The 2005 e-readiness rankings
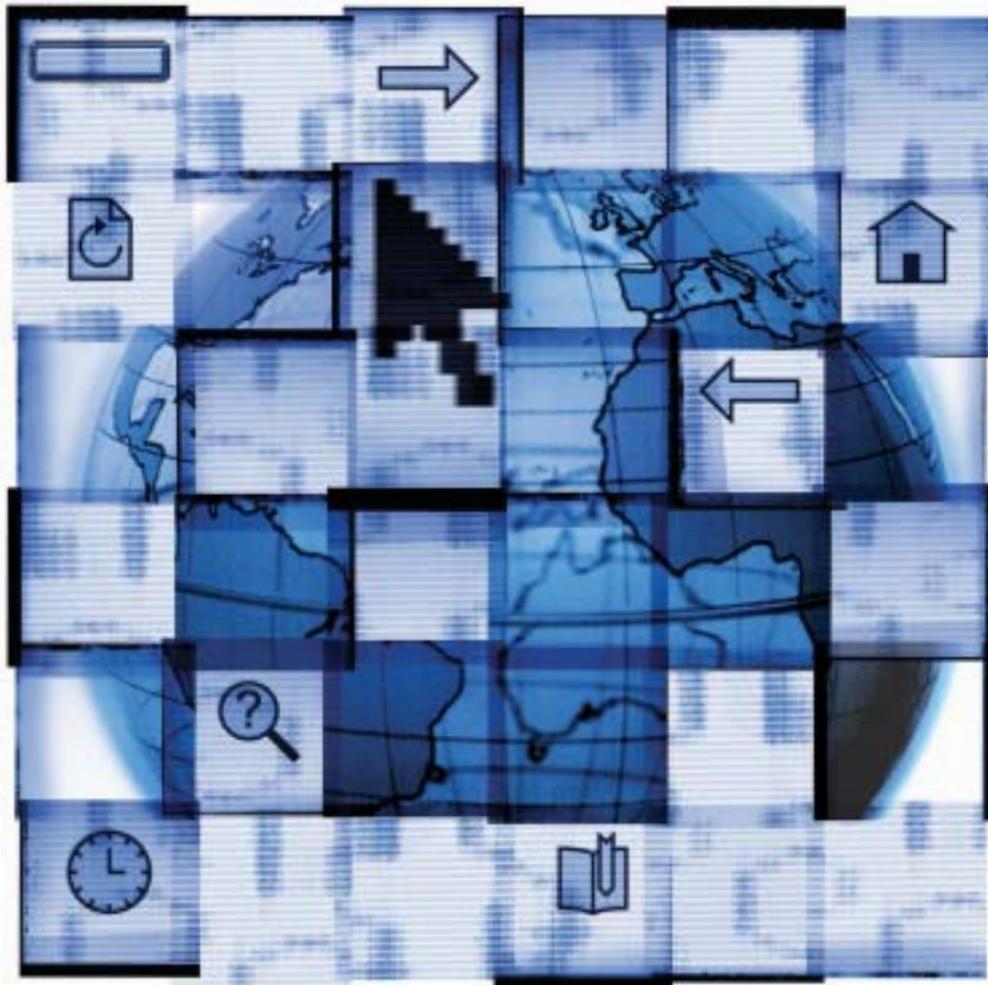
A white paper from the Economist Intelligence Unit

Written in co-operation with
The IBM Institute for Business Value

About the Economist Intelligence Unit

The Economist Intelligence Unit is the business information arm of The Economist Group, publisher of *The Economist* newspaper. Through our global network of over 500 analysts, we continuously assess and forecast political, economic and business conditions in more than 200 countries. As the world's leading provider of country intelligence, we help executives make better business decisions by providing timely, reliable and impartial analysis on worldwide market trends and business strategies.

More than 500,000 customers in corporations, banks, universities and government institutions rely on our intelligence. In order to meet the needs of executives like these, we provide a full range of print and electronic delivery channels and have developed a portfolio of leading electronic services. These include: eiu.com, a virtual library with access to all of our publications, and store.eiu.com, our transactional site; viewswire.com and riskwire.eiu.com, which provide daily and operational intelligence on countries worldwide; Executive Services, which provides insight and analysis on global business and management trends; and Data Services, a portfolio of economic and market indicators and forecasts.

London
The Economist Intelligence Unit
15 Regent Street
London
SW1Y 4LR
United Kingdom
Tel: (44.20) 7830 1000
Fax: (44.20) 7499 9767
e-mail: london@eiu.com

New York
The Economist Intelligence Unit
111 West 57th Street
New York, NY 10019
USA
Tel: (1.212) 554-0600
Fax: (1.212) 586-0248
e-mail: newyork@eiu.com

Hong Kong
The Economist Intelligence Unit
60/F Central Plaza
18 Harbour Road
Wanchai
United Kingdom
Tel: (852) 2802 7288
Fax: (852) 2802 7638
Fax: (852) 2802 7638

Website: http://www.eiu.com

About the IBM Institute for Business Value

The IBM Institute for Business Value develops fact-based strategic insights for senior business executives around critical industry-specific and cross-industry issues. This paper is part of an ongoing commitment by IBM Business Consulting Services to provide forward-looking industry and business points of view, and to help companies and industries transform their futures.

With consultants and professional staff in more than 160 countries globally, IBM Business Consulting Services is the world's largest consulting services organization. IBM Business Consulting Services provides clients with business process and industry expertise, a deep understanding of technology solutions that address specific industry issues, and the ability to design, build and run those solutions in a way that delivers bottom-line business value.

