CHAPTER 1.1

Connecting the World to the Networked Economy: A Progress Report Based on the Findings of the Networked Readiness Index 2006–2007

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In today's interconnected world, the potential for countries' sustained competitiveness and growth depends more and more on the capability and propensity of governments and civil society alike to integrate knowledge into the production processes and into everyday life. In particular, information and telecommunication technologies (ICT) seems to have turned into the steam engine of our time, the "general-purpose technology" able to transform production processes across sectors and industries and boost productivity,[1] hence contributing to a substantial share of countries' overall growth rates. In this sense, leveraging—and benefiting from—ICT becomes an essential tool for countries and national stakeholders to ensure continued levels of prosperity for their people, irrespective of their development levels. This also explains why the digital divide features so prominently in the international debate as one of the biggest impediments to development and as a major challenge for the international community for the near future.

The World Economic Forum has long recognized the importance of technological readiness and innovation in its competitiveness work, notably in its most recent methodological competitiveness model, the Global Competitiveness Index (GCI). Of the nine pillars of growth on which the GCI is based, one addresses factors related to a country's capacity to absorb technology from abroad, the economy's ICT readiness, and other factors related to national endogenous potential for innovation. Although these factors are believed to be important drivers of any country's competitiveness, they become central for nations and companies that, for their stage of development, need efficient production processes and innovation to compete. For a discussion on the crucial role of networked readiness in fostering national competitiveness, see Box 1.

In the same spirit, the Forum and INSEAD have been partnering since 2002 on a wide-ranging research project looking specifically at the capacity of countries to leverage ICT for development and growth. The main outcome of this project has been the production of the *Global Information Technology Report* (GITR) series,[2] published annually. Over the years this annual report has become the most comprehensive and respected international assessment of its kind.

The 2007 edition of the GITR features once again the Networked Readiness Index (NRI) as the main methodological framework used to assess countries' propensity and preparation in benefiting from, and participating in, ICT advancements. This year's NRI includes a record number of 122 economies around the world: 7 more than last year and almost double the 72 economies covered in the original 2001–2002 edition.

The NRI not only maps out the factors that have proven to be key for countries' ability to leverage ICT for improved competitiveness but also offers a valuable

Box 1: Networked readiness as a key driver of national competitiveness

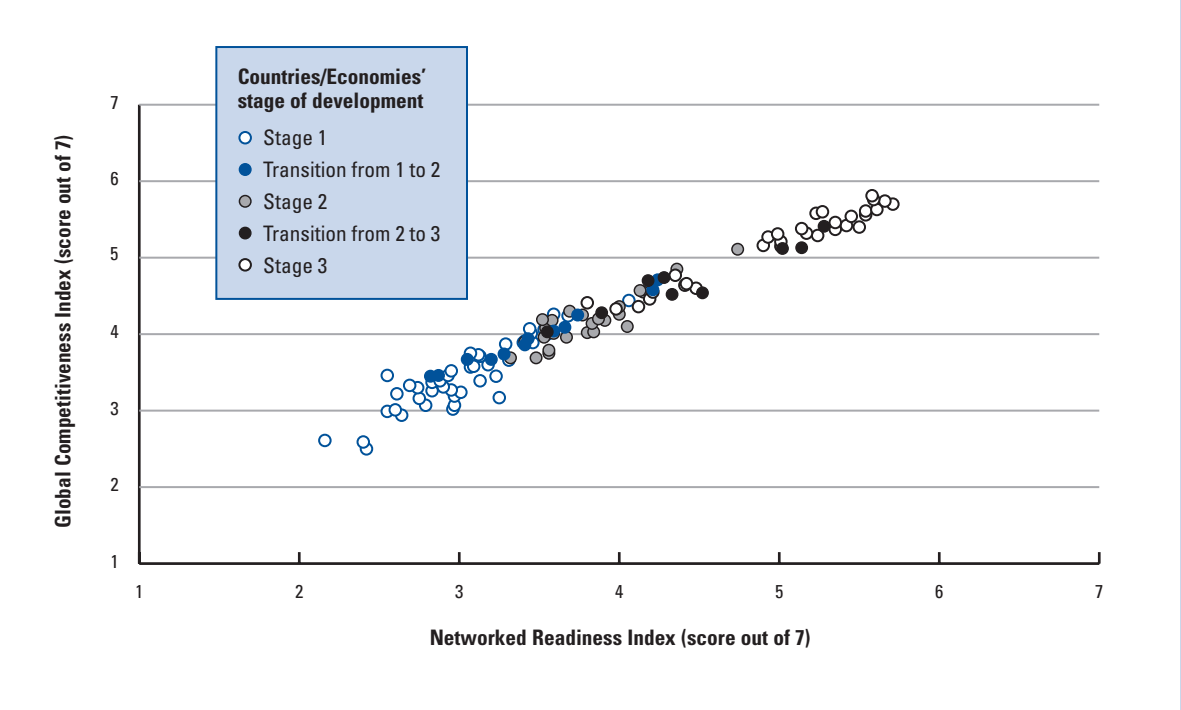
Figure 1 plots the Global Competitive Index (GCI) score against the NRI score for 2006–07. The distribution of data points in the figure shows a high degree of correlation between countries that are more competitive (have higher GCI scores) and those that are more ready for leveraging the networked economy (have higher NRI scores). This distribution is aligned with our observations about networked readiness being a fundamental driver of countries' competitiveness.

