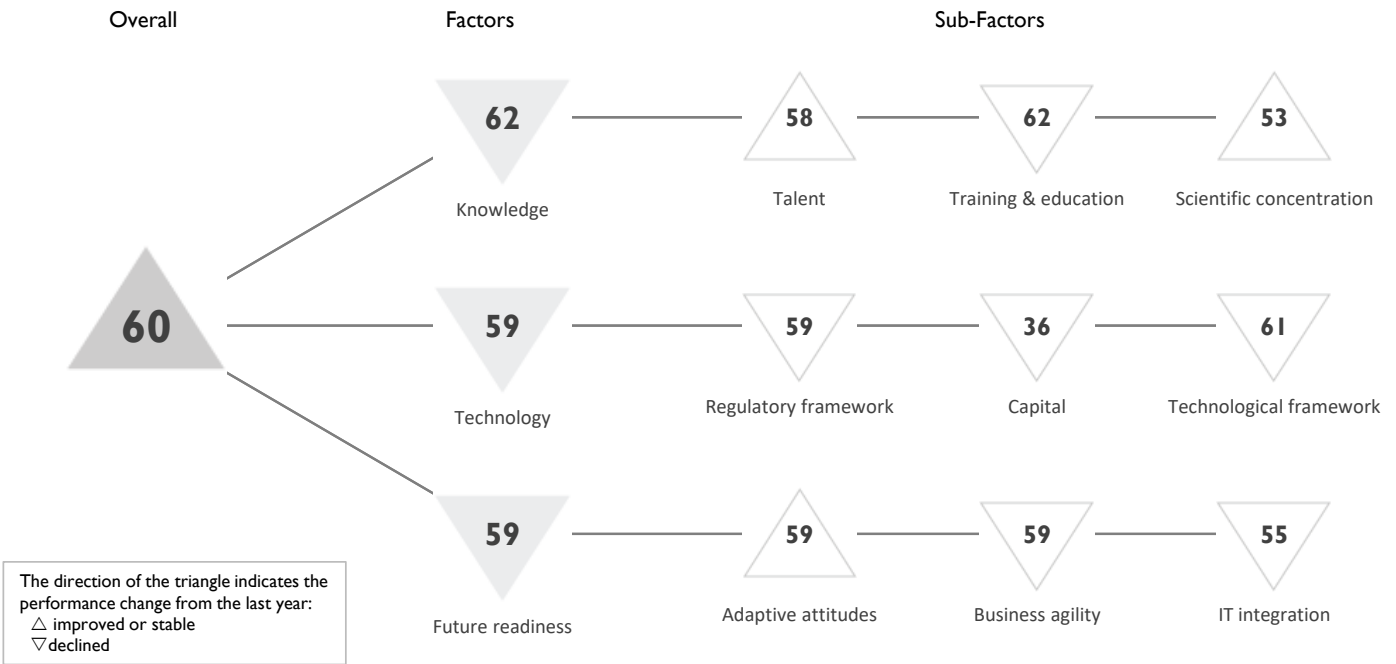


SOUTH AFRICA

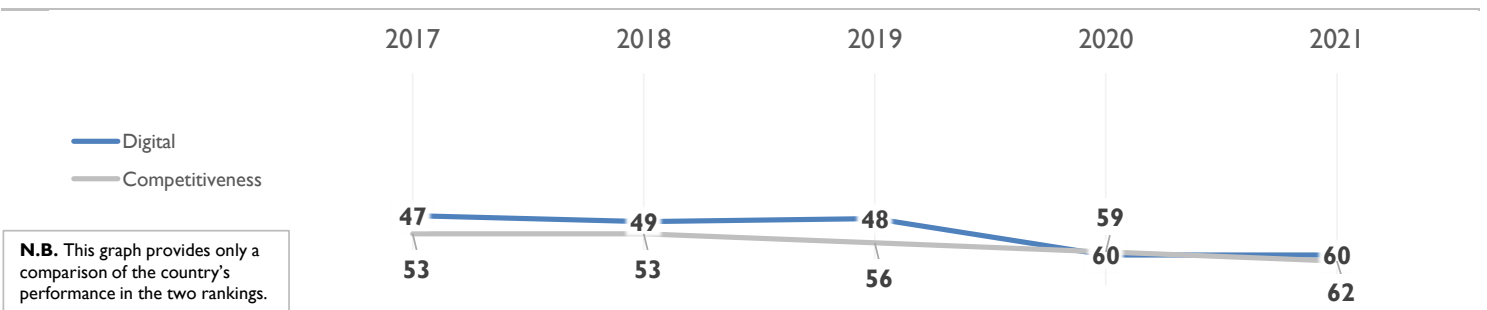
OVERALL PERFORMANCE (64 countries)