Boston
IBM Institute for Business Value
One Rogers Street, 3rd floor
Cambridge, MA 02142
USA
Tel: + 617 693-6414
Fax: + 617 693-6483
Email: ibv@us.ibv.com

Amsterdam
IBM Institute for Business Value
P.O. Box 94099
1090 GB Amsterdam
The Netherlands
Tel: +31 20 513 5131
Fax: + 31 20 513 6068
Email: ibv@us.ibv.com

Beijing
IBM Institute for Business Value
24/F IBM Tower, Pacific Century Place
2A Gong Ti Bei Road
Beijing 100027
China
Tel: +86 10 65391188
Fax: +86 10 65391679
Email: ibv@us.ibm.com

Website: www.ibm.com/iibv

About the 2005 e-readiness rankings

The Economist Intelligence Unit has published an annual e-readiness ranking of the world's largest economies since 2000. Currently 65 countries are assessed on their ability to promote and support digital business and information and communications technology (ICT) services. A country's e-readiness is essentially a measure of its e-business environment, a collection of factors that indicate how amenable a market is to Internet-based opportunities. Our ranking allows governments to gauge the success of their technology initiatives against those of other countries. It also provides companies that wish to invest in online operations with an overview of the world's most promising investment locations.

The e-readiness rankings are a weighted collection of nearly 100 quantitative and qualitative criteria, organised into six distinct categories measuring the various components of a country's social, political, economic and of course technological development. The underlying principal behind the rankings is that digital business is at its heart business, and that for digital transactions to be widely adopted and efficient, they have to thrive in a holistically supportive environment. E-readiness is not simply a matter of the number of computer servers, websites and mobile phones in the country (although these naturally form a core component of the rankings), but also such things as its citizens' ability to utilise technology skillfully, the transparency of its business and legal systems, and the extent to which governments encourage the use of digital technologies. (For a fuller account of the ranking criteria, please see the appendix on pages 20-21.)

We have become accustomed to constant change in information technology and its enabling power. In this spirit, the ranking methodology and definitions are continuously updated in order that the rankings remain relevant measures of e-readiness. Thus, in 2005 our ranking methodology has undergone significant modification: criteria that no longer accurately reflect the shape of the digital economy have been removed, and many criteria have been reweighted to reflect their increasing importance in determining e-readiness. The latter include broadband access and Internet security, as both fast and secure Internet connectivity are proving to be the key enabling qualities for effective e-business. New metrics have been added, such as the penetration of public-access wireless "hotspots", in line with our belief that Internet connectivity has to be not just mobile but ubiquitous. And new, more precise means of measuring performance in some criteria have been developed, including in the areas of Internet security, ICT spending and education.

For this and previous e-readiness rankings, the Economist Intelligence Unit worked in co-operation with the IBM Institute for Business Value, the think tank of IBM Business Consulting Services. IBM worked together with the Economist Intelligence Unit to build the rankings model. The Economist Intelligence Unit, however, is entirely responsible for the rankings and the content of this white paper.

"The e-readiness rankings are very dynamic", says George Pohle, Global Leader, IBM Institute for Business Value. "Leadership requires continued focus, strategic planning and targeted investment, but that is only the beginning. The hard work is in using the leadership to complete a blend of public and private initiatives that yield meaningful improvements for private citizens, businesses and government. That is where the return on these investments are ultimately being achieved."

Executive summary

The past year was perhaps the first since the technology bubble burst that the global economy has felt comfortable in a digital skin. Spending on information and communications technology (ICT) showed renewed buoyancy in developed markets, while in emerging markets growth of connectivity—individuals' and organisations' access to voice and data communications—continued on a rapid ascent.

The best news, however, is that this renewed enthusiasm for the Internet economy comes with a healthy dose of sobriety. Indeed, pragmatism now seems to be guiding ICT developments. Investment in e-business infrastructure, software and systems is focused on making it work robustly. Internet security management is becoming increasingly important. And there is growing recognition that e-readiness depends on many more factors than just connectivity.

Meanwhile, the importance that countries have attached in the past to development of broadband Internet access is clearly paying "next-generation" dividends. The countries that see broadband as a national development priority—in north-east Asia and Scandinavia, as well as North America—are now becoming convergence leaders. These markets are spawning the poster children of convergence, "triple play" operators—single service providers of telecommunications, Internet and interactive television—along with all manner of multimedia innovations.

Countries where citizens and businesses take to the Internet in a big way tend to have developed sustainable ICT industries. Our long-held view is that ICT infrastructure (lots of it) sparks a virtuous cycle: as a country's citizens become more connected to the Internet, their increased usage shifts more actors in the country's economy towards building technologies and businesses to exploit the Internet. Countries thus become competitive not only because their citizens

and corporations are online, but because being online jump-starts growth in high-value technology businesses.

This is why our e-readiness rankings measure a country's accumulated telecoms and computer infrastructure, and accord it the heaviest weight of all e-readiness determinants. The criteria we use also evolve with the infrastructure itself: this year we have increased the importance of broadband (both fixed and mobile), which is why many e-ready leaders (including the resurgent US) have seen their rankings rise. We have also refined the measurement of some other aspects of connectivity, such as the security of Internet servers, and the amount of GDP that goes into ICT spending. And, in order to measure the knock-on effect that the boxes and wires have on a country's digital economy, we have introduced quantitative measures of innovation and qualitative measures of entrepreneurship.