Although a detailed overview of the GCI is beyond the scope of this chapter, the GCI data of Figure 1 capture an additional dimension that is worth considering and also provides an insightful way to analyze countries' NRI performance.[1] The GCI builds upon the idea that national competitiveness is driven by many and diverse factors (grouped into the nine pillars of growth), each of them mattering to a certain extent for all countries, but with a different relative importance according to a particular country's specific level of development. In this sense, the model captures the following stages of development, in which the process of economic development evolves:

- **the factor-driven stage** (economies and firms compete in prices, taking advantage of cheap factors),
- **the efficiency-driven stage** (cheap factors are no longer a sufficient condition for sustained economic growth, efficient production practices and efficient markets become key to increasing productivity), and
- **the innovation-driven stage** (productivity increases rest on economies' capability to produce innovative products using sophisticated production methods).

In addition to the above three stages of development, the GCI identifies two transition stages: from stage 1 to 2 and from stage 2 to 3; Appendix B lists the countries covered in this *Report* according to their stage of development. In Figure 1, one observes that the higher the development stage of the economy, the greater the

Figure 1: The Global Competitiveness Index and the Networked Readiness Index for 2006–07



Note: See Appendix B for a list of countries/economies covered by the NRI 2006–07, by stage of development.

Box 1: Networked readiness as a key driver of national competitiveness *(cont'd.)*

networked readiness of the economy. Although the plot of Figure 1 does not prove causality, it does show a high degree of correlation between the two aspects above. Intuitively this can be understood when one views the use of ICT for innovation—be it the creation of new ICT technologies (for example, Web 2.0), the application of new value-adding ICT-enabled features in everyday products (for example, mobile telephones), or the use of ICT for generating new sources of customer value (for example, customer relationship management systems). Innovation in many, if not most, spheres of business and everyday life depends upon the application and usage of ICT. If the primary actors (government, businesses, and citizens) of an economy are not networked-ready, it will be hard for the economy to transition to the innovation-driven stage of development. For example, if broadband technologies are not widespread in sub-Saharan Africa, it is more difficult for these economies to innovate in global e-commerce.

1 See Lopez-Claros et al. (2005) for a full description of the GCI.

benchmarking instrument vis-à-vis other countries as well as with each country's own past performance, thanks to its time series stretching back to 2002. In this sense, the NRI provides a snapshot of countries' competitive advantages and disadvantages with regard to ICT development. The results have been used extensively as a unique platform for private-public debate on national ICT weaknesses and for drawing roadmaps toward improvements in networked readiness. Moreover, the GITR publications have often included country-specific case studies, showcasing best ICT practices and policies and offering sources of inspiration for countries in their efforts to invest in ICT developments.

This 2007 edition of the GITR aims again at presenting a rigorous assessment of countries' ICT progress, raising national stakeholders' awareness of the importance of this progress for sustained growth. It also provides a useful toolkit for policymakers for the design and adoption of policies and actions conducive to ICT growth.

This chapter starts by outlining the main features of the methodological framework adopted for the 2006–2007 NRI. The main results for the 2006–2007 NRI are then discussed and analyzed, looking at the regional trends and comparative performance of economies by region and stage of development.

Networked readiness: Defining the framework for 2006–07

As in the past, the networked readiness framework used to compute the NRI this year measures countries' preparedness to use ICT effectively on the basis of three main theoretical assumptions as follows:

1. National actors cannot operate in a vacuum when it comes to networked readiness: an appropriate ICT-friendly and conducive environment must be in place or established as precondition. The term *environment* is used here in a very broad sense, embracing the business environment, the political and regulatory frame for ICT, and the actual ICT infrastructure.

