

7.01 Firm-level technology absorption

To what extent do businesses in your country absorb new technology? [1 = not at all; 7 = aggressively absorb] | 2010–2011 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 4.8	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 4.8	7
1	Sweden	6.5				72	Jamaica	4.7			
2	Iceland	6.3				73	Albania	4.7			
3	Japan	6.3				74	Morocco	4.7			
4	Switzerland	6.2				75	Thailand	4.7			
5	Norway	6.1				76	Uruguay	4.7			
6	Israel	6.1				77	Cambodia	4.7			
7	Qatar	6.0				78	Egypt	4.7			
8	Korea, Rep.	6.0				79	Nigeria	4.7			
9	Denmark	6.0				80	Croatia	4.7			
10	Singapore	6.0				81	Mexico	4.6			
11	Finland	6.0				82	Ukraine	4.6			
12	Austria	5.9				83	Colombia	4.6			
13	Taiwan, China	5.9				84	Slovenia	4.6			
14	Germany	5.9				85	El Salvador	4.6			
15	Hong Kong SAR	5.9				86	Zambia	4.6			
16	United Arab Emirates	5.9				87	Gambia, The	4.6			
17	New Zealand	5.9				88	Vietnam	4.6			
18	United States	5.9				89	Greece	4.6			
19	Australia	5.8				90	Mongolia	4.5			
20	Bahrain	5.7				91	Botswana	4.5			
21	Netherlands	5.7				92	Pakistan	4.5			
22	United Kingdom	5.7				93	Argentina	4.5			
23	Saudi Arabia	5.7				94	Latvia	4.5			
24	Luxembourg	5.7				95	Bangladesh	4.4			
25	France	5.6				96	Guyana	4.4			
26	Belgium	5.6				97	Uganda	4.4			
27	Portugal	5.6				98	Mozambique	4.4			
28	Malaysia	5.6				99	Montenegro	4.4			
29	Canada	5.6				100	Poland	4.3			
30	South Africa	5.5				101	Benin	4.3			
31	Senegal	5.5				102	Italy	4.3			
32	Panama	5.5				103	Ecuador	4.3			
33	Puerto Rico	5.5				104	Malawi	4.2			
34	Malta	5.5				105	Venezuela	4.2			
35	Ireland	5.5				106	Burkina Faso	4.2			
36	Estonia	5.5				107	Bosnia and Herzegovina	4.2			
37	Jordan	5.4				108	Cameroon	4.2			
38	Barbados	5.4				109	Ghana	4.2			
39	Kuwait	5.4				110	Paraguay	4.2			
40	Chile	5.4				111	Zimbabwe	4.2			
41	India	5.3				112	Mali	4.2			
42	Sri Lanka	5.2				113	Kazakhstan	4.1			
43	Cyprus	5.2				114	Armenia	4.1			
44	Turkey	5.2				115	Georgia	4.1			
45	Czech Republic	5.2				116	Nepal	4.1			
46	Spain	5.2				117	Romania	4.1			
47	Guatemala	5.2				118	Nicaragua	4.0			
48	Brazil	5.2				119	Tajikistan	4.0			
49	Oman	5.2				120	Iran, Islamic Rep.	4.0			
50	Tunisia	5.1				121	Macedonia, FYR	4.0			
51	Namibia	5.1				122	Lesotho	4.0			
52	Philippines	5.1				123	Yemen	4.0			
53	Lithuania	5.0				124	Suriname	3.9			
54	Indonesia	5.0				125	Tanzania	3.9			
55	Costa Rica	5.0				126	Moldova	3.9			
56	Mauritius	5.0				127	Bulgaria	3.9			
57	Dominican Republic	5.0				128	Swaziland	3.9			
58	Slovak Republic	5.0				129	Belize	3.9			
59	Hungary	4.9				130	Russian Federation	3.8			
60	Kenya	4.9				131	Madagascar	3.8			
61	China	4.9				132	Haiti	3.8			
62	Peru	4.9				133	Angola	3.7			
63	Brunei Darussalam	4.9				134	Algeria	3.7			
64	Cape Verde	4.8				135	Ethiopia	3.7			
65	Côte d'Ivoire	4.8				136	Serbia	3.7			
66	Azerbaijan	4.8				137	Timor-Leste	3.6			
67	Honduras	4.8				138	Kyrgyz Republic	3.6			
68	Lebanon	4.8				139	Bolivia	3.6			
69	Rwanda	4.8				140	Mauritania	3.6			
70	Syria	4.8				141	Chad	3.6			
71	Trinidad and Tobago	4.8				142	Burundi	3.2			

