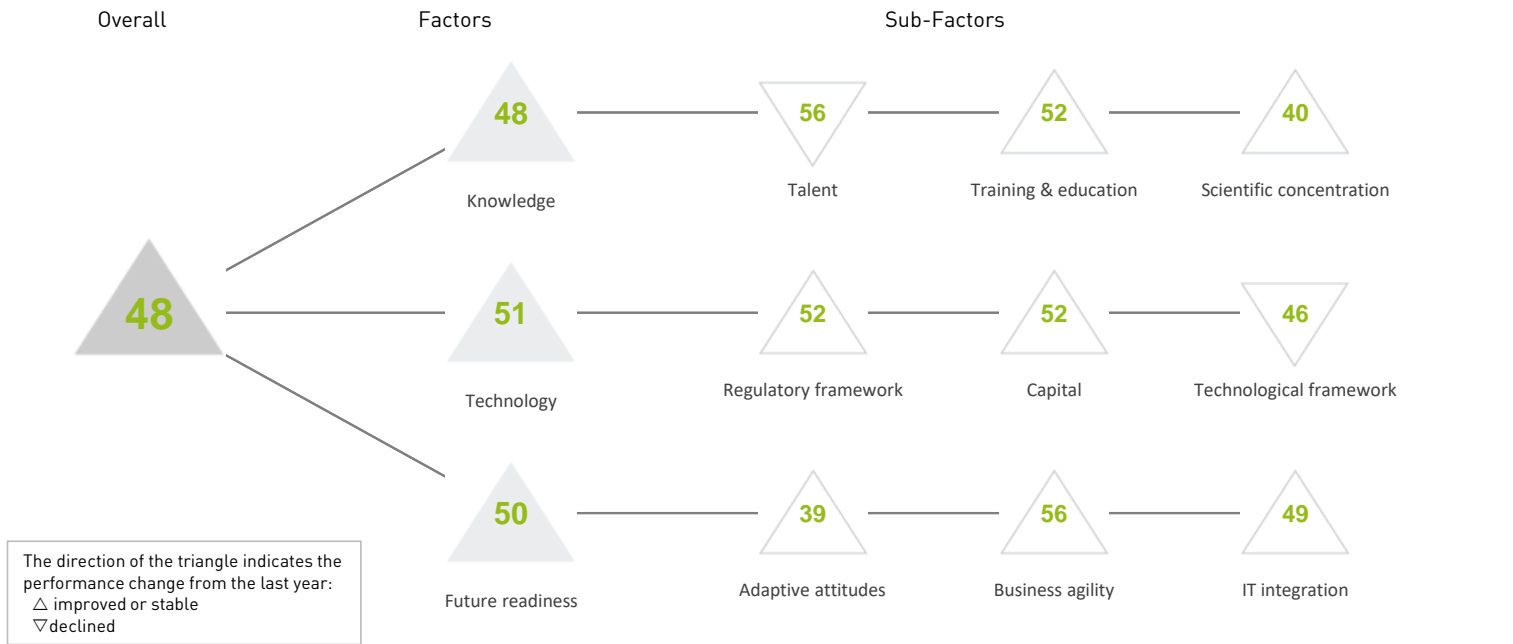


BULGARIA

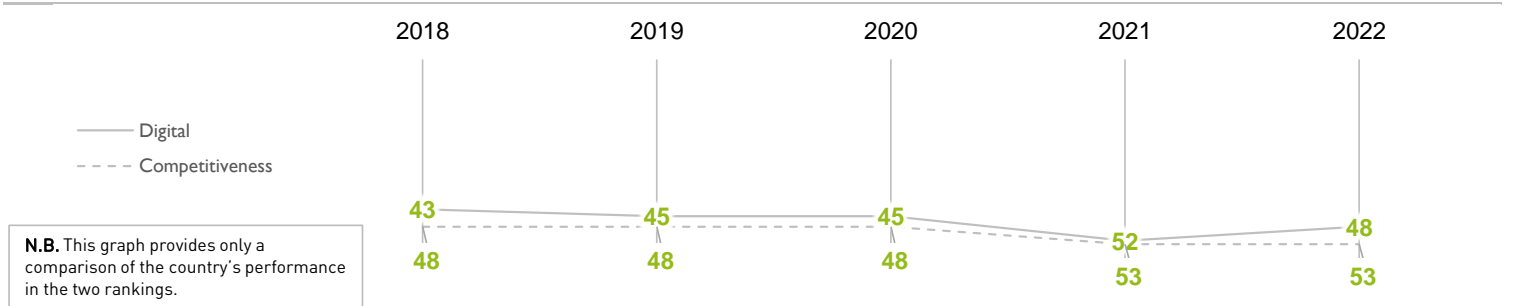
OVERALL PERFORMANCE (63 countries)