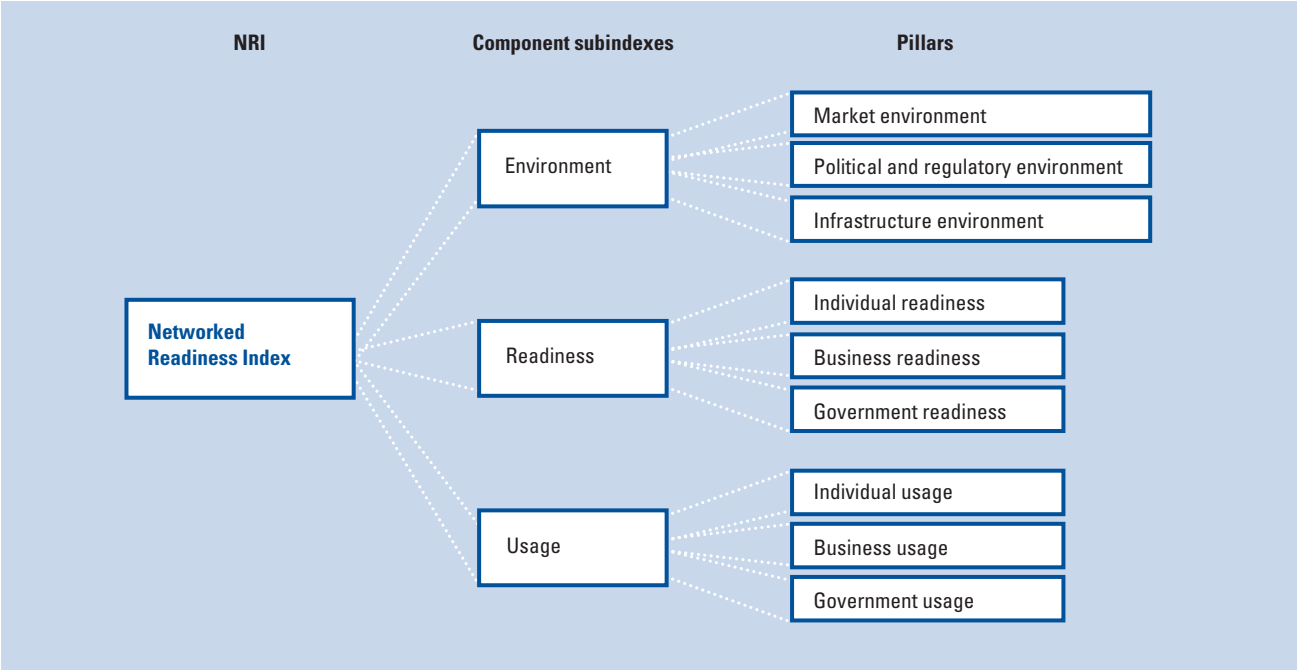
2. Countries' capability to fully leverage ICT depends crucially on the joint effort of the main national actors—notably the government, the business sector, and individuals. They each have a role to play in improving networked readiness. Experience has shown that the countries most successful in ICT have been those in which the government has been able to mobilize business and civil society toward a common ICT development vision and strategy.

3. The actual usage of ICT by the three above actors is greatly influenced and determined by their readiness and propensity to adopt ICT advancements.

In line with the above principles, the framework is structured around the three main dimensions of environment, readiness, and usage. The latter two are broken down along the contributions given respectively by the three primary actors—the government, the business sector, and individuals. Figure 1 provides a graphic description of the framework.

The framework outlined above translates into a nine-pillar index, composed of market environment, political and regulatory environment, infrastructure environment, individual readiness, business readiness, government readiness, individual usage, business usage, and government usage pillars; the entire Index is evaluated for a total of 67 variables. The nine pillars are then regrouped into the three subindexes mentioned above: environment, readiness, and usage. The same weight is given to each pillar in the calculation of the three subindexes, and the overall NRI is an unweighted average of the three subindexes. The underlying assumption is that all index components contribute similarly in determining the overall networked readiness of a country. (For a more detailed description of its composition, please see Appendix A: Technical composition and computation of the Networked Readiness Index 2006–2007.)

Figure 1: The framework of the Networked Readiness Index 2006–07



Readers can interpret the NRI at different levels of analysis: while the overall NRI score can give a broad indication on a country's level of networked readiness, the specific subindex and pillar scores provide more detailed insights regarding the areas of relative weakness and strength in national ICT performances. A brief analysis of the structure of the NRI and of its building blocks follows.

