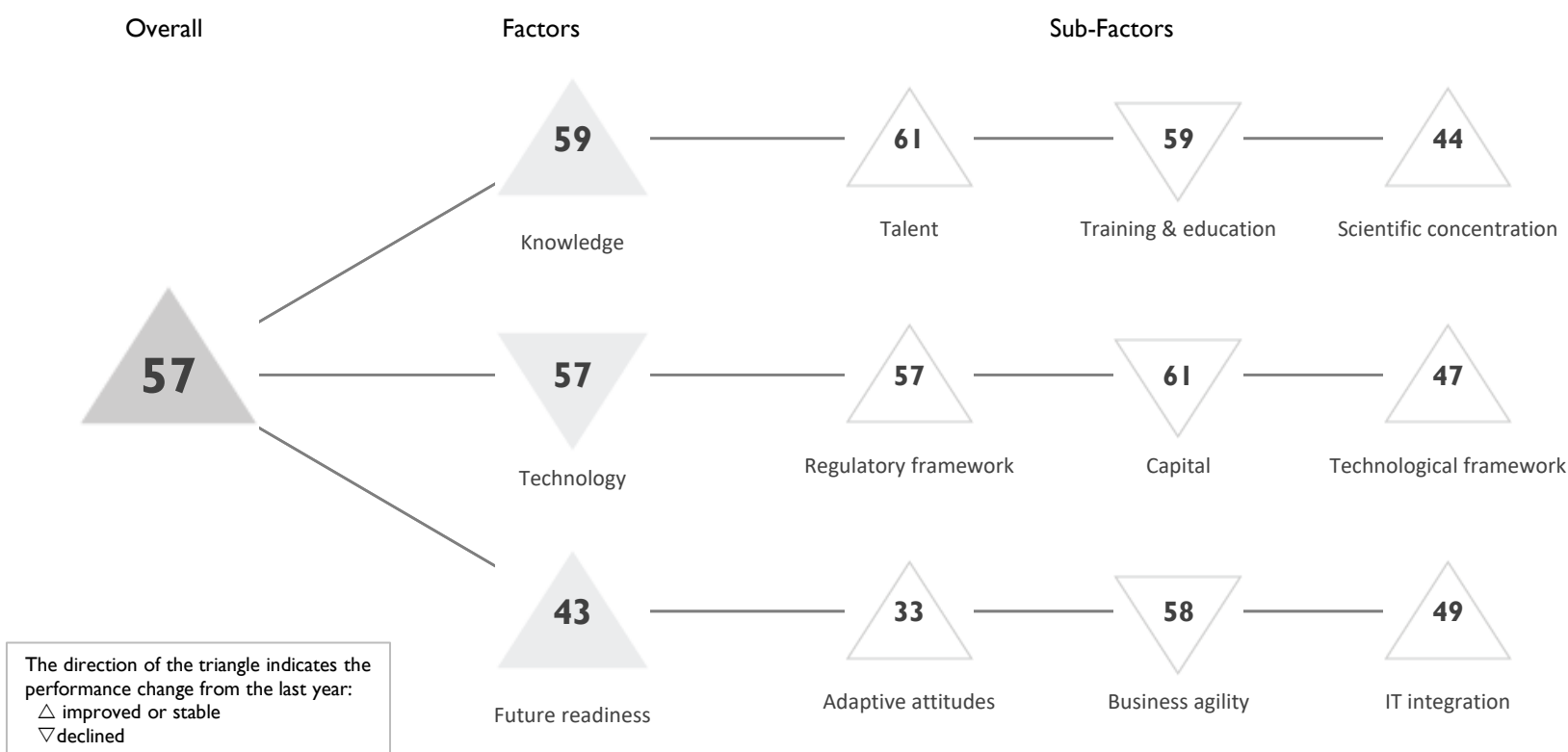


# BRAZIL

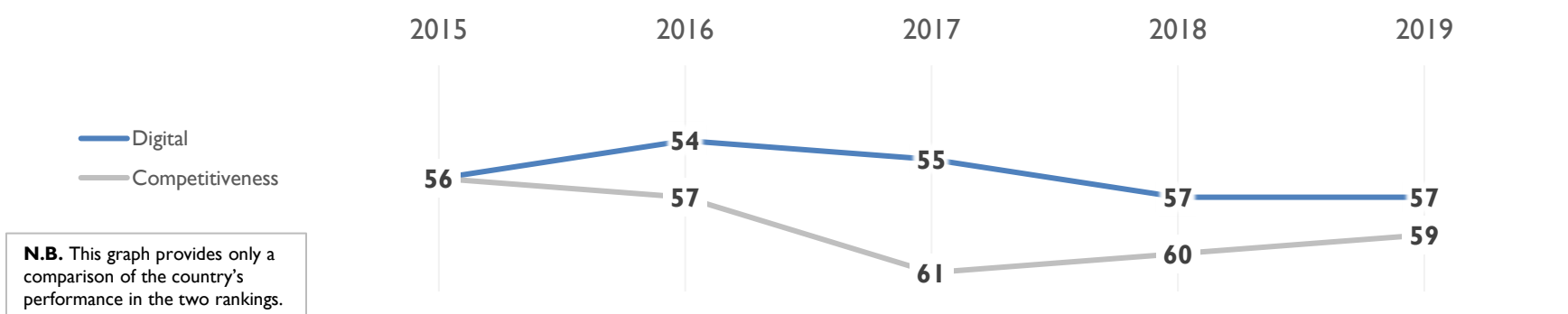
## OVERALL PERFORMANCE (63 countries)



### OVERALL & FACTORS - 5 years

	2015	2016	2017	2018	2019
OVERALL	56	54	55	57	57
Knowledge	55	54	55	62	59
Technology	55	54	55	55	57
Future readiness	51	49	44	47	43

### COMPETITIVENESS & DIGITAL RANKINGS

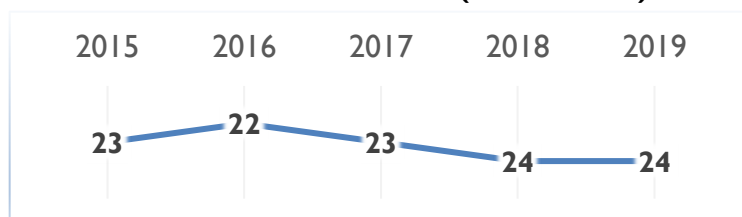


### PEER GROUPS RANKINGS

#### THE AMERICAS (9 countries)



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



## ► Overall top strengths

## ▷ Overall top weaknesses

## KNOWLEDGE

Subfactors	2015	2016	2017	2018	2019
Talent	60	59	60	61	61
Training & education	52	49	48	57	59
Scientific concentration	40	43	44	54	44

Talent	Rank
Educational assessment PISA - Math	56
International experience	58
Foreign highly-skilled personnel	58
▷ Management of cities	60
▷ Digital/Technological skills	62
Net flow of international students	38

Training & education	Rank
Employee training	53
▶ Total public expenditure on education	8
Higher education achievement	57
Pupil-teacher ratio (tertiary education)	48
Graduates in Sciences	56
Women with degrees	51

Scientific concentration	Rank
Total expenditure on R&D (%)	30
Total R&D personnel per capita	44
Female researchers	51
▶ R&D productivity by publication	8
Scientific and technical employment	-
High-tech patent grants	46