SOURCE: World Economic Forum, Executive Opinion Survey, 2010 and 2011 editions

7.02 Capacity for innovation

In your country, how do companies obtain technology? [1 = exclusively from licensing or imitating foreign companies; 7 = by conducting formal research and pioneering their own new products and processes] | 2010–2011 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.2	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 3.2	7
1	Japan	5.8				72	Mongolia	3.0			
2	Switzerland	5.8				73	Guyana	3.0			
3	Germany	5.7				74	Senegal	3.0			
4	Sweden	5.7				75	Brunei Darussalam	3.0			
5	Finland	5.6				76	Mexico	3.0			
6	Israel	5.3				77	Argentina	2.9			
7	United States	5.2				78	Romania	2.9			
8	France	5.1				79	Benin	2.9			
9	Denmark	5.1				80	Rwanda	2.9			
10	Netherlands	5.0				81	Malawi	2.9			
11	Qatar	5.0				82	Bulgaria	2.9			
12	Austria	4.8				83	Egypt	2.8			
13	United Kingdom	4.8				84	Slovak Republic	2.8			
14	Belgium	4.7				85	Cambodia	2.8			
15	Taiwan, China	4.7				86	Macedonia, FYR	2.8			
16	Luxembourg	4.5				87	Ecuador	2.8			
17	Norway	4.5				88	Honduras	2.8			
18	Iceland	4.4				89	Mauritius	2.8			
19	Malaysia	4.3				90	Kuwait	2.8			
20	Korea, Rep.	4.3				91	Barbados	2.7			
21	Saudi Arabia	4.3				92	Jordan	2.7			
22	Singapore	4.3				93	Ghana	2.7			
23	China	4.2				94	Zambia	2.7			
24	Canada	4.1				95	Philippines	2.7			
25	Czech Republic	4.0				96	Greece	2.7			
26	Italy	4.0				97	Jamaica	2.7			
27	Australia	4.0				98	Panama	2.7			
28	Slovenia	3.9				99	Peru	2.7			
29	New Zealand	3.8				100	Suriname	2.6			
30	Indonesia	3.8				101	Kazakhstan	2.6			
31	Brazil	3.8				102	Namibia	2.6			
32	United Arab Emirates	3.8				103	Georgia	2.6			
33	Ireland	3.8				104	Botswana	2.6			
34	Estonia	3.7				105	Mali	2.6			
35	India	3.6				106	Lebanon	2.6			
36	Spain	3.5				107	Moldova	2.6			
37	Portugal	3.5				108	Morocco	2.6			
38	Russian Federation	3.5				109	Chad	2.6			
39	Hong Kong SAR	3.5				110	Serbia	2.5			
40	Costa Rica	3.4				111	Nicaragua	2.5			
41	Hungary	3.4				112	Uganda	2.5			
42	Ukraine	3.4				113	Madagascar	2.5			
43	Latvia	3.4				114	Cameroon	2.5			
44	Tunisia	3.4				115	El Salvador	2.5			
45	Puerto Rico	3.4				116	Paraguay	2.4			
46	South Africa	3.4				117	Bahrain	2.4			
47	Kenya	3.3				118	Mauritania	2.4			
48	Lithuania	3.3				119	Albania	2.4			
49	Poland	3.3				120	Trinidad and Tobago	2.4			
50	Sri Lanka	3.3				121	Bangladesh	2.4			
51	Pakistan	3.3				122	Zimbabwe	2.4			
52	Azerbaijan	3.2				123	Venezuela	2.4			
53	Montenegro	3.2				124	Bosnia and Herzegovina	2.4			
54	Nigeria	3.2				125	Ethiopia	2.3			
55	Tanzania	3.2				126	Dominican Republic	2.3			
56	Thailand	3.2				127	Mozambique	2.3			
57	Oman	3.2				128	Burkina Faso	2.3			
58	Vietnam	3.2				129	Nepal	2.3			
59	Colombia	3.2				130	Haiti	2.3			
60	Cyprus	3.2				131	Belize	2.3			
61	Armenia	3.1				132	Timor-Leste	2.2			
62	Gambia, The	3.1				133	Côte d'Ivoire	2.2			
63	Malta	3.1				134	Syria	2.1			
64	Croatia	3.1				135	Swaziland	2.1			
65	Uruguay	3.0				136	Lesotho	2.1			
66	Chile	3.0				137	Cape Verde	2.1			
67	Iran, Islamic Rep.	3.0				138	Algeria	2.0			
68	Tajikistan	3.0				139	Kyrgyz Republic	2.0			
69	Guatemala	3.0				140	Burundi	1.8			
70	Bolivia	3.0				141	Angola	1.6			
71	Turkey	3.0				142	Yemen	1.5			