Environment

An ICT-conducive environment is an essential element of a country's networked readiness since it is a prerequisite for allowing the main national actors to benefit from and participate in ICT developments. Thus the environment subindex is designed to measure the degree to which the environment of a country is conducive to the development and use of ICT. The environment subindex includes a total of 28 variables, measuring the general market environment, the ICT-friendliness of the regulatory and political environment, and the quality of both hard and soft infrastructure for ICT.

The *market environment pillar* (12 variables) aims at measuring the openness of the general business environment for ICT development, taking into account the presence of appropriate capital sources, the degree of business sophistication and innovation potential, and the ease of doing business as well as the intensity of local competition and the freedom of the press in the country.

The *regulatory and political environment pillar* (9 variables) assesses the general efficiency and fairness of public institutions and of the legal framework, as well as of ICT-specific laws, the extent of protection of property rights and intellectual property, and the quality of competition in the ISP sector.

Last but not least, the *infrastructure environment pillar* (7 variables) measures the existence of ICT-conducive soft infrastructure as well as the state of ICT hard infrastructure in countries. Specifically, the tertiary enrollment rate, the quality of scientific research institutions, and the availability of scientists and engineers together with the degree of ICT penetration (number of telephone lines, secure Internet servers) and electricity production are assessed.

From the above analysis, it is clear that although many of the preconditions for an ICT-friendly environment depend upon the actions of the government, businesses and civil society also need to play a central role, notably by facilitating the establishment of an effective market environment and strong ICT soft and hard infrastructures.

Readiness

The readiness component measures the capability of the principal agents of a given nation's economy (citizens, businesses, and governments) to leverage the potential of ICT. This capability is based on a combination of factors (measured by 24 variables), such as the existence of

necessary human skills for using ICT, access to and affordability of ICT for companies, and the government's own use of ICT for its services and processes.

The *individual readiness pillar* (10 variables) assesses the extent to which individuals within a country are disposed to use ICT as well as their degree of preparedness to do so, taking into account the presence of appropriate human skills together with the extent of access to ICT and the affordability of telephone and Internet connection and use. Examples of variables assessed in this pillar are the quality of the educational system, with particular emphasis on math and science education; the availability of Internet access in schools; residential telephone connection charges; broadband and telephone subscription charges; and the cost of mobile telephone calls.

The *business readiness pillar* (9 variables) looks at companies' readiness to incorporate ICT fully in their operations and businesses, focusing on factors such as the presence of an appropriately trained labor force, the extent of company spending on R&D and collaboration between universities and firms on R&D, the affordability of ICT for business, and levels of ICT imports.

The *government readiness pillar* (5 variables) measures the prioritization of ICT by the government and the extent to which the government has a clear vision on how to promote its use and penetration. The extent of e-government and e-democracy are also examined.

Usage

The usage component aims to measure the degree of ICT usage by the principal actors of the NRI framework: individuals, businesses, and governments. In the absence of reliable data about the specific impact of ICT on the key agents, the usage component provides an indication of the potential gains in efficiency and productivity associated with the adoption of ICT. This third subindex of the NRI assesses the actual degree of ICT usage in each of the countries covered, relying on 15 mainly quantitative variables.

The *individual usage pillar* (5 variables) includes variables relating to ICT penetration among the civil society, namely telephone, personal computer (PC), and Internet penetration.

The *business usage pillar* (6 variables) examines the extent of innovation and technology absorption in the business sector, the availability and usage of fixed lines and mobile telephones for business, and Internet penetration within firms.

The *government usage pillar* (4 variables) deals with government use of ICT as measured by the availability of online services, the improvement of government productivity as a consequence of ICT introduction and use, ICT pervasiveness in governmental offices, and government success in promoting general ICT penetration.

Computation methodology and data

This section outlines the methodology employed to compute the 2006–07 NRI in the context of the networked readiness framework and its building blocks presented earlier.

