

IMD World Digital Competitiveness ranking 2020

2 de Outubro de 2020

Portugal ocupa a 37ª posição do ranking de competitividade digital do IMD World Competitiveness center, divulgado recentemente, mantendo assim a tendência decrescente dos últimos cinco anos, com exceção de 2018.

Apesar de ter conseguido melhorias ligeiras nas áreas do conhecimento e da tecnologia, o posicionamento nacional caiu 3 posições face a 2019 e não conseguiu acompanhar o ritmo de competitividade digital de outros países.

Com as devidas vénias transcrevemos parte da informação publicada pelo IMD.

“Since the beginning of the year, every aspect of our lives has been affected by the pandemic.

Technology has been incorporated to address the pandemic in different dimensions from communication to monitoring, assessing and, hopefully in the nondistant future, finding a cure for the virus.

For most countries the responses of the survey were acquired during the first wave of COVID-19.

WDCR measures the capacity and readiness of 63 economies to adopt and explore digital technologies for economic and social transformation.

The ranking relies on three factors:

- *Knowledge, which captures the intangible infrastructure necessary for the learning and discovery dimensions of technology;*
- *Technology, which quantifies the landscape of developing digital technologies; and*
- *Future Readiness, that examines the level of preparedness of an economy to assume its digital transformation.*

Methodology in a Nutshell

1. The IMD World Digital Competitiveness (WDC) ranking analyzes and ranks the extent to which countries adopt and explore digital technologies leading to transformation in government practices, business models and society in general.

2. As in the case of the IMD World Competitiveness ranking, is assumed that digital transformation takes place primarily at enterprise level (whether private or state-owned) but it also occurs at the government and society levels.

3. Based on the research, the methodology of the WDC ranking defines digital competitiveness into three main factors: - Knowledge - Technology - Future readiness

4. In turn, each of these factors is divided into 3 sub-factors which highlight every facet of the areas analyzed. Altogether, the WDC features 9 such sub-factors.
5. These 9 sub-factors comprise 52 criteria, although each sub-factor does not necessarily have the same number of criteria (for example, it takes more criteria to assess Training and Education than to evaluate IT integration).
6. Each sub-factor, independently of the number of criteria it contains, has the same weight in the overall consolidation of results, that is approximately 11.1% ($100 \div 9 \sim 11.1$).
7. Criteria can be hard data, which analyze digital competitiveness as it can be measured (e.g. Internet bandwidth speed) or soft data, which analyze competitiveness as it can be perceived (e.g. Agility of companies). Hard criteria represent a weight of 2/3 in the overall ranking whereas the survey data represent a weight of 1/3.
8. The 52 criteria include 19 new indicators which are only used in the assessment of the WDC ranking. The rest of the indicators are shared with the IMD World Competitiveness Ranking.
9. In addition, two criteria are for background information only, which means that they are not used in calculating the overall competitiveness ranking (i.e., Population and GDP).
10. Finally, aggregating the results of the 9 sub-factors makes the total consolidation, which leads to the overall ranking of the WDC"

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O texto foi elaborado com base na melhor informação disponível à data da sua edição