Same again, with a twist

These new levers of emphasis and new categories have created some turmoil in this year's rankings. Denmark's primacy in both infrastructure and innovation has helped it retain the top position it gained in 2004. But the US, which last year fell to 6th place largely because its broadband development lagged other global leaders, has recovered the number two position. Not only has the US seen broadband adoption surge forward, but the country remains a global leader in secure Internet server penetration and ICT spending. Switzerland (in 4th place this year) has also climbed upward in the rankings owing to its steady growth in broadband—including WiFi, one of the new connectivity categories introduced this year—and healthy ICT investment.

Other west European countries have lost some of their sheen in this year's rankings. This is more the

result of the faster ICT progress of other countries—for example in the US, Switzerland, Hong Kong (6th) and Australia (10th)—than to any regression by the Europeans, but our refinements to the model have shown up some of their weaknesses. The UK, for example, slipped to 5th place this year from 2nd place in 2004; it continues to enjoy high levels of connectivity and benefits from substantial government commitment to achieving information society objectives, but education is one area where the UK is somewhat weaker than previously thought. Norway, which fell to 9th spot this year, remains a global leader in ICT infrastructure but, unlike its fellow Nordic peers in the top ten, it has not leveraged these physical assets into intellectual property assets. Likewise, South Korea (18th) could never be accused of a lack of ICT innovation, but it too dropped by four places. The country's investment in information technology per head is in fact low, and it surprisingly has not prioritised investments in security infrastructure to the extent that other e-readiness leaders have.

Putting all the pieces together

The e-readiness rankings continue to be a measure of the complete e-picture. In this holistic measurement, many markets fall short: there are some countries in which e-business plays an increasingly important role, but not one big enough to transform large parts of their economy (yet). Collectively, India (49th) and China (54th) consume close to one-third of the world's ICT investment, and both countries continue to attract the lion's share of the world's technology-earmarked foreign direct investment. Moreover, a large ICT skills base continues to fuel India's outsourcing industry and China's prodigious technology manufacturing sector, both of which are fundamental to the global ICT economy. Yet both countries continue to slide in terms of overall e-readiness (three places down in 2005 for India, two places for China), partly because the billions of dollars in ICT investment and revenue

Economist Intelligence Unit e-readiness rankings, 2005
World regions

2005 rank	Region	e-readiness score (of 10)*
1	North America	8.38
2	Western Europe	7.87
3	Asia-Pacific	5.60
4	Central and eastern Europe	4.85
5	Latin America	4.74
6	Middle East & Africa	4.42

* Each region's score is based on the e-readiness scores for each of that region's countries covered in our rankings
Source: Economist Intelligence Unit, 2005

are tiny compared to their overall economy. Consider that the 22m broadband accounts in China—the world's second-largest fast Internet subscriber base—do not even represent 2% population penetration.

There are many other countries in the world where elements of e-readiness are in place but the sum of their parts doesn't add up to e-leadership. Notable examples are the regional leaders of central and eastern Europe and Latin America, Estonia (26th) and Chile (31st) respectively. Each of these markets scores higher than the global average in their respective core competencies—e-government and online services in Estonia; transparency and legal infrastructure in the case of Chile. Yet they are still weighed down by low infrastructure penetration and slow e-business adoption.

Certainly, the infrastructure ball and chain weighs down most of the world's economies, as does every so often the age-old issue of sluggish regulatory change: South Africa did well to retain its 32nd place in the rankings this year despite the government's failure to enforce competition in its fixed-line market effectively, which has seriously impaired broadband and online services development.

This does not imply that those less e-ready countries will never get ahead; nor does it imply that they cannot be e-ready in their own fashion. As we suggested in last year's report, and which is being proven every day, countries like India are profiting

from a global arbitrage opportunity, supplying lower-cost information technology (IT)-enabled skills to their more wired peers. But it is our belief, borne out by global trends, that all the pieces—infrastructure, security, transparency, innovation and skills—must be properly interlaced to ensure e-readiness. In 2005 it appears that both fully and aspiring e-ready countries understand this.

Economist Intelligence Unit e-readiness rankings, 2005

2005 e-readiness rank (of 65)	2004 rank	Country	2005 e-readiness score (of 10)*	2004 score
1	1	Denmark	8.74	8.28
2	6	US	8.73	8.04
3	3	Sweden	8.64	8.25
4	10	Switzerland	8.62	7.96
5	2	UK	8.54	8.27
6 (tie)	9	Hong Kong	8.32	7.97
6 (tie)	5	Finland	8.32	8.08
8	8	Netherlands	8.28	8.00
9	4	Norway	8.27	8.11
10	12	Australia	8.22	7.88
11	7	Singapore	8.18	8.02
12 (tie)	11	Canada	8.03	7.92
12 (tie)	13	Germany	8.03	7.83
14	12	Austria	8.01	7.68
15	16	Ireland	7.98	7.45
16	19	New Zealand	7.82	7.33
17	17	Belgium	7.71	7.41
18	14	S. Korea	7.66	7.73
19	18	France	7.61	7.34
20	22	Israel	7.45	7.06
21	25	Japan	7.42	6.86
22	20	Taiwan	7.13	7.32
23	21	Spain	7.08	7.20
24	23	Italy	6.95	7.05
25	24	Portugal	6.90	7.01
26	26	Estonia	6.32	6.54
27	31	Slovenia	6.22	6.06
28	27 (tie)	Greece	6.19	6.47
29	27 (tie)	Czech Republic	6.09	6.47
30	30	Hungary	6.07	6.22
31	29	Chile	5.97	6.35
32 (tie)	36	Poland	5.53	5.41
32 (tie)	32	South Africa	5.53	5.79