OVERALL & FACTORS - 5 years

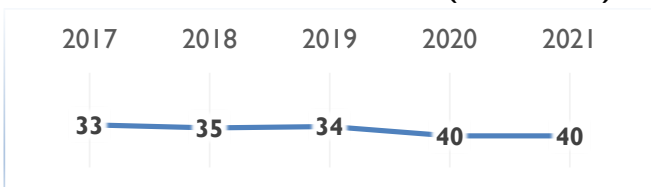
	2017	2018	2019	2020	2021
OVERALL	47	49	48	60	60
Knowledge	49	52	54	60	62
Technology	53	52	51	55	59
Future readiness	42	43	44	57	59

COMPETITIVENESS & DIGITAL RANKINGS

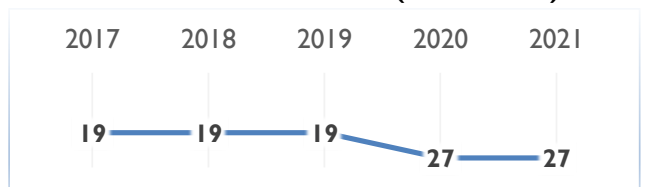


PEER GROUPS RANKINGS

EUROPE - MIDDLE EAST - AFRICA (41 countries)



POPULATIONS > 20 MILLION (29 countries)



SOUTH AFRICA

► Overall top strengths

▷ Overall top weaknesses

KNOWLEDGE

Subfactors	2017	2018	2019	2020	2021
Talent	52	54	49	59	58
Training & education	37	54	58	60	62
Scientific concentration	49	47	48	53	53

Talent	Rank
Educational assessment PISA - Math	-
International experience	56
Foreign highly-skilled personnel	50
▷ Management of cities	63
Digital/Technological skills	57
Net flow of international students	32

Training & education	Rank
Employee training	52
► Total public expenditure on education	2
Higher education achievement	60
Pupil-teacher ratio (tertiary education)	46
Graduates in Sciences	55
Women with degrees	55

Scientific concentration	Rank
Total expenditure on R&D (%)	44
Total R&D personnel per capita	51
► Female researchers	16
R&D productivity by publication	26
Scientific and technical employment	-
High-tech patent grants	59
Robots in Education and R&D	39

TECHNOLOGY

Subfactors	2017	2018	2019	2020	2021
Regulatory framework	54	53	53	56	59
Capital	35	27	30	32	36
Technological framework	57	58	59	57	61

Regulatory framework	Rank
Starting a business	59
Enforcing contracts	51
▷ Immigration laws	63
Development & application of tech.	53
Scientific research legislation	44
Intellectual property rights	49

Capital	Rank
► IT & media stock market capitalization	8
Funding for technological development	58
Banking and financial services	43
Country credit rating	56
Venture capital	56
► Investment in Telecommunications	4

Technological framework	Rank
Communications technology	59
▷ Mobile Broadband subscribers	61
Wireless broadband	47
▷ Internet users	63
Internet bandwidth speed	56
High-tech exports (%)	55

FUTURE READINESS

Subfactors	2017	2018	2019	2020	2021
Adaptive attitudes	54	56	55	59	59
Business agility	37	38	40	58	59
IT integration	42	39	42	50	55

Adaptive attitudes	Rank
E-Participation	45
Internet retailing	59
Tablet possession	57
Smartphone possession	44
Attitudes toward globalization	56

Business agility	Rank
Opportunities and threats	49
World robots distribution	33
Agility of companies	55
Use of big data and analytics	40
Knowledge transfer	55
Entrepreneurial fear of failure	48

IT integration	Rank
E-Government	56
▷ Public-private partnerships	61
Cyber security	57
► Software piracy	20