SOURCE: World Economic Forum, Executive Opinion Survey, 2010 and 2011 editions

7.03 PCT patent applications

Number of applications filed under the Patent Cooperation Treaty (PCT) per million population | 2008–09 average

RANK	COUNTRY/ECONOMY	VALUE	RANK	COUNTRY/ECONOMY	VALUE
1	Sweden	310.7	72	Thailand	0.6
2	Switzerland	286.4	73	Egypt	0.6
3	Finland	276.1	74	Morocco	0.6
4	Israel	234.4	75	Jordan	0.5
5	Denmark	209.4	76	Guatemala	0.5
6	Japan	207.4	77	Panama	0.4
7	Germany	202.5	78	Oman	0.4
8	Netherlands	202.5	79	El Salvador	0.4
9	Korea, Rep.	160.9	80	Syria	0.4
10	Austria	143.9	81	Azerbaijan	0.4
11	Norway	143.8	82	Kuwait	0.4
12	United States	137.5	83	Dominican Republic	0.4
13	Singapore	123.0	84	Philippines	0.3
14	France	110.0	85	Namibia	0.3
15	Luxembourg	103.3	86	Cameroon	0.2
16	Belgium	102.1	87	Lesotho	0.2
17	Iceland	96.0	88	Peru	0.2
18	United Kingdom	92.5	89	Mongolia	0.2
19	Ireland	89.8	90	Swaziland	0.2
20	Australia	83.1	91	Algeria	0.2
21	Canada	77.4	92	Suriname	0.2
22	New Zealand	75.2	93	Ecuador	0.2
23	Slovenia	65.6	94	Venezuela	0.1
24	Italy	51.6	95	Kenya	0.1
25	Spain	35.0	96	Vietnam	0.1
26	Estonia	34.2	97	Zimbabwe	0.1
27	Hungary	22.0	98	Paraguay	0.1
28	Czech Republic	18.3	99	Iran, Islamic Rep.	0.1
29	Malta	12.9	100	Indonesia	0.1
30	Latvia	12.5	101	Kyrgyz Republic	0.1
31	Portugal	12.1	102	Mauritius	0.1
32	Barbados	11.5	103	Zambia	0.0
33	Croatia	10.1	104	Chad	0.0
34	Malaysia	9.5	105	Yemen	0.0
35	Cyprus	9.4	106	Bolivia	0.0
36	Greece	9.2	107	Senegal	0.0
37	South Africa	6.7	108	Ghana	0.0
38	China	6.5	109	Burkina Faso	0.0
39	Lithuania	6.2	110	Benin	0.0
40	Slovak Republic	6.0	111	Haiti	0.0
41	Turkey	5.8	112	Nepal	0.0
42	Poland	5.7	113	Pakistan	0.0
43	Russian Federation	5.4	114	Angola	0.0
44	United Arab Emirates	4.5	115	Bangladesh	0.0
45	Chile	3.6	116	Nigeria	0.0
46	Bulgaria	3.6	117	Tanzania	0.0
47	Brazil	2.7	118	Uganda	0.0
48	Saudi Arabia	2.1	119	Albania	0.0
49	Bosnia and Herzegovina	2.1	119	Botswana	0.0
50	Ukraine	2.1	119	Burundi	0.0
51	Bahrain	2.1	119	Cambodia	0.0
52	Uruguay	2.1	119	Cape Verde	0.0
53	Trinidad and Tobago	2.0	119	Côte d'Ivoire	0.0
54	Brunei Darussalam	1.9	119	Ethiopia	0.0
55	Belize	1.8	119	Gambia, The	0.0
56	Romania	1.7	119	Guyana	0.0
57	Costa Rica	1.7	119	Honduras	0.0
58	Mexico	1.6	119	Madagascar	0.0
59	Macedonia, FYR	1.5	119	Malawi	0.0
60	Georgia	1.5	119	Mali	0.0
61	Qatar	1.3	119	Mauritania	0.0
62	Armenia	1.2	119	Montenegro	0.0
63	India	1.2	119	Mozambique	0.0
64	Kazakhstan	1.1	119	Nicaragua	0.0
65	Colombia	1.1	119	Rwanda	0.0
66	Argentina	1.1	119	Serbia	0.0
67	Lebanon	0.9	119	Tajikistan	0.0
68	Tunisia	0.8	119	Timor-Leste	0.0
69	Sri Lanka	0.7	n/a	Hong Kong SAR	n/a
70	Moldova	0.7	n/a	Puerto Rico	n/a
71	Jamaica	0.7	n/a	Taiwan, China	n/a