2005 e-readiness rank (of 65)	2004 rank	Country	2005 e-readiness score (of 10)*	2004 score
34	39 (tie)	Slovakia	5.51	5.33
35	33	Malaysia	5.43	5.61
36	39 (tie)	Mexico	5.21	5.33
37	34	Latvia	5.11	5.60
38	35	Brazil	5.07	5.56
39	37	Argentina	5.05	5.38
40	38	Lithuania	5.04	5.35
41	n/a	Jamaica**	4.82	n/a
42	42	Bulgaria	4.68	4.71
43	45	Turkey	4.58	4.51
44	43	Thailand	4.56	4.69
45	44	Venezuela	4.53	4.53
46	48	Saudi Arabia	4.38	4.38
47	50	Romania	4.19	4.23
48	41	Colombia	4.18	4.76
49	46	India	4.17	4.45
50	47	Peru	4.07	4.44
51	49	Philippines	4.03	4.35
52	55	Russia	3.98	3.74
53	51	Egypt	3.90	4.08
54	52 (tie)	China	3.85	3.96
55	56	Ecuador	3.83	3.70
56	52 (tie)	Sri Lanka	3.80	3.96
57	54	Ukraine	3.51	3.79
58	58	Nigeria	3.46	3.44
59	57	Iran	3.08	3.68
60	59	Indonesia	3.07	3.39
61	60	Vietnam	3.06	3.35
62	63	Kazakhstan	2.97	2.60
63	61	Algeria	2.94	2.63
64	62	Pakistan	2.93	2.61
65	64	Azerbaijan	2.72	2.43

* Substantial differences between our 2005 and 2004 scores mainly reflect changes we have introduced in our methodology.
** Jamaica is new to the annual rankings and was not ranked in 2004.   Source: Economist Intelligence Unit, 2005

Western Europe: Overview of the region

Aided by proactive policy implementation and the presence of a solid IT infrastructure, west European countries take seven out of the top ten spots in this year's global rankings. The region has made some strides, especially in the connectivity indicators, as more of the population is gaining access to the Internet. By the end of 2004, nearly one-half of west European Internet households were using broadband, and the subscriber base is estimated to have grown by 61% from 2003 to about 38m households. Forrester Research estimates that by 2010 almost one-half of all households in western Europe—about 72m in total—will subscribe to broadband.

In the 2004 white paper, we lauded the European Union (EU) and national governments for their high degree of co-ordination in promoting the expansion of "information societies". Such initiatives cover the gamut of electronic activity, from telecoms services to e-government. This being Europe, some of the initiatives are overly ambitious in scope, and implementation often leaves much to be desired. But no other region enjoys such supra-national commitment to boosting e-readiness. The EU's framework ICT initiative, the eEurope programme, also provides another valuable service to member countries in the form of a steady stream of best practices to study and emulate.

Some of them have slipped slightly in the rankings from last year, but the Nordic countries are still

Economist Intelligence Unit e-readiness rankings, 2005
Western Europe

2005 rank in region	2004 rank in region	Country	Overall ranking (of 65)	e-readiness score (of 10)
1	1	Denmark	1	8.74
2	3	Sweden	3	8.64
3	7	Switzerland	4	8.62
4	2	UK	5	8.54
5	5	Finland	6	8.32
6	6	Netherlands	8	8.28
7	4	Norway	9	8.27
8	8	Germany	12	8.03
9	9	Austria	14	8.01
10	10	Ireland	15	7.98
11	11	Belgium	17	7.71
12	12	France	19	7.61
13	13	Spain	23	7.08
14	14	Italy	24	6.95
15	15	Portugal	25	6.90
16	16	Greece	28	6.19

Source: Economist Intelligence Unit, 2005

prominent among our e-readiness leaders, again taking four of the top ten slots. The slippage is less a result of their weakness and more a result of improvement in other countries, such as the US and Switzerland. Denmark, Sweden and Finland, and to a lesser extent Norway, remain best-in-class in key areas of connectivity such as mobile penetration, Internet use and personal computer (PC) use, and trail only South Korea in broadband adoption. Denmark and Sweden are also acknowledged standard-setters in e-government implementation.

The UK, number two in the global rankings in 2004, also slipped three places this year due largely to the US and Swiss improvement, even while it's overall score rose. The UK remains a leader in ICT development, particularly where it comes to government commitment in supporting initiatives in e-government and broadband, for example. It's performance in some e-readiness criteria now appears in a less positive light than previously, however, due to refinements to our ranking methodology. This includes the educational level of the population which, as measured by mean years of schooling, is lower than most other west European countries.

Trends and best practices

Switzerland surges forward

Last year, Switzerland was singled out for its less effective (in comparison with Scandinavia), decentralised approach to e-business development. This year, however, our emphasis on next-generation infrastructure, security and ICT investment have all helped to make Switzerland our fastest gainer (moving up six spots to 4th place). The country's highly skilled workforce and increased spending on ICT have helped to boost service and product innovation from companies in the industry. And although the country's

local loop unbundling effort has lagged in comparison with others in Europe, an unusually strong cable TV industry is giving the telecoms incumbent Swisscom a run for its money in the delivery of Internet and voice services to the home.

Such competition has produced healthy growth of broadband adoption over the last two years, and is spurring innovation in the sector. Swisscom, for example, has been among the world's most aggressive developers of wireless WiFi networks and services, and may be the first European telco to deliver IPTV (Internet TV) into the home.

Other evidence of Switzerland's high level of e-readiness include a burgeoning online shopping market, which has led global e-commerce leaders such as eBay to establish a presence in the country; the ringing of public spaces in Switzerland with WiFi hotspots, for example by the national railway; and the government's use of the Internet for voting in the September 2004 federal election, the world's first such example in a national ballot.