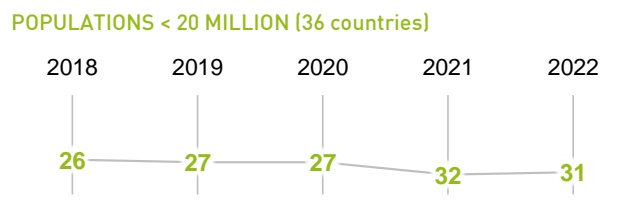
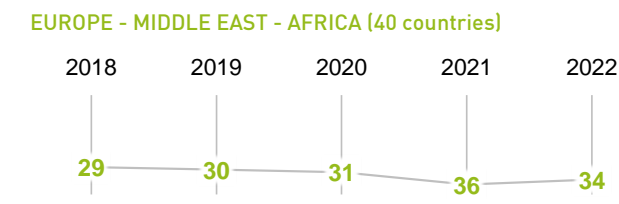
OVERALL & FACTORS - 5 years

	2018	2019	2020	2021	2022
OVERALL	43	45	45	52	48
Knowledge	41	46	47	53	48
Technology	42	42	45	51	51
Future readiness	55	48	44	55	50

COMPETITIVENESS & DIGITAL RANKINGS



PEER GROUPS RANKINGS



BULGARIA

▶ Overall Top Strengths

▷ Overall Top Weaknesses

KNOWLEDGE

Sub-Factors	2018	2019	2020	2021	2022
Talent	53	50	48	54	56
Training & education	42	46	50	53	52
Scientific concentration	33	37	42	46	40

Talent	Rank	Training & education	Rank	Scientific concentration	Rank
Educational assessment PISA - Math	42	▷ Employee training	59	Total expenditure on R&D (%)	43
International experience	56	Total public expenditure on education	48	Total R&D personnel per capita	35
▷ Foreign highly-skilled personnel	61	Higher education achievement	48	▶ Female researchers	11
Management of cities	51	▶ Pupil-teacher ratio (tertiary education)	13	R&D productivity by publication	45
Digital/Technological skills	26	Graduates in Sciences	48	Scientific and technical employment	37
Net flow of international students	52	Women with degrees	35	▶ High-tech patent grants	13
				Robots in Education and R&D	48

TECHNOLOGY

Sub-Factors	2018	2019	2020	2021	2022
Regulatory framework	52	46	55	55	52
Capital	50	42	48	53	52
Technological framework	36	44	39	42	46

Regulatory framework	Rank	Capital	Rank	Technological framework	Rank
Starting a business	46	IT & media stock market capitalization	43	Communications technology	35
Enforcing contracts	31	Funding for technological development	47	Mobile Broadband subscribers	37
Immigration laws	58	Banking and financial services	52	Wireless broadband	21
Development & application of tech.	53	Country credit rating	42	Internet users	55
Scientific research legislation	53	Venture capital	50	Internet bandwidth speed	38
Intellectual property rights	55	Investment in Telecommunications	37	High-tech exports (%)	39

FUTURE READINESS

Sub-Factors	2018	2019	2020	2021	2022
Adaptive attitudes	48	43	41	45	39
Business agility	59	56	40	61	56
IT integration	54	47	47	53	49

Adaptive attitudes	Rank	Business agility	Rank	IT integration	Rank
E-Participation	22	▷ Opportunities and threats	60	E-Government	39
Internet retailing	47	World robots distribution	44	Public-private partnerships	51
Tablet possession	45	▷ Agility of companies	62	Cyber security	53
Smartphone possession	23	Use of big data and analytics	54	Software piracy	51
Attitudes toward globalization	50	Knowledge transfer	57	▷ Government cyber security capacity	59
		▶ Entrepreneurial fear of failure	06	▶ Privacy protection by law content	20