SOURCE: Organisation for Economic Co-operation and Development (OECD), *Patent Database*, December 2011

7.04 Extent of business Internet use

To what extent do companies within your country use the Internet for their business activities? (e.g., buying and selling goods, interacting with customers and suppliers) [1 = not at all; 7 = extensively] | 2010–2011 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 5.0	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 5.0	7
1	Sweden	6.5				72	Trinidad and Tobago	5.0			
2	Korea, Rep.	6.4				73	Russian Federation	4.9			
3	Estonia	6.3				74	Albania	4.9			
4	United Kingdom	6.3				75	Mauritius	4.9			
5	Iceland	6.2				76	Jordan	4.9			
6	Denmark	6.2				77	Indonesia	4.9			
7	Lithuania	6.2				78	Rwanda	4.9			
8	United States	6.1				79	Romania	4.9			
9	Taiwan, China	6.1				80	Guyana	4.9			
10	Canada	6.1				81	Belize	4.8			
11	Norway	6.1				82	Tunisia	4.8			
12	Switzerland	6.1				83	Namibia	4.8			
13	Japan	6.0				84	Dominican Republic	4.8			
14	Finland	6.0				85	Argentina	4.8			
15	Netherlands	6.0				86	Cambodia	4.8			
16	Australia	6.0				87	Zambia	4.7			
17	New Zealand	6.0				88	Peru	4.7			
18	Austria	5.9				89	Philippines	4.7			
19	Qatar	5.9				90	Lebanon	4.7			
20	Singapore	5.9				91	Kuwait	4.7			
21	Hong Kong SAR	5.9				92	Georgia	4.6			
22	France	5.9				93	Mongolia	4.6			
23	Czech Republic	5.9				94	Cameroon	4.6			
24	Malta	5.8				95	Greece	4.6			
25	Israel	5.8				96	Egypt	4.6			
26	Belgium	5.8				97	Botswana	4.6			
27	Malaysia	5.8				98	Cape Verde	4.6			
28	Germany	5.8				99	Gambia, The	4.5			
29	Brazil	5.7				100	Suriname	4.5			
30	Luxembourg	5.7				101	Macedonia, FYR	4.5			
31	Slovak Republic	5.7				102	Morocco	4.5			
32	Ireland	5.6				103	Ghana	4.5			
33	Puerto Rico	5.6				104	Mozambique	4.5			