Appendices

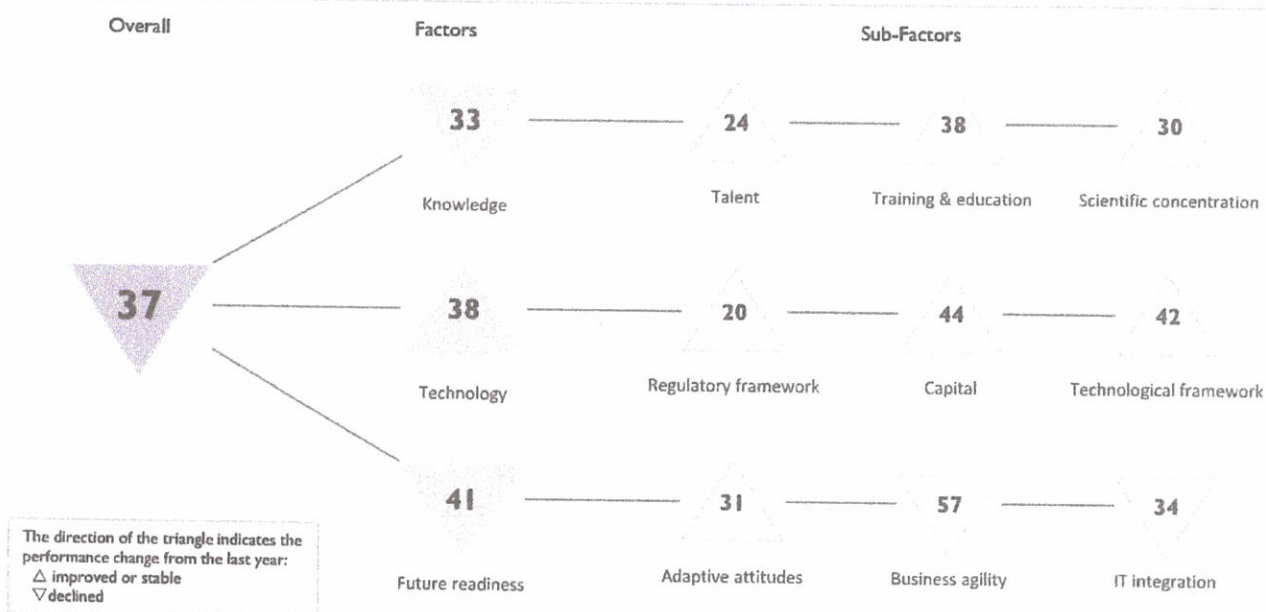
Digital competitiveness ranking 2019 and 2020

Country / Economy	2020	Change	2019	Country / Economy	2020	Change	2019
USA	1	— (0)	1	Spain	33	▼ (-5)	28
Singapore	2	— (0)	2	Saudi Arabia	34	▲ (+5)	39
Denmark	3	▲ (+1)	4	Czech Republic	35	▲ (+2)	37
Sweden	4	▼ (-1)	3	Kazakhstan	36	▼ (-1)	35
Hong Kong SAR	5	▲ (+3)	8	Portugal	37	▼ (-3)	34
Switzerland	6	▼ (-1)	5	Latvia	38	▼ (-2)	36
Netherlands	7	▼ (-1)	6	Thailand	39	▲ (+1)	40
Korea Rep.	8	▲ (+2)	10	Cyprus	40	▲ (+14)	54
Norway	9	— (0)	9	Chile	41	▲ (+1)	42
Finland	10	▼ (-3)	7	Italy	42	▼ (-1)	41
Taiwan, China	11	▲ (+2)	13	Russia	43	▼ (-5)	38
Canada	12	▼ (-1)	11	Turkey	44	▲ (+8)	52
United Kingdom	13	▲ (+2)	15	Bulgaria	45	— (0)	45
UAE	14	▼ (-2)	12	Greece	46	▲ (+7)	53
Australia	15	▼ (-1)	14	Hungary	47	▼ (-4)	43
China	16	▲ (+6)	22	India	48	▼ (-4)	44
Austria	17	▲ (+3)	20	Romania	49	▼ (-3)	46
Germany	18	▼ (-1)	17	Slovak Republic	50	▼ (-3)	47
Israel	19	▼ (-3)	16	Brazil	51	▲ (+6)	57
Ireland	20	▼ (-1)	19	Croatia	52	▼ (-1)	51
Estonia	21	▲ (+8)	29	Jordan	53	▼ (-3)	50
New Zealand	22	▼ (-4)	18	Mexico	54	▼ (-5)	49
Iceland	23	▲ (+4)	27	Peru	55	▲ (+6)	61
France	24	— (0)	24	Indonesia	56	— (0)	56
Belgium	25	— (0)	25	Philippines	57	▼ (-2)	55
Malaysia	26	— (0)	26	Ukraine	58	▲ (+2)	60
Japan	27	▼ (-4)	23	Argentina	59	— (0)	59
Luxembourg	28	▼ (-7)	21	South Africa	60	▼ (-12)	48
Lithuania	29	▲ (+1)	30	Colombia	61	▼ (-3)	58
Qatar	30	▲ (+1)	31	Mongolia	62	— (0)	62
Slovenia	31	▲ (+1)	32	Venezuela	63	— (0)	63
Poland	32	▲ (+1)	33				