▶ Robots in Education and R&D	14

## TECHNOLOGY

Subfactors	2015	2016	2017	2018	2019
Regulatory framework	57	58	60	59	57
Capital	55	54	56	56	61
Technological framework	49	47	48	47	47

Regulatory framework	Rank
▷ Starting a business	60
Enforcing contracts	36
Immigration laws	46
Development and application of techn	59
▷ Scientific research legislation	60
Intellectual property rights	57

Capital	Rank
IT & media stock market capitalization	44
Funding for technological development	59
Banking and financial services	58
Country credit rating	56
Venture capital	55
Investment in Telecommunications	39

Technological framework	Rank
▷ Communications technology	61
▶ Mobile Broadband subscribers	27
Wireless broadband	33
Internet users	46
Internet bandwidth speed	52
High-tech exports (%)	30

## FUTURE READINESS

Subfactors	2015	2016	2017	2018	2019
Adaptive attitudes	43	44	45	38	33
Business agility	54	51	46	52	58
IT integration	51	48	49	51	49

Adaptive attitudes	Rank
▶ E-Participation	12
Internet retailing	42
Tablet possession	48
Smartphone possession	28
Attitudes toward globalization	47

Business agility	Rank
Opportunities and threats	50
World robots distribution	19
Agility of companies	57
Use of big data and analytics	60
Knowledge transfer	59

IT integration	Rank
E-Government	37
Public-private partnerships	58
Cyber security	58
Software piracy	36