Innovation tells the tale in Scandinavia

Norway (9th) is among Europe's broadband leaders with close to 16% penetration of the population at the end of 2004. Eight out of every ten Norwegians also owns a mobile phone, and this figure is steadily increasing. Yet despite the country's strong performance in terms of connectivity, it dropped four positions in the ranking this year. One of the reasons for the decline is the inclusion of a new rating on the innovativeness of each country (as measured by the number of patents registered by residents). Unlike some of its Scandinavian counterparts, Norway has no sizeable home-grown intellectual base for technology innovation and production. Finland (6th), which is home to Nokia, a world leader in developing innovative mobile communication products,

surpassed Norway in the rankings this year. For their part, Danish manufacturers have made significant innovations in such ICT fields as software development, photonics and mobile communications, as well as in the burgeoning field of bioinformatics. Danish innovation is thus helping the country to retain its e-readiness edge.

Ireland gets better at ICT use, not just production

Ireland (15th) is the world's largest exporter of software and the European beachhead for some of the world's largest ICT companies, including Dell, Google and Intel. Earlier this year, Yahoo! announced plans to base its European operations in Ireland as well, to support its other European headquarters in London. The presence of a highly skilled IT labour force has reinforced the country's role as a key player in the global IT service and outsourcing market.

The country's leadership as a centre of ICT production has not filtered through to its own population's access to IT. But this at last seems to be changing, as lower-cost Internet services and PCs are becoming more accessible to citizens. Ireland's broadband subscription numbers jumped by 119% in the first half of 2004, although the country still lags behind other European countries in terms of penetration. Nonetheless, easier access to the Internet is helping the growth of e-commerce. According to the Bank of Ireland, the number of small businesses using online services doubled in 2004, while 80% of their larger customers are already banking online. The benefits from the growing availability of Internet access are spilling over to other fields of digital endeavour.

Central and eastern Europe: Overview of the region

As in the Asia-Pacific region, there is wide variation in central and eastern Europe in levels of e-readiness. The region houses a first tier of rapidly developing digital markets such as Slovenia, the Baltics (Estonia, Latvia, Lithuania), the Czech Republic, Poland, Hungary and Slovakia. At the other end of the scale are countries such as Azerbaijan and Kazakhstan, which in their 14 years since leaving the Soviet Union have made little real headway in promoting ICT development. Even the first tier of countries continues to lag well behind western Europe in key e-readiness indicators: this is true of broadband and narrowband Internet penetration, for example, as well as that of personal computers and other digital infrastructure. Computer and web literacy and legal framework development are other areas in which most of the region fares poorly with the established EU.

At the same time, connectivity in the eight new members of the European Union, as well as the two (Romania and Bulgaria) slated to join in 2007, has benefited from telecoms policy and regulatory co-ordination with the EU. While broadband adoption lags, mobile subscriptions in countries such as Estonia, Slovenia and the Czech Republic have skyrocketed and have quickly surpassed the plain old telephone service (POTS) as the primary means of voice communication for citizens. Mobile penetration rates in these countries exceed those in much of western Europe.

More broadly, efforts to comply with EU entry requirements and implement information society initiatives over the past five years have benefited overall ICT market expansion. According to IT research firm IDC, Poland—which has jumped four places in ranking this year—registered growth of its information technology market (which includes IT hardware,

Economist Intelligence Unit e-readiness rankings, 2005
Central and eastern Europe

2005 rank in region	2004 rank in region	Country	Overall ranking (of 65)	e-readiness score (of 10)
1	1	Estonia	26	6.32
2	4	Slovenia	27	6.22
3	2	Czech Republic	29	6.09
4	3	Hungary	30	6.07
5	6	Poland	32	5.53
6	8	Slovakia	34	5.51
7	5	Latvia	37	5.11
8	7	Lithuania	40	5.04
9	9	Bulgaria	42	4.68
10	10	Romania	47	4.19
11	12	Russia	52	3.98
12	11	Ukraine	57	3.51
13	13	Kazakhstan	62	2.97
14	14	Azerbaijan	65	2.72

Source: Economist Intelligence Unit, 2005

software and services) of 11% in 2004, while those of the Czech Republic and Hungary each grew by 9%. These levels compare favourably with average IT market growth in western Europe of 4% in 2004.

Trends and best practices

E-government energy

A few of the region's new EU members have put in place sophisticated e-government practices. Estonia's lead e-readiness spot in the region (26th) is not only attributable to its good connectivity performance, but also to extremely proactive e-government development. Initiatives such as its e-cabinet programme, implemented in 2001 to streamline government decision-making at the highest level, have helped to improve administrative efficiency with a web-based documentation system. Electronic customs, tax filing and purchasing portals here, in Slovenia, the Czech Republic and Poland, among other countries, are starting to make the lives of business executives easier. Romania, still struggling with poor IT infrastructure, has also earned praise from the EU and analysts (such as the Economist Intelligence Unit) for well-co-ordinated efforts to establish working technical platforms for e-government services, even if take-up by citizens and businesses is still slow.