DIGITAL TRENDS - OVERALL

PORTUGAL

OVERALL PERFORMANCE (63 countries)

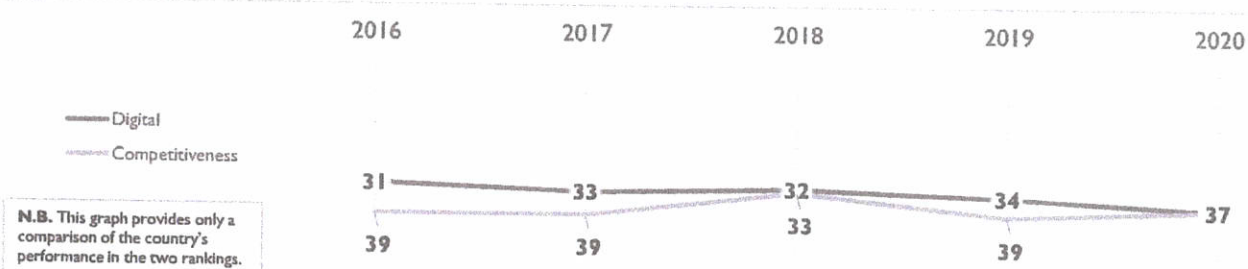


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OVERALL & FACTORS - 5 years

	2016	2017	2018	2019	2020
OVERALL	31	33	32	34	37
Knowledge	31	31	27	31	33
Technology	35	37	36	38	38
Future readiness	31	35	32	34	41

COMPETITIVENESS & DIGITAL RANKINGS



PEER GROUPS RANKINGS

EUROPE - MIDDLE EAST - AFRICA (40 countries)



POPULATIONS < 20 MILLION (34 countries)



- Overall top strengths
- Overall top weaknesses

KNOWLEDGE

Subfactors	2016	2017	2018	2019	2020
Talent	31	30	23	26	24
Training & education	21	18	27	39	38
Scientific concentration	35	36	34	32	30

Talent	Rank	Training & education	Rank	Scientific concentration	Rank
Educational assessment PISA - Math	27	► Employee training	58	Total expenditure on R&D (%)	29
International experience	48	Total public expenditure on education	31	Total R&D personnel per capita	23
Foreign highly-skilled personnel	35	Higher education achievement	42	Female researchers	18
Management of cities	24	► Pupil-teacher ratio (tertiary education)	13	R&D productivity by publication	32
Digital/Technological skills	14	► Graduates in Sciences	13	Scientific and technical employment	33
Net flow of international students	28	Women with degrees	39	High-tech patent grants	41
				Robots in Education and R&D	34

TECHNOLOGY

Subfactors	2016	2017	2018	2019	2020
Regulatory framework	20	19	19	21	20
Capital	50	50	45	48	44
Technological framework	38	43	39	45	42

Regulatory framework	Rank	Capital	Rank	Technological framework	Rank
Starting a business	33	IT & media stock market capitalization	34	► Communications technology	5
Enforcing contracts	30	Funding for technological development	30	► Mobile Broadband subscribers	59
► Immigration laws	4	Banking and financial services	42	Wireless broadband	52
Development & application of tech.	18	Country credit rating	46	► Internet users	12
Scientific research legislation	30	Venture capital	42	Internet bandwidth speed	23
Intellectual property rights	29	Investment in Telecommunications	39	► High-tech exports (%)	55

FUTURE READINESS

Subfactors	2016	2017	2018	2019	2020
Adaptive attitudes	31	34	35	32	31
Business agility	27	40	27	52	57
IT integration	32	32	30	29	34

Adaptive attitudes	Rank	Business agility	Rank	IT integration	Rank
E-Participation	35	Opportunities and threats	50	E-Government	32
Internet retailing	35	World robots distribution	31	Public-private partnerships	41
Tablet possession	32	► Agility of companies	53	Cyber security	41
Smartphone possession	41	► Use of big data and analytics	55	Software piracy	28
Attitudes toward globalization	19	Knowledge transfer	32		
		Entrepreneurial fear of failure	49		