In line with the Forum's general competitiveness methodology, the NRI builds on a mix of hard, quantitative data, collected by international institutions such as the International Telecommunication Union (ITU) and the World Bank, and on qualitative data coming from the Forum's Executive Opinion Survey (Survey), administered to more than 11,000 business leaders across 125 economies in 2006.[3] The Survey data provide a valuable complement to the hard data since they capture key aspects for assessing countries' networked readiness but for which no hard data are available for all countries covered. For example, it is difficult to find precise quantifiable data about the effectiveness of law-making bodies in different economies. However, this is an important component of the overall business environment of an economy that affects both the levels of innovation in the ICT industry and the adoption of ICT by businesses across sectors in the economy. Therefore a question capturing this concept is included in the Survey questionnaire, and the resulting data are used for the computation of the NRI (as a contributing variable to the political/regulatory environment in the economy).

Of the 125 economies covered by the Survey this year, three—Gambia, Tajikistan, and Timor Leste—could unfortunately not be included in the NRI computation because of the scarcity of reliable hard data for them. Table 1 shows the evolution of the geographical coverage of *The Global Information Technology Report* since its inception, as compared with *The Global Competitiveness Report*.

Table 1: Evolution of the geographical coverage of *The Global Information Technology Report* compared with *The Global Competitiveness Report*

	Global Information Technology Report	*Global Competitiveness Report*
Years	No. of countries/economies	No. of countries/economies
2001–02	72	75
2002–03	82	80
2003–04	102	102
2004–05	104	104
2005–06	115	117
2006–07	122	125

Turning to the composition of the NRI, one can notice some differences in the number and in the nature of the variables included from year to year. This is because of the dynamism of the ICT sector and the need to review the appropriate set of variables in good time to capture each of the networked readiness framework's component subindexes. The changes also reflects the need to include recent data related to ICT developments. Many aspects of ICT usage in economies change rapidly, and our research uses the most recent data available. This means that some time-sensitive variables that have been used for computing the NRI in the past but have not been updated in recent years by the relevant collecting agency are no longer used in computing the NRI.

It is therefore important to introduce a note of caution in comparing the NRI rankings over time since, at the variable level, there have been some changes. However, the uniformity of the networked readiness framework ensures the comparability of the data at the global, subindex, and pillar levels.

In previous years, the variables used to compute the various component subindexes of the NRI have been chosen from a larger set of possible variables using factor-analytical techniques. Although factor-analytical techniques are technically rigorous, they often diminish the ability to easily explain the underlying logic for including specific variables and to make strict comparisons over time. With the benefit of our previous experience in computing the NRI, expert opinion has played the primary role in selecting the variables this year. As a result, most of the variables used for computing the NRI last year have been retained. However, 10 new variables have been introduced this year for various reasons—some because new variables have been identified as relevant to the environment for using ICT (such as the freedom of the press), some because the need to capture recent ICT developments has been deemed important (through variables on broadband penetration and usage), and some because older variables were no longer updated by the collecting agencies and had to be dropped. Particular care has been taken to ensure that the total set of variables used for the NRI this year ensures comparability of the results for this year with those for previous years.[4]

The above shift in the selection procedure of the variables also aligns the procedures for the NRI with those used by the Forum for the computation of the GCI. As part of these changes, the NRI has been computed this year on the (increasing) 1–7 scale traditionally used by the Forum in its competitiveness work. This is a change from the scales (positive and negative scores around a standardized mean of 0) used for the computation of NRI scores for the last couple of years.[5]

The current state of networked readiness in the world: Findings from the NRI 2006–07

Tables 2, 3, and 4 show, respectively, the NRI rankings for 2006–07 and their comparison with last year's rankings, the top performers for each of the nine pillars and the evolution of the top 10 NRI rankings from the very first computation in 2001–02 up to now.[6] Tables 5, 6, and 7 display the rankings for each of the three subindexes composing the NRI— environment, readiness, and usage—and the details for each pillar.

As it can be seen from Table 2, ***Denmark*** leads the way in networked readiness this year, climbing to the top position for the first time as the culmination of an upward trend observed since 2003. Denmark's recipe for networked success has much to do with the country's excellent regulatory and political environment (where it ranks 1st) and with its clear government leadership and vision in developing ICT penetration and usage, promptly followed by the civil society: Denmark ranks 2nd and 5th out of 122 economies for government readiness and usage and 6th and 3rd for individual readiness and usage, respectively. Indeed, an early liberalization of the telecommunications sector in 1996 has given a major boost to the national ICT industry and to ICT penetration in the country. In this sense, Denmark displays impressive levels of Internet and PC usage as well as of government online services, and a very dynamic e-business environment. The well-developed internal market—coupled with a continued emphasis on education and a talent for developing pioneering applications and technologies—laid the basis for the development of a world-class national high-tech industry whose total exports accounted for more than 9 percent of total national exports in 2004 according to ITU.