Czech progress

The Czech Republic (29th) is approaching parity with other west European countries in terms of ICT spending and mobile penetration. The country's ICT market is estimated to have reached a volume of €6.8bn last year, according to the European Information Technology Observatory, thereby overtaking that of Ireland (15th), with a market size of €6.2bn. This growth has been stimulated partly by strong government initiatives designed to boost the development of e-commerce. As mentioned above, the country has done well on the e-government front; its

"E-trziste" programme, for example, successfully applied an electronic marketplace to the government's procurement operations. Mobile penetration has surpassed the 100% mark. Broadband growth, however, has been held back by a lack of effective competition in local access markets to incumbent operator Cesky Telecom. The latter finally launched an asymmetric digital subscriber line (ADSL) service in 2003, long after its counterparts in Hungary and Poland. The good news is that, owing to the increasing popularity of ADSL, and the existence of competitive cable Internet services, the country's broadband penetration is expected to shoot upward over the next two years—to nearly 8% by 2007, according to telecoms market analysts Pyramid Research.

E-commerce grows slowly, but innovation helps

The EU's recently released Central and Eastern Europe Information Society Benchmarks reveal that, on average, only 10% of the Internet users in the region have actually made an online purchase. Credit-card fraud—or the fear of it—is one of the hurdles to faster e-commerce growth, and many countries are recognised as sources of credit-card scams by e-commerce professionals. However, a local innovation is helping to address the problem, and may work to boost the region's very low credit-card penetration. A fraud management software developed in Hungary (30th) and pioneered by that country's leading credit-card issuer, OTP Bank, has for years allowed consumers to receive an SMS as a verification message each time their credit card is charged. The software is now used by banks across the region, and is credited with boosting credit-card usage in such markets as Hungary, Poland (32nd) and Slovakia (34th). The SMS-based fraud management solution is also a rare example of an e-ready best practice exported outside the region: Mastercard has announced plans to roll out such services to its customers in western Europe, and eventually in Asia and North America.

The Americas: Overview of the region

At first glance, the contrast between the relative e-readiness of North America and Latin America is too vast to be comparable. Twenty-nine places in rank separate the two leaders in each region—the US (2nd) and Chile (31st). The US climbed to the second spot this year, helped largely by its performance in broadband Internet access. Outpaced in growth by other countries, Canada (12th) dropped one place in ranking. With the exception of Mexico (36th), all Latin American countries included in the ranking have dropped in their positions this year. The continuing digital divide between north and south is rooted in the very issues that constrain Latin America's overall economic development—income inequality, lack of infrastructure and a still-nascent technological knowledge base.

Latin American countries are trying to close the gap through higher technology spending and the implementation of government policies to promote greater IT use. Countries like Chile, Brazil (38th), Mexico and Argentina (39th) are adding Internet and mobile users at a very high rate. Nevertheless, only in Chile does broadband penetration surpass 3%, and the Latin America average was less than 1% at year-end 2004. In North America, by contrast, IT has become part of the fabric of commerce and everyday activity. A survey by Mobile Media Monitor shows that US mobile users have begun to grow comfortable with more advanced mobile data and content services. In 2004, for example, the share of US wireless subscribers who use their mobile device to access the Internet rose to 12%.

Economist Intelligence Unit e-readiness rankings, 2005

The Americas

2005 rank in region	2004 rank in region	Country	Overall ranking (of 65)	e-readiness score (of 10)
North America				
1	1	United States	2	8.73
2	2	Canada	12	8.03
Latin America				
1	1	Chile	31	5.97
2	4	Mexico	36	5.21
3	2	Brazil	38	5.07
4	3	Argentina	39	5.05
5	6	Venezuela	45	4.53
6	5	Colombia	48	4.18
7	7	Peru	50	4.07
8	8	Ecuador	55	3.83
Caribbean				
1	n/a	Jamaica	41	4.82

Source: Economist Intelligence Unit, 2005

Trends and best practices

Good news and bad on broadband adoption

After a slow start, growth of broadband access in the United States is finally picking up. According to the US Federal Communications Commission, the number of broadband connections jumped to 32m in June last year, up by 38% from 2003. This is mainly attributable to lower prices driven by competition between cable and digital subscriber line (DSL) providers.

Canada has been anything but a laggard in this area: owing partly to government initiatives, broadband penetration of the population reached 17% by end-2004, one of the highest levels in the world. Now, the Canadian government seems intent on doing its bit to make the Internet ubiquitous: it recently announced a C$155m national project that will connect 52 remote communities to broadband via satellites.

Latin America sadly presents a different story. Persistent hurdles to ICT development—including sparse telecommunications infrastructure, low PC ownership rates and limited access to credit—continue to restrain broadband connectivity in the region. Broadband connections in Chile did increase by 51% last year, but the cost of access remains high here and throughout the region. According to Pyramid Research, no more than 4% of Latin American households will have a broadband connection by the end of 2005.

Broadband gains a voice

The expansion of broadband access in the US, in enabling the delivery of high-bandwidth services to the home, has spurred demand for new electronic products and services, among them Internet gambling, interactive entertainment and digital media services. The market for VoIP (Voice over Internet Protocol) services, for example, has made some breakthroughs owing to more pervasive broadband availability. According to a research firm, Yankee Group, the ranks of VoIP users grew to nearly 1m last year, a steep increase from the 131,000 users at year-end 2003. Moreover, it is predicted that the market will serve 17.5m US households by year-end 2008. The growth of VoIP promises not only to reduce costs for all local and international calls, but also to redefine the competitive landscape of the voice market, as niche players such as Vonage and others loosen the big telcos' lock on fixed voice telephony.

Brazil: an outsourcing partner to US multinationals

IT service companies in Brazil have emerged as a strong outsourcing force for multinationals in nearby regions, owing largely to the country's burgeoning cadre of IT professionals. US-based IT service providers have been investing aggressively in the country as part of a regional expansion of their operations. Demand for such services comes largely from other multinationals that benefit by outsourcing their IT support operations on a regional or a global scale. Moreover, the country's growing outsourcing prowess may have knock-on effects in stimulating IT-enabled services elsewhere in the region, as Brazil itself may become both costly in regional comparison and lacking in the Spanish language skills needed to support regional operations.

