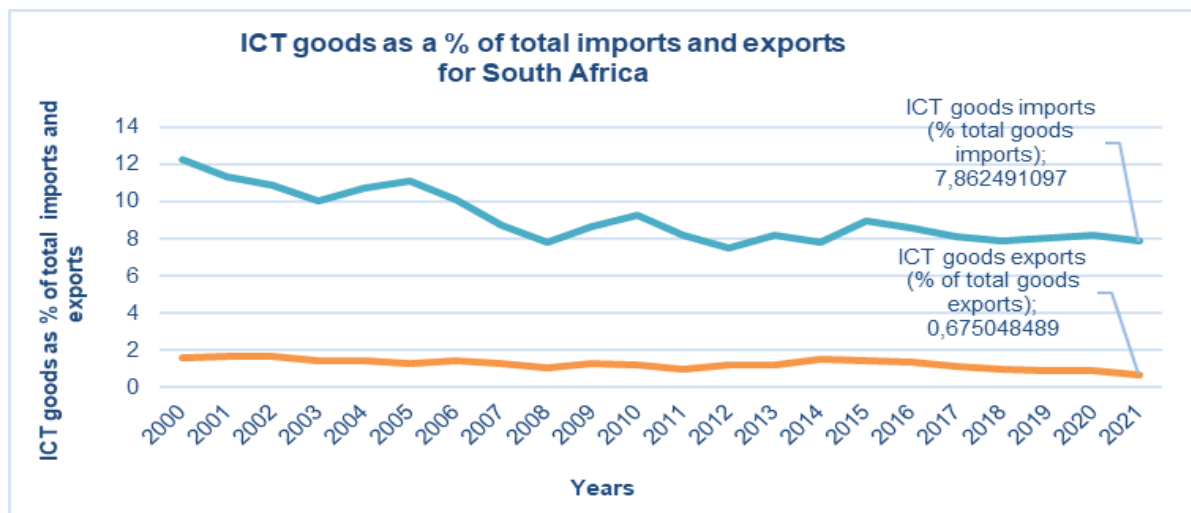
Source: World Bank

Most ICT products traded in South Africa include computers, peripheral equipment, consumer electronics, and electronic components. The country's primary strengths are its free trade and investment policies.

- The market welcomes investments that promote ICT and manufacturing.
- Its above-average score is further bolstered by financial solid and cybercrime regulations and extensive data protection regulations, which encourage cloud computing use (BMI, South Africa Information Technology Report, 2024).

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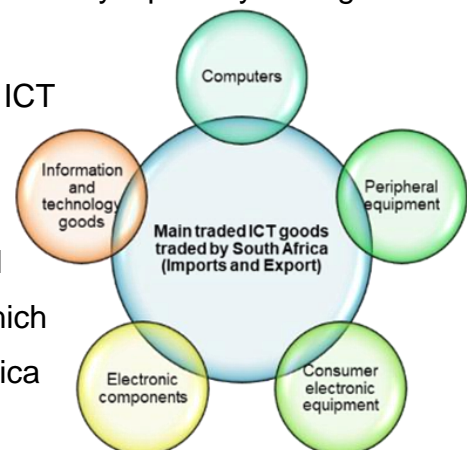
7. Growing e-commerce continues to be robust.