Among the other best-performing countries, the following trends can be highlighted:

- All ***Nordic countries***, except Iceland, share Denmark's upward trend, with Finland, Sweden, and Norway gaining 1, 6, and 3 positions respectively. Iceland is the only country of the group losing some ground, down 4 positions from last year to what remains an impressive 8th rank.

- The ***United States*** loses its networked readiness pre-eminence to Denmark, Sweden, Singapore, Finland, Switzerland, and the Netherlands with a 6-place drop to 7th position. Nevertheless, the United States continues to lead the world in the efficiency and quality of its market environment and ICT soft and hard infrastructure, confirming itself as a world ICT powerhouse and innovative country.

- ***Switzerland*** (up 4 positions to 5th place) registers one of the greatest improvements of the top 20 countries, together with the Netherlands and Sweden, which also registered large improvements. In this, the NRI echoes Switzerland's impressive rise to the top position in the GCI and gives credit to the country's efficient market environment (where it ranks 3rd) and high levels of individual and business readiness and usage. Switzerland ranks 3rd and 1st respectively for individual and business readiness and 4th for both individual and business usage.[7]

- Last but not least, ***Estonia*** gains 3 positions from last year and enters the top 20 league, ranking 20th overall. Estonia must be praised for the progress realized in a very short period and for showing the way, in networked readiness and general competitiveness alike, not only to the rest of the recent European Union (EU) accession countries but also to much of the EU old guard. The remarkable leadership role assumed by the Estonian government in promoting ICT usage and penetration is portrayed in Chapter 2.1 in this *Report*, "Estonia: A Sustainable Success in Networked Readiness?"

Before turning our attention to the analysis of the NRI by region, one must spend a few words on Table 3, highlighting the best performer per pillar. As the table shows, the picture at the pillar level is rather mixed in terms of ICT national showings. Only one country outperforms the rest of the world in more than one pillar: Singapore. In this respect, the NRI highlights the Singaporean government's clear vision for ICT and the subsequent leading role undertaken by the latter in promoting ICT diffusion and penetration, with a 1st position in government readiness and usage. As already pointed out, the United States is outperforming the rest of the world in the quality and efficiency of the market environment. The Nordic countries are each topping a pillar: Denmark tops the regulatory and political environment; Iceland, ICT infrastructure; and Finland, individual readiness. The Netherlands, Switzerland, and Japan rank 1st in individual usage, business readiness, and in business usage respectively.

Europe and North America

Europe continues to figure prominently in the NRI rankings this year, with ***Denmark*** (1st), ***Sweden*** (2nd), ***Finland*** (4th), ***Switzerland*** (5th), the ***Netherlands*** (6th), ***Iceland*** (8th), the ***United Kingdom*** (9th), ***Norway*** (10th), ***Germany*** (16th), ***Austria*** (17th), and ***Estonia*** (20th) all among the top 20.

We have already mentioned the outstanding networked readiness performance of the ***Nordic countries***, which have featured consistently among the top 10 over the last six years, with high ICT penetration and diffusion rates. Quite predictably, the Nordic countries do exceptionally well also in the GCI's rankings, reflecting the importance of ICT readiness for global national competitiveness. Indeed, these countries have in common a top-class education system, a culture for innovation, a friendly business climate, and a distinct public and private inclination to adopt new technology, all factors that boost their levels of networked readiness.

The networked readiness map for the ***EU area*** tends to be more diverse: countries such as the Netherlands, the United Kingdom, Germany, Austria, Estonia, ***Ireland*** (21st), and ***France*** (23nd) seem to be fully leveraging and benefiting of ICT advances. Some other "old-timers" such as ***Italy*** (38th) and ***Greece*** (48th) keep lagging behind, although it must be pointed out that Italy's 4-position recovery from 2005 confirms last year's upward trend after its dismal 17-place drop from 2004 to 2005.

Among the most recent EU accession countries, ***Estonia*** and ***Poland***, at 58th—down 5 places from last year—represent two extremes in the networked readiness continuum. It is worth noticing that Estonia has gained a total of 5 positions in the last two years, displaying an impressive dynamism in networked readiness.

Turkey, at 52nd, is down 4 positions from last year, showing much room for improvement in all dimensions of the NRI, particularly in individual readiness.

Russia gains 2 positions from last year, reversing the 2005–06 major fall and positioning itself at 70th, with rather significant improvements registered in the regulatory environment and in the ICT infrastructure.