Governments make a difference

More focused government ICT policies have helped to propel Mexico's four-notch rise in the rankings this year. The government's e-Mexico project has opened 3,200 community centres with public Internet access kiosks throughout the country. A growing number of Internet cafes, broader access to bundled finance packages (PC plus Internet access) and aggressive prepaid Internet offerings from service providers have all served to improve connectivity. Elsewhere, lawmakers in Argentina have recently passed

legislation aimed at promoting their local software industry by promising a stable tax environment over the next ten years. A similar program put into place in Uruguay exempted software producers from paying income tax.

Jamaica joins the ranks

Jamaica (41st), included in our rankings for the first time this year, is paving a path for growth in its e-business sector despite a big impediment: a lack of previous ICT investment, resulting in a sparse installed base of Internet infrastructure. On the bright side, efforts taken to liberalise the local telecoms industry

in 2000 have brought growth to the mobile phone market, which now boasts a penetration rate of 67%. Internet penetration has nearly tripled from 2000, although it remains below 25%. But Internet growth has been slowed by high costs—broadband subscription fees average over US$90 per month, according to Jamaica's Office of Utilities Regulation, compared with a low of US$12 per month in Asia. To address this, a group called Jamaica Network Access Point has been launched that will allow operators to share overheads and reduce the costs of interconnecting their networks. Should the scheme take, telecoms service prices should fall.

Asia-Pacific: Overview of the region

The Asia-Pacific region consists of countries that stand on different rungs of the e-readiness evolution ladder. Part of this, of course, is down to wide variations in their levels of economic development. But the absence of a co-ordinating force such as the European Commission to push digital development across the region is also a factor in the countries' e-readiness divergence. While high connectivity scores in Hong Kong (6th), Australia (10th) and Singapore (11th) bolster the region's overall ranking, innovativeness in products and services in South Korea (18th) and Japan (21st) also weighs heavily in the region's favour. The region is also home to relatively poor performers on the e-readiness scale—notably China (54th) and India (49th). Yet these serve as major global nodes in the ICT economy, and are among its largest and fastest-growing consumers and producers of technology, despite their low rankings.

Hong Kong tops all other Asia-Pacific countries in the e-readiness rankings; it scores well in e-business development and the fostering of a legal and policy environment that supports healthy industry growth. Hong Kong telecoms operators also excel in the mobile arena, and are aggressively pushing third-generation (3G) mobile services, although Japan stands out as the region's leader in this area. Wider availability of advanced mobile phones and services is expected to accelerate uptake in existing 3G markets, including South Korea, Hong Kong and Australia (10th), while they remain nascent in countries such as Taiwan (22nd), China and Vietnam (61st).

Economist Intelligence Unit e-readiness rankings, 2005
Asia-Pacific

2005 rank in region	2004 rank in region	Country	Overall ranking (of 65)	e-readiness score (of 10)
1	2	Hong Kong	6	8.32
2	3	Australia	10	8.22
3	1	Singapore	11	8.18
4	5	New Zealand	16	7.82
5	4	South Korea	18	7.66
6	7	Japan	21	7.42
7	6	Taiwan	22	7.13
8	8	Malaysia	35	5.43
9	9	Thailand	44	4.56
10	10	India	49	4.17
11	11	Philippines	51	4.03
12	12	China	54	3.85
13	12	Sri Lanka	56	3.80
14	14	Indonesia	60	3.07
15	15	Vietnam	61	3.06
16	16	Pakistan	64	2.93

Source: Economist Intelligence Unit, 2005

After a slip in rankings last year, Australia has rebounded two positions, owing partly to an acceleration in broadband growth resulting from a price war waged in 2004 by the incumbent national operator Telstra. New Zealand (16th) is also ranked higher this year, its rise from 19th place in 2004 owing mainly to a good performance in areas such as ICT investment, electronic security, entrepreneurship and education, criteria that have been either reweighted or refined in our scoring methodology.

Trends and best practices

Japan sets the pace in security

Steep growth in Japan's IT market has brought with it new threats in the form of fraud and other cyber crimes, and government initiatives have begun to focus on enhanced IT security. The Personal Information Protection Act, which will take effect in April 2005, has already boosted investment in network security products. The act includes tough new requirements for companies to secure client data from loss or unauthorised access, and has unleashed a wave of network security product development. Thus, a market for integrated security management services has been established, and systems integrators are joining forces with vendors of security products to capitalise. An example is a partnership between Hitachi Systems & Services, a leading solutions provider, and Protego Networks, a provider of enterprise threat mitigation appliances. Japan has jumped four positions in the e-readiness rankings this year, to 21st place, owing partly to growth in this emerging network security market.

Software innovation in New Zealand

One reason for New Zealand's jump from 19th to 16th place in the rankings is its emergence as a key exporter of software and other IT products and services. The country has gained renown as an innovator for niche-market products, with successes that include the

launch of the world's first dental software by a local developer, Software of Excellence International. New Zealand network security services firms have also been able to leverage the competitive edge that comes from operating in a time zone 12 hours ahead of GMT: they provide "early warning" alert services to European and American companies before the start of the workday. Such local e-security firms as Endace Measurement Systems, Keyghost and EMS Global have enjoyed notable success in recent years and are likely to continue to grow their export markets, in some cases by following their enterprise customers overseas and forging partnerships with local service providers.

