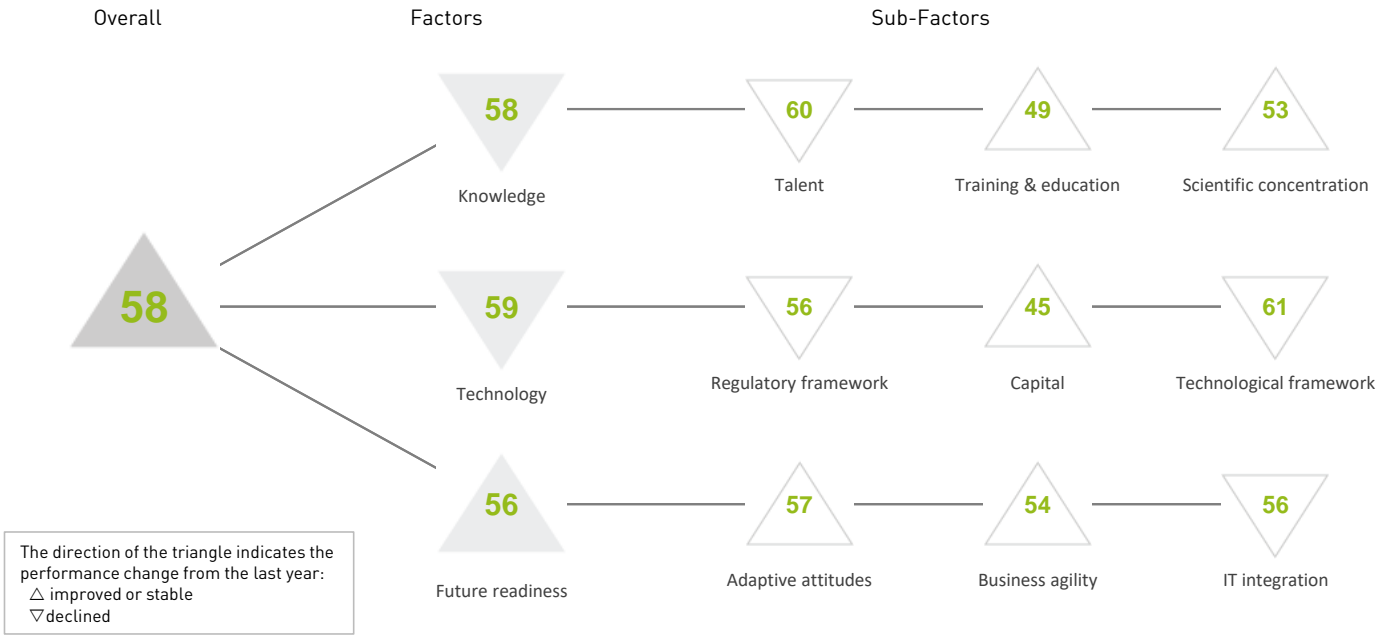


# SOUTH AFRICA

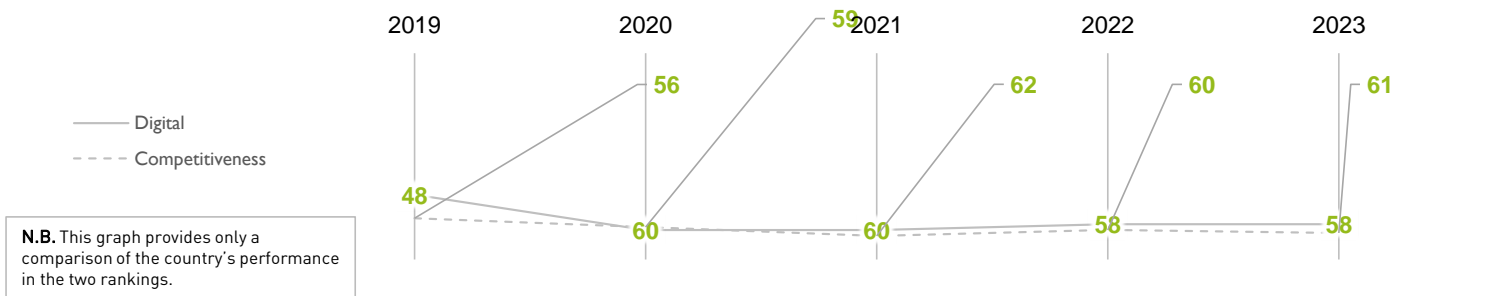
## OVERALL PERFORMANCE (64 countries)



## OVERALL & FACTORS - 5 years

	2019	2020	2021	2022	2023
OVERALL	48	60	60	58	58
Knowledge	54	60	62	54	58
Technology	51	55	59	58	59
Future readiness	44	57	59	59	56

## COMPETITIVENESS & DIGITAL RANKINGS



## PEER GROUPS RANKINGS

### EUROPE - MIDDLE EAST - AFRICA (41 countries)



### POPULATIONS > 20 MILLION (27 countries)



## SOUTH AFRICA

▶ Overall Top Strengths

▷ Overall Top Weaknesses

## KNOWLEDGE

Sub-Factors	2019	2020	2021	2022	2023
Talent	49	59	58	57	60
Training & education	58	60	62	50	49
Scientific concentration	48	53	53	53	53

Talent	Rank	Training & education	Rank	Scientific concentration	Rank
Educational assessment PISA - Math	-	Employee training	54	Total expenditure on R&D (%)	48
International experience	58	▶ Total public expenditure on education	02	Total R&D personnel per capita	53
Foreign highly skilled personnel	53	Higher education achievement	60	▶ Female researchers	15
▷ Management of cities	62	Pupil-teacher ratio (tertiary education)	40	▶ R&D productivity by publication	20
Digital/Technological skills	57	Graduates in Sciences	56	Scientific and technical employment	-
Net flow of international students	35	Women with degrees	55	High-tech patent grants	55
				Robots in Education and R&D	45

## TECHNOLOGY

Sub-Factors	2019	2020	2021	2022	2023
Regulatory framework	53	56	59	53	56
Capital	30	32	36	51	45
Technological framework	59	57	61	60	61

Regulatory framework	Rank	Capital	Rank	Technological framework	Rank
Starting a business	59	▶ IT & media stock market capitalization	05	Communications technology	57
Enforcing contracts	51	Funding for technological development	58	▷ Mobile broadband subscribers	62
▷ Immigration laws	61	Banking and financial services	53	Wireless broadband	37
Development & application of tech.	55	Country credit rating	57	▷ Internet users	62
Scientific research legislation	43	Venture capital	59	Internet bandwidth speed	59
Intellectual property rights	47	▶ Investment in Telecommunications	12	High-tech exports (%)	54

## FUTURE READINESS

Sub-Factors	2019	2020	2021	2022	2023
Adaptive attitudes	55	59	59	57	57
Business agility	40	58	59	57	54
IT integration	42	50	55	55	56

Adaptive attitudes	Rank	Business agility	Rank	IT integration	Rank
E-Participation	50	Opportunities and threats	36	E-Government	53
Internet retailing	57	World robots distribution	32	▷ Public-private partnerships	62
Tablet possession	55	Agility of companies	47	Cyber security	55
Smartphone possession	28	Use of big data and analytics	33	Software piracy	20
Attitudes toward globalization	41	Knowledge transfer	56	Government cyber security capacity	47
		Entrepreneurial fear of failure	46	Privacy protection by law content	49