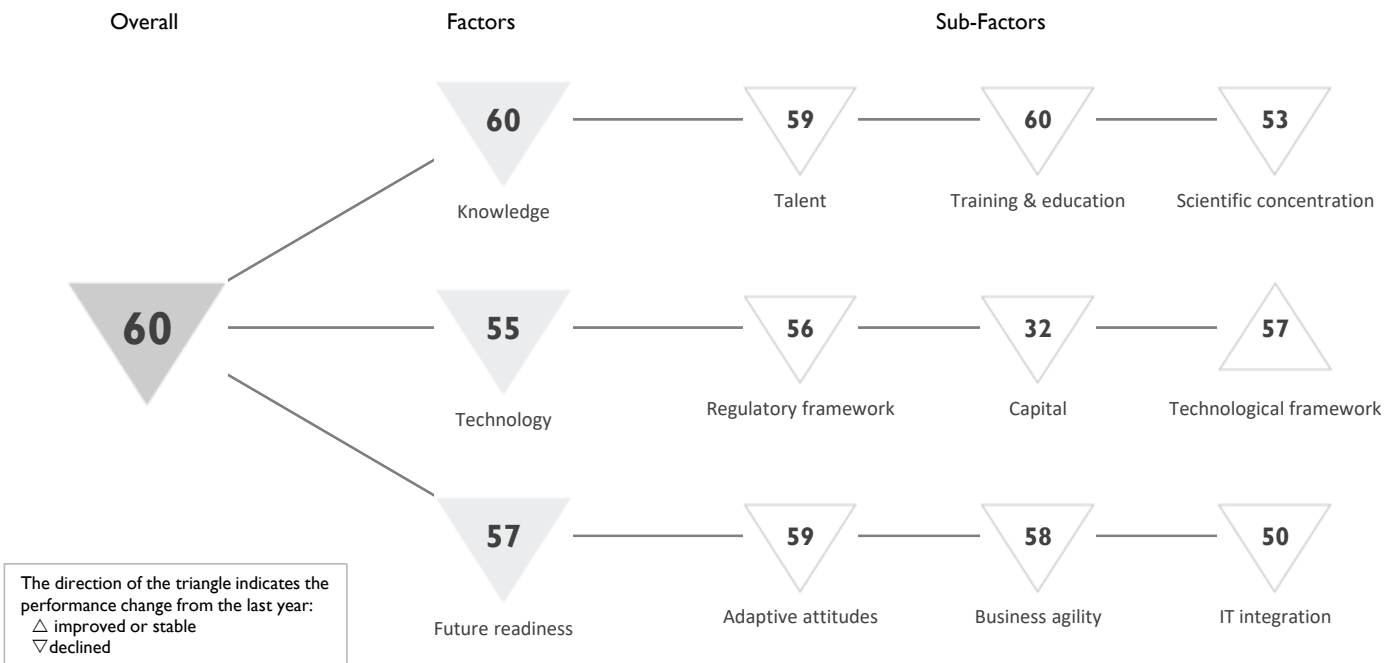


# SOUTH AFRICA

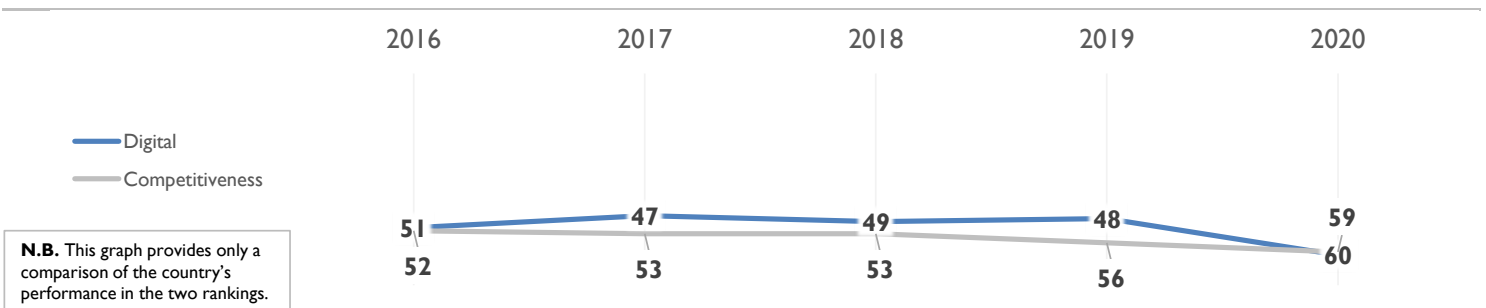
## OVERALL PERFORMANCE (63 countries)



### OVERALL & FACTORS - 5 years

	2016	2017	2018	2019	2020
OVERALL	51	47	49	48	60
Knowledge	49	49	52	54	60
Technology	51	53	52	51	55
Future readiness	47	42	43	44	57

### COMPETITIVENESS & DIGITAL RANKINGS



### PEER GROUPS RANKINGS

#### EUROPE - MIDDLE EAST - AFRICA (40 countries)



#### POPULATIONS > 20 MILLION (29 countries)



## SOUTH AFRICA

## ► Overall top strengths

## ▷ Overall top weaknesses

## KNOWLEDGE

Subfactors	2016	2017	2018	2019	2020
Talent	53	52	54	49	59
Training & education	38	37	54	58	60
Scientific concentration	50	49	47	48	53

Talent	Rank
Educational assessment PISA - Math	-
International experience	55
Foreign highly-skilled personnel	44
Management of cities	58
▷ Digital/Technological skills	61
Net flow of international students	30

Training & education	Rank
Employee training	57
► Total public expenditure on education	1
▷ Higher education achievement	60
Pupil-teacher ratio (tertiary education)	45
Graduates in Sciences	52
Women with degrees	54

Scientific concentration	Rank
Total expenditure on R&D (%)	44
Total R&D personnel per capita	53
► Female researchers	16
R&D productivity by publication	27
Scientific and technical employment	-
High-tech patent grants	54
Robots in Education and R&D	38

## TECHNOLOGY

Subfactors	2016	2017	2018	2019	2020
Regulatory framework	54	54	53	53	56
Capital	33	35	27	30	32
Technological framework	56	57	58	59	57

Regulatory framework	Rank
Starting a business	59
Enforcing contracts	51
Immigration laws	58
Development & application of tech.	53
Scientific research legislation	43
Intellectual property rights	41

Capital	Rank
► IT & media stock market capitalization	7
Funding for technological development	56
Banking and financial services	50
Country credit rating	54
Venture capital	58
► Investment in Telecommunications	2

Technological framework	Rank
▷ Communications technology	61
Mobile Broadband subscribers	48
Wireless broadband	50
▷ Internet users	59
Internet bandwidth speed	56
High-tech exports (%)	54

## FUTURE READINESS

Subfactors	2016	2017	2018	2019	2020
Adaptive attitudes	55	54	56	55	59
Business agility	38	37	38	40	58
IT integration	47	42	39	42	50

Adaptive attitudes	Rank
E-Participation	45
▷ Internet retailing	59
Tablet possession	57
Smartphone possession	45
Attitudes toward globalization	52

Business agility	Rank
Opportunities and threats	56
World robots distribution	34
Agility of companies	58
Use of big data and analytics	44
Knowledge transfer	52
Entrepreneurial fear of failure	47

IT integration	Rank
E-Government	56
Public-private partnerships	57
Cyber security	54
► Software piracy	20