As far as ***North America*** is concerned, the ***United States*** (7th) and ***Canada*** (11th) continue to feature among the world's best performers, but they both experienced a significant drop in their NRI rankings, of 6 and 5 places respectively. Although the US performance has been discussed above, it is worth noting that Canada's main weakness is to be found in the levels of usage by all national actors.

Asia and the Pacific

As in previous years, Asia and the Pacific, as a region, shows an extremely varied performance, with economies spread all over the NRI rankings. In this sense, if ***Singapore*** (3rd), ***Hong Kong*** (12th), ***Taiwan*** (13th), ***Japan*** (14th), ***Australia*** (15th), ***Korea*** (19th), and, to a certain extent, ***Malaysia*** (26th) and ***Thailand*** (37th) stand out for their world-class levels of networked readiness, ***Bangladesh*** (118th), ***Cambodia*** (106th), and ***Kyrgyz Republic*** (105th) continue to feature in the bottom part of the rankings.

Among the best performers, ***Singapore*** maintains its dominant position for the fifth consecutive year, thanks to its excellent business environment and the government's savvy early focus on ICT diffusion and on development of synergies with the private sector.

Table 2: The Networked Readiness Index 2006–07 and 2005–06 comparison

2006–07 rank	Country/Economy	Score	2005–06 rank
1	Denmark	5.71	3
2	Sweden	5.66	8
3	Singapore	5.60	2
4	Finland	5.59	5
5	Switzerland	5.58	9
6	Netherlands	5.54	12
7	United States	5.54	1
8	Iceland	5.50	4
9	United Kingdom	5.45	10
10	Norway	5.42	13
11	Canada	5.35	6
12	Hong Kong SAR	5.35	11
13	Taiwan, China	5.28	7
14	Japan	5.27	16
15	Australia	5.24	15
16	Germany	5.22	17
17	Austria	5.17	18
18	Israel	5.14	19
19	Korea, Rep.	5.14	14
20	Estonia	5.02	23
21	Ireland	5.01	20
22	New Zealand	5.01	21
23	France	4.99	22
24	Belgium	4.93	25
25	Luxembourg	4.90	26
26	Malaysia	4.74	24
27	Malta	4.52	30
28	Portugal	4.48	27
29	United Arab Emirates	4.42	28
30	Slovenia	4.41	35
31	Chile	4.36	29
32	Spain	4.35	31
33	Hungary	4.33	38
34	Czech Republic	4.28	32
35	Tunisia	4.24	36
36	Qatar	4.21	39
37	Thailand	4.21	34
38	Italy	4.19	42
39	Lithuania	4.18	44
40	Barbados	4.18	—
41	Slovak Republic	4.15	41
42	Latvia	4.13	51
43	Cyprus	4.12	33
44	India	4.06	40
45	Jamaica	4.05	54
46	Croatia	4.00	57
47	South Africa	4.00	37
48	Greece	3.98	43
49	Mexico	3.91	55
50	Bahrain	3.89	49
51	Mauritius	3.87	45
52	Turkey	3.86	48
53	Brazil	3.84	52
54	Kuwait	3.80	46
55	Romania	3.80	58
56	Costa Rica	3.77	69
57	Jordan	3.74	47
58	Poland	3.69	53
59	China	3.68	50
60	Uruguay	3.67	65
61	El Salvador	3.66	59
62	Indonesia	3.59	68
63	Argentina	3.59	71
64	Colombia	3.59	62
65	Panama	3.58	66
66	Dominican Republic	3.56	89
67	Botswana	3.56	56
68	Trinidad and Tobago	3.55	74
69	Philippines	3.55	70
70	Russian Federation	3.54	72
71	Azerbaijan	3.53	73
72	Bulgaria	3.53	64
73	Kazakhstan	3.52	60
74	Serbia and Montenegro	3.48	80
75	Ukraine	3.46	76
76	Morocco	3.45	77
77	Egypt	3.44	63
78	Peru	3.43	85
79	Guatemala	3.41	98
80	Algeria	3.41	87
81	Macedonia, FYR	3.41	82
82	Vietnam	3.40	75
83	Venezuela	3.32	81
84	Pakistan	3.31	67
85	Namibia	3.28	78
86	Sri Lanka	3.27	83
87	Mauritania	3.25	—
88	Nigeria	3.23	90
89	Bosnia and Herzegovina	3.20	97
90	Mongolia	3.18	92
91	Tanzania	3.13	84
92	Moldova	3.13	94
93	Georgia	3.12	96
94	Honduras	3.09	100
95	Kenya	3.07	91
96	Armenia	3.07	86
97	Ecuador	3.05	107
98	Guyana	3.01	111
99	Burkina Faso	2.97	—
100	Uganda	2.97	79
101	Mali	2.96	95
102	Madagascar	2.95	102
103	Nicaragua	2.95	112
104	Bolivia	2.93	109
105	Kyrgyz Republic	2.90	103
106	Cambodia	2.88	104
107	Albania	2.87	106
108	Nepal	2.83	—
109	Benin	2.83	108
110	Suriname	2.82	—
111	Malawi	2.79	—
112	Zambia	2.75	—
113	Cameroon	2.74	99
114	Paraguay	2.69	113
115	Mozambique	2.64	101
116	Lesotho	2.61	—
117	Zimbabwe	2.60	105
118	Bangladesh	2.55	110
119	Ethiopia	2.55	115
120	Angola	2.42	—
121	Burundi	2.40	—
122	Chad	2.16	114