34	Portugal	5.5				105	Ecuador	4.5			
35	Slovenia	5.5				106	Azerbaijan	4.5			
36	United Arab Emirates	5.5				107	Nigeria	4.5			
37	Sri Lanka	5.5				108	Bosnia and Herzegovina	4.4			
38	Chile	5.5				109	Moldova	4.4			
39	Barbados	5.5				110	Uganda	4.4			
40	Bahrain	5.5				111	Pakistan	4.3			
41	Panama	5.5				112	Paraguay	4.3			
42	Oman	5.4				113	Armenia	4.3			
43	Latvia	5.4				114	Benin	4.2			
44	Kazakhstan	5.3				115	Malawi	4.2			
45	Saudi Arabia	5.3				116	Venezuela	4.2			
46	South Africa	5.3				117	Bangladesh	4.2			
47	Guatemala	5.3				118	Zimbabwe	4.2			
48	Poland	5.3				119	Tajikistan	4.2			
49	China	5.3				120	Kyrgyz Republic	4.2			
50	Senegal	5.3				121	Haiti	4.1			
51	Costa Rica	5.2				122	Nepal	4.1			
52	Bulgaria	5.2				123	Lesotho	4.1			
53	Vietnam	5.2				124	Burkina Faso	4.0			
54	Croatia	5.2				125	Iran, Islamic Rep.	4.0			
55	Turkey	5.1				126	Timor-Leste	4.0			
56	India	5.1				127	Swaziland	3.9			
57	Brunei Darussalam	5.1				128	Bolivia	3.9			
58	Thailand	5.1				129	Nicaragua	3.9			
59	Ukraine	5.1				130	Côte d'Ivoire	3.9			
60	Hungary	5.0				131	Madagascar	3.9			
61	Spain	5.0				132	Syria	3.8			
62	Mexico	5.0				133	Mali	3.8			
63	Uruguay	5.0				134	Serbia	3.8			
64	Cyprus	5.0				135	Tanzania	3.8			
65	El Salvador	5.0				136	Burundi	3.7			
66	Jamaica	5.0				137	Yemen	3.6			
67	Colombia	5.0				138	Ethiopia	3.6			
68	Montenegro	5.0				139	Mauritania	3.5			
69	Honduras	5.0				140	Angola	3.4			
70	Kenya	5.0				141	Algeria	3.1			
71	Italy	5.0				142	Chad	2.9			

SOURCE: World Economic Forum, Executive Opinion Survey, 2010 and 2011 editions

7.05 Extent of staff training

To what extent do companies in your country invest in training and employee development? [1 = hardly at all; 7 = to a great extent] | 2010–2011 weighted average

RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 4.0	7	RANK	COUNTRY/ECONOMY	VALUE	1	MEAN 4.0	7
1	Switzerland	5.6				72	Portugal	3.9			
2	Sweden	5.5				73	Uruguay	3.9			
3	Denmark	5.5				74	Morocco	3.9			
4	Singapore	5.4				75	Peru	3.9			
5	Norway	5.4				76	Argentina	3.9			
6	Japan	5.3				77	El Salvador	3.9			
7	Luxembourg	5.3				78	Zimbabwe	3.9			
8	Finland	5.3				79	Romania	3.8			
9	Malaysia	5.2				80	Mexico	3.8			
10	Netherlands	5.1				81	Ghana	3.8			
11	Bahrain	5.0				82	Russian Federation	3.8			
12	United States	5.0				83	Slovenia	3.8			
13	Belgium	5.0				84	Colombia	3.7			
14	Austria	5.0				85	Zambia	3.7			
15	United Kingdom	4.9				86	Turkey	3.7			
16	Germany	4.9				87	Slovak Republic	3.7			
17	Australia	4.9				88	Lesotho	3.7			
18	Canada	4.9				89	Angola	3.7			
19	Puerto Rico	4.8				90	Spain	3.7			
20	Israel	4.8				91	Tanzania	3.6			
21	Iceland	4.8				92	Swaziland	3.6			
22	Ireland	4.7				93	Ecuador	3.6			
23	New Zealand	4.7				94	Venezuela	3.6			
24	Qatar	4.7				95	Cameroon	3.6			
25	United Arab Emirates	4.7				96	Kazakhstan	3.6			
26	Hong Kong SAR	4.7				97	Cambodia	3.6			
27	South Africa	4.7				98	Lebanon	3.6			
28	Saudi Arabia	4.6				99	Dominican Republic	3.6			
29	Costa Rica	4.6				100	Uganda	3.6			
30	Taiwan, China	4.6				101	Paraguay	3.5			
31	Gambia, The	4.5				102	Kuwait	3.5			
32	Albania	4.5				103	Jordan	3.5			
33	Brazil	4.4				104	Nicaragua	3.5			
34	Philippines	4.4				105	Armenia	3.5			
35	France	4.4				106	Georgia	3.5			
36	Barbados	4.4				107	Vietnam	3.5			
37	Chile	4.4				108	Tajikistan	3.5			
38	Tunisia	4.4				109	Pakistan	3.5			
39	Czech Republic	4.3				110	Benin	3.4			
40	Mauritius	4.3				111	Hungary	3.4			
41	Korea, Rep.	4.3				112	Senegal	3.4			
42	Oman	4.3				113	Bolivia	3.4			
43	Panama	4.3				114	Greece	3.4			
44	Botswana	4.3				115	Madagascar	3.3			
45	China	4.2				116	Cape Verde	3.3			
46	Estonia	4.2				117	Ukraine	3.3			
47	Guatemala	4.2				118	Moldova	3.3			
48	Jamaica	4.2				119	Mozambique	3.3			
49	Sri Lanka	4.2				120	Italy	3.3			
50	Namibia	4.2				121	Bangladesh	3.3			
51	Côte d'Ivoire	4.1				122	Mali	3.3			
52	Indonesia	4.1				123	Belize	3.2			
53	Trinidad and Tobago	4.1				124	Macedonia, FYR	3.2			
54	Rwanda	4.1				125	Croatia	3.2			
55	Poland	4.1				126	Algeria	3.1			
56	Thailand	4.1				127	Timor-Leste	3.1			
57	Malta	4.1				128	Bulgaria	3.1			
58	Nigeria	4.1				129	Chad	3.1			
59	Brunei Darussalam	4.1				130	Kyrgyz Republic	3.1			
60	Guyana	4.1				131	Egypt	3.0			
61	Suriname	4.0				132	Serbia	2.9			
62	Kenya	4.0				133	Iran, Islamic Rep.	2.9			
63	India	4.0				134	Ethiopia	2.9			
64	Latvia	4.0				135	Yemen	2.9			
65	Lithuania	4.0				136	Nepal	2.9			
66	Montenegro	4.0				137	Bosnia and Herzegovina	2.7			
67	Azerbaijan	4.0				138	Burkina Faso	2.7			
68	Mongolia	4.0				139	Burundi	2.6			
69	Cyprus	4.0				140	Syria	2.6			
70	Honduras	4.0				141	Mauritania	2.4			
71	Malawi	3.9				142	Haiti	2.3			

SOURCE: World Economic Forum, Executive Opinion Survey, 2010 and 2011 editions