South Africa's e-commerce market experienced remarkable growth between 2020 and 2022, driven by the pandemic-induced demand for home deliveries and a shift in consumer behaviour towards online shopping.
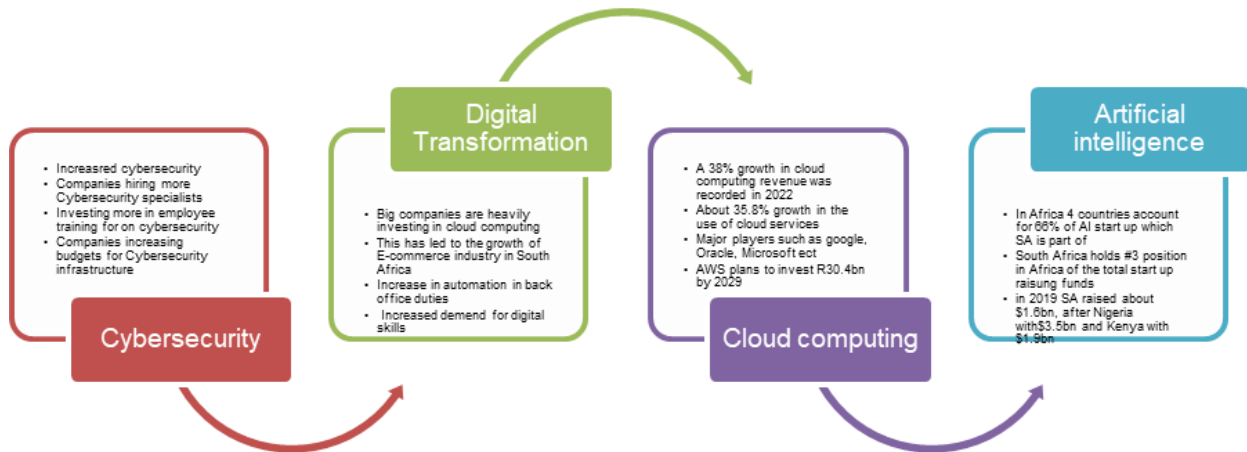
10.1 South Africa - E-Commerce Sales Trends (2020-2022)
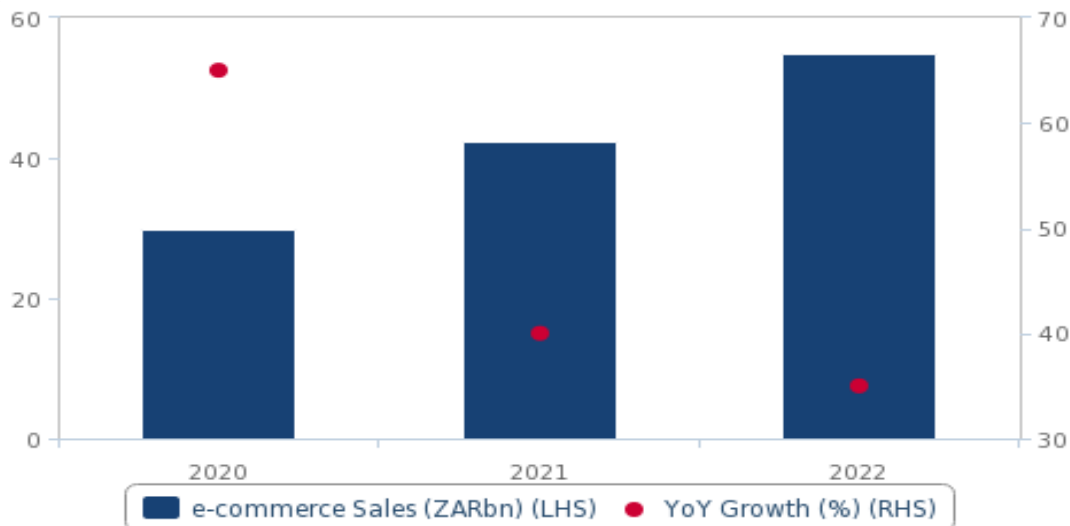
Source: Stats South Africa, Mastercard, World Wide Worx, BMI

- E-commerce sales surged by more than 65% in 2020, reaching ZAR30bn (USD1.8bn), followed by a 40% growth in 2021 to ZAR42.3bn and a 35% growth in 2022 to ZAR55bn, according to local surveys.
- This growth was fueled by the strong performance of companies like Checkers Sixty60, Mr Price, and Pick n Pay and boosted by events such as Black Friday.
- The online retail sector's share of total retail sales rose from 2.8% in 2020 to 4.0% in 2021 and is believed to have reached 4.7% in 2022.
- This upward trend demonstrates the increasing importance of e-commerce in South Africa's retail landscape and the potential for further growth and innovation in the market (BMI, 2024).

8. Opportunities for Developing Countries

Cybersecurity
- Increasred cybersecurity
- Companies hiring more Cybersecurity specialists
- Investing more in employee training for on cybersecurity
- Companies increasing budgets for Cybersecurity infrastructure

Digital Transformation
- Big companies are heavily investing in cloud computing
- This has led to the growth of E-commerce industry in South Africa
- Increase in automation in back office duties
- Increased demend for digital skills

Cloud computing
- A 38% growth in cloud computing revenue was recorded in 2022
- About 35.8% growth in the use of cloud services
- Major players such as google, Oracle, Microsoft ect
- AWS plans to invest R30.4bn by 2029

Artificial intelligence
- In Africa 4 countries account for 66% of AI start up which SA is part of
- South Africa holds #3 position in Africa of the total start up raisung funds
- in 2019 SA raised about $1.6bn, after Nigeria with$3.5bn and Kenya with $1.9bn

8.1 Digital Transformation

- Software development companies expect significant revenue growth as more companies invest in digital transformation.

- Digital transformation has been the talk of the town in South Africa to the degree that many fast-food outlets have adopted self-service tellers, such as Mcdonald's and KFC.

8.2 Cybersecurity

- Spending on cybersecurity solutions has surged in South Africa, creating a rising opportunity for IT service providers.

- According to a February 2023 study of 163 IT and security experts conducted by cybersecurity consultant Artic Wolf for ITWeb, 74% of respondents expect to increase their cybersecurity budget in 2023.

8.3 Cloud Computing

- The digital domain is increasingly essential for economic efficiency.

- The Internet and e-commerce platforms rapidly facilitate cross-border trade by allowing scalable deployments across large ecosystems. Digital platforms make it easier to collaborate with other ecosystem partners (DCDT, 2024).

- Cloud computing revenue in South Africa increased by 38% in 2022, owing to international cloud providers such as Amazon Web Services (AWS), Oracle, Huawei, and Microsoft growing their presence in the region, according to BMIT's South Africa Cloud Market Report, published in July 2023.

- Google should have launched its first cloud region in Africa despite announcing this in October 2022. AWS intends to invest R30.4 billion in its South African cloud

infrastructure by 2029.

- Through the Ministry of Minister of Communications and Digital Technologies, the South African Government has committed to develop a data and cloud policy in 2023.

8.4 Artificial intelligence

- There are significant signs that AI can provide more advantages to humanity than any technology developed in the last century.
- As with any technology, the benefits are always weighed against the drawbacks. The damage must be reduced and managed by an ongoing planning process at all levels of society.

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