(cont'd.)

Table 3: Top performer on each pillar of the Networked Readiness Index 2006–2007

Country/Economy	Market environment	Regulatory environment	Infrastructure environment	Individual readiness	Business readiness	Government readiness	Individual usage	Business usage	Government usage
United States	**1**	17	2	19	4	5	15	14	22
Denmark	16	**1**	7	6	7	2	3	7	5
Iceland	10	3	**1**	10	34	25	6	8	3
Finland	2	9	4	**1**	2	8	14	6	13
Switzerland	3	8	10	3	**1**	19	4	4	19
Singapore	6	11	15	2	15	**1**	10	13	**1**
Netherlands	12	5	11	15	10	12	**1**	9	18
Japan	7	15	14	14	5	11	22	**1**	35

Table 4: Networked Readiness Index: History of the top 10 rankings

Country/Economy	2006–07	2005–06	2004–05	2003–04	2002–03	2001–02
(Number of countries/economies)	(122)	(115)	(104)	(102)	(82)	(72)
Denmark	1	3	4	5	8	7
Sweden	2	8	6	4	4	4
Singapore	3	2	1	2	3	8
Finland	4	5	3	3	1	3
Switzerland	5	9	9	7	13	16
Netherlands	6	12	16	13	11	6
United States	7	1	5	1	2	1
Iceland	8	4	2	10	5	2
United Kingdom	9	10	12	15	7	10
Norway	10	13	13	8	17	5

Despite ***Taiwan***'s drop of 6 positions from 2005,[8] it still comes in at an impressive 13th position overall. This confirms the success story of a mostly rural and resource-poor economy that turned into one of the world ICT powerhouses in the space of three decades. Notable enabling factors in this transformation have been the strong leadership exercised by the government in ICT, fostering public-private partnership, investing heavily in education and R&D, and reversing the brain drain of the 1960–1970 period through incentives as well as the access to the large Chinese market.[9]

Korea also moves down 5 places from last year, with a relative worsening of the market environment in particular. However, its 19th position overall reflects its sound ICT fundamentals and the amazing progress realized by the nation in the short span of a few decades, in a way very similar to Taiwan's success story.

India (44th) and ***China*** (59th) seem to be both losing ground in networked readiness, with a drop of 4 and 9 places respectively from last year. In particular, India's ICT environment and readiness register a relative drop (from 40th to 46th and 29th to 37th respectively), mainly because of the diminishing quality of the regulatory environment for ICT (from 30th to 48th) and the levels of government readiness (from 28th to 39th).

As for China, all component subindexes see a relative deterioration with respect to last year, with notable drops in the quality of the market environment (from 43rd to 61st), the business readiness level (from 48th to 65th) and individual usage (from 63rd to 80th).

A note of caution must be introduced here—since both countries show very different regional levels of ICT diffusion and development, a difference that is partly hidden by the overall NRI score—India and China's general performance appears to be especially hindered by weak infrastructures, a very low level of individual ICT usage for India and of individual and business readiness and usage for China. Graham Vickery and Sacha Wunsch-Vincent give a detailed account of the state of ICT penetration in China in "Made in China: Information Technologies and the Internet," Chapter 2.4 of this *Report*.

Kazakhstan, at 73rd place, is losing its predominance in Central Asia to Azerbaijan (71st), dropping 13 positions in the rankings. Kazakhstan's capability to wholly leverage ICT seems to be slowed by a lack of individual readiness (where it is ranked 95th) and usage (83rd).