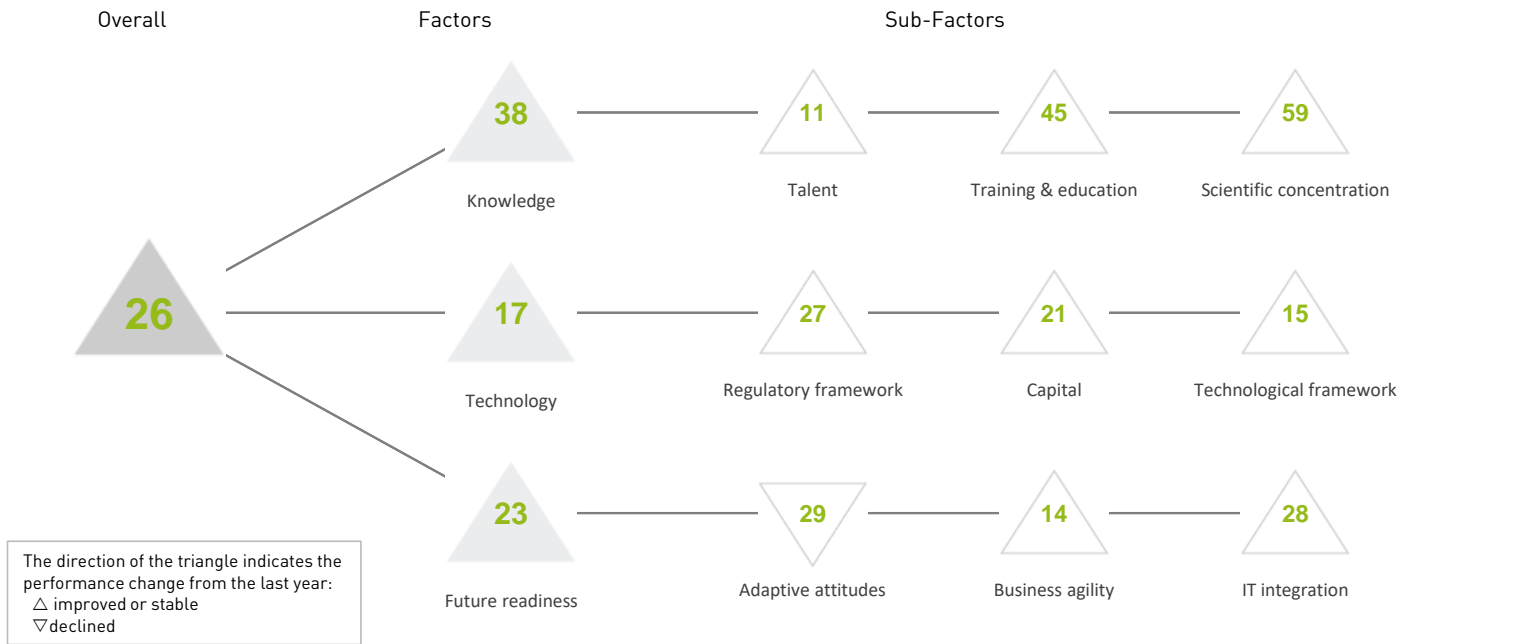


QATAR

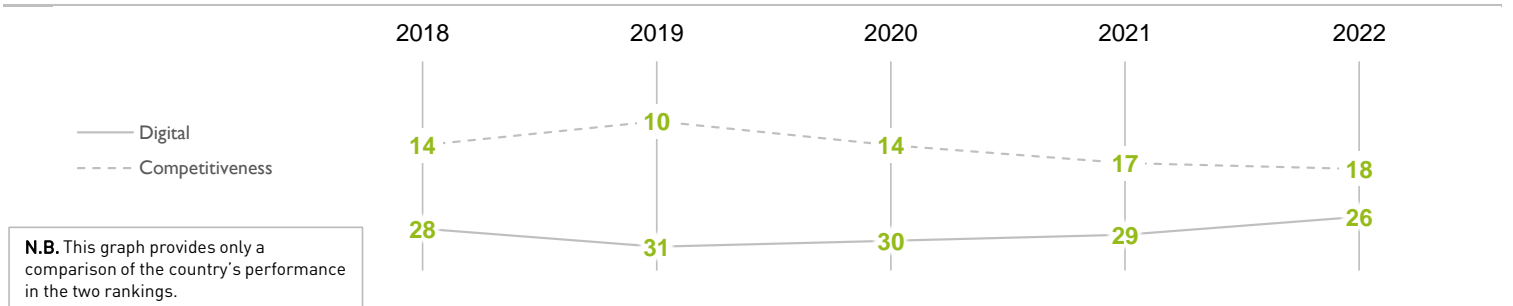
OVERALL PERFORMANCE (63 countries)



OVERALL & FACTORS - 5 years

	2018	2019	2020	2021	2022
OVERALL	28	31	30	29	26
Knowledge	37	45	45	44	38
Technology	27	33	25	19	17
Future readiness	16	22	24	23	23

COMPETITIVENESS & DIGITAL RANKINGS



PEER GROUPS RANKINGS

EUROPE - MIDDLE EAST - AFRICA (40 countries)



POPULATIONS < 20 MILLION (36 countries)



▶ Overall Top Strengths

▷ Overall Top Weaknesses

KNOWLEDGE

Sub-Factors	2018	2019	2020	2021	2022
Talent	15	15	15	19	11
Training & education	38	48	53	54	45
Scientific concentration	59	61	60	59	59

Talent	Rank
Educational assessment PISA - Math	48
▶ International experience	02
Foreign highly-skilled personnel	04
Management of cities	06
Digital/Technological skills	11
Net flow of international students	24

Training & education	Rank
Employee training	19
▷ Total public expenditure on education	57
Higher education achievement	53
Pupil-teacher ratio (tertiary education)	29
Graduates in Sciences	32
Women with degrees	-

Scientific concentration	Rank
Total expenditure on R&D (%)	49
Total R&D personnel per capita	45
Female researchers	35
R&D productivity by publication	51
▷ Scientific and technical employment	57
High-tech patent grants	11
Robots in Education and R&D	51

TECHNOLOGY

Sub-Factors	2018	2019	2020	2021	2022
Regulatory framework	32	28	29	27	27
Capital	24	23	19	24	21
Technological framework	30	38	31	16	15

Regulatory framework	Rank
Starting a business	45
▷ Enforcing contracts	54
Immigration laws	13
Development & application of tech.	11
Scientific research legislation	09
Intellectual property rights	18

Capital	Rank
IT & media stock market capitalization	44
Funding for technological development	07
Banking and financial services	08
Country credit rating	22
Venture capital	12
Investment in Telecommunications	46

Technological framework	Rank
Communications technology	16
▶ Mobile Broadband subscribers	02
Wireless broadband	06
▶ Internet users	02
Internet bandwidth speed	39
High-tech exports (%)	52

FUTURE READINESS

Sub-Factors	2018	2019	2020	2021	2022
Adaptive attitudes	16	18	27	26	29
Business agility	08	12	17	17	14
IT integration	26	27	28	28	28

Adaptive attitudes	Rank
▷ E-Participation	55
Internet retailing	52
Tablet possession	05
Smartphone possession	03
Attitudes toward globalization	17

Business agility	Rank
Opportunities and threats	11
▷ World robots distribution	56
Agility of companies	23
▶ Use of big data and analytics	03
Knowledge transfer	11
Entrepreneurial fear of failure	14

IT integration	Rank
E-Government	51
Public-private partnerships	12
▶ Cyber security	01
Software piracy	38
Government cyber security capacity	13
Privacy protection by law content	47