China's irresistible attraction

China has surpassed Japan to attain 2nd place worldwide—after the US—in broadband lines installed, with over 22m in place as of the third quarter of last year. (Japan registered 17.2m at the same point in time.) With broadband adoption growing at about 8% per month and still at a very low penetration level, China's potential market remains vast. To date, its low labour costs have done most to make China a manufacturing hub for global companies. Last year, such firms as Samsung Electronics, Hynix and Siemens announced plans to move more of their manufacturing and R&D to China. But the enormous pull of the domestic market may come to overshadow the appeal of low-cost labour. In any event, investing in manufacturing remains a time-honoured point of entry to qualify for China's infrastructure contracts. The market's potential has enticed Hong Kong telecoms carrier, PCCW, for example, to pursue HK$1bn in wireless joint ventures in the country.

South Korea's next broadband frontier

South Korea remains the most developed broadband access market in the world, and continues to rank among the leaders in overall connectivity. As of early 2005, 75% of South Korean households—

approximately four times the number in North America—subscribed to broadband services. It also boasts a fast-growing market for online entertainment and shopping, which now constitutes nearly 12% of all retail sales in the country. Nonetheless, South Korea has fallen four places in this year's e-readiness rankings. This is mainly a result of refinements to our scoring methodology, which have revealed weaknesses in South Korea's e-readiness armour. For example, we have placed a greater focus on aspects of entrepreneurship, in which South Korea fares less well than many of its regional neighbours, not to mention European and North American countries. Our methodology refinements have also led us to reassess the country's overall ICT spending, and have revealed shortcomings in network security.

Signs have also emerged that South Korea's broadband market is nearing a point of saturation, among them falling margins and declining subscriber growth rates. Operators are responding by shifting their focus towards end-to-end broadband services. KT, for example, aims to become a "broadband communication provider" and to serve customers with high-speed, high-quality broadband communication for services like file transfer, video and peer-to-peer communication. This shift in strategy has begun to drive investment in certain leading-edge technologies, such as home networking—the set-up of wireless networks that could eventually allow "smart" appliances at home to integrate and interact with each other. SK Telecom, LG, KT and other South Korean firms see this new frontier as a way to reinvigorate the broadband market, and the Ministry of Information and Communications has allocated W880bn towards developing home networking. If this increase in ICT spending is implemented to plan, look for South Korea to regain some of its lost e-readiness ground with characteristic speed.

Middle East and Africa: Overview of the region

Despite rapid growth in most countries in the region, connectivity rates—the criterion most heavily weighted in our scores—still lag far behind those in other regions. The Middle East and Africa currently serve a total of about 1m broadband subscribers, a meagre sum compared with the 53m in Asia and 42m in the Americas. Low levels of investment and limited sources of financing constitute the primary reasons for the slow development. With public and private funds lacking for infrastructure development, even broadly available technologies remain too costly for widespread adoption. Taken together, these factors feed a cycle of suppressed demand and constrained investment. Only Israel (20th), Saudi Arabia (46th) and Turkey (43rd) have managed to move up in this year's rankings.

But the slow pace of development belies a widespread awareness among businesses and governments of the importance of ICT. In South Africa (32nd), local business owners spend 1.4 hours a day accessing and responding to e-mail, well in line with the 1.5 hours spent on average internationally. In Nigeria (58th), banks and educational institutions have started to bring their transactions online. A Nigerian bank, FSG International, has since 2003 operated a GUI (graphical user interface)-based network platform to integrate retail and corporate banking operations among its 35 centres and branches.

The growth and proliferation of such initiatives remains hindered by very low Internet penetration—0.1% in Nigeria at year-end 2004, according to Pyramid Research. But there are positive signs; earlier this year, a US-based satellite firm, Intelsat, launched high-speed connectivity services in Africa in an attempt to bring affordable broadband to the region. Some governments have also made strides in injecting more competition into their telecoms markets. Most encouraging of all is the growth of mobile phone services. Pyramid Research forecasts that mobile penetration of the region's population will increase from 12% in 2004 to nearly 15% by the end of 2005. This is a far cry from the penetration levels of Asia, Europe and North America, but mobile telephony is arguably doing more to hasten business growth in the Middle East and Africa than traditional Internet technologies.

Economist Intelligence Unit e-readiness rankings, 2005
Middle East and Africa

2005 rank in region	2004 rank in region	Country	Overall ranking (of 65)	e-readiness score (of 10)
1	1	Israel	20	7.45
2	2	South Africa	32	5.53
3	3	Turkey	43	4.58
4	4	Saudi Arabia	46	4.38
5	5	Egypt	53	3.90
6	7	Nigeria	58	3.46
7	6	Iran	59	3.08
8	8	Algeria	63	2.94

Source: Economist Intelligence Unit, 2005

Trends and best practices

Broadband pluses and minuses in Israel

Blessed with a stable business environment and low prices for personal computers and Internet services, Israel leads the region in the development of ICT and e-commerce markets. Its 2004 broadband penetration rate of 15% surpasses those in such broadband-hungry markets as Japan and Sweden, and is among the ten highest rates in the world. Such rapid growth of high-speed Internet and of applications delivered over it has had an impact on a number of domestic industries, including the media, for better or for worse. According to a survey by Target Group Index, Israel's daily newspapers have suffered losses in readership over the past few years, partly because people have defected to new information sources on the Internet.

Liberalisation helps in Saudi Arabia and Turkey

Liberalisation efforts continued in the telecoms markets of Turkey and Saudi Arabia last year. Saudi Arabia awarded a new mobile operator licence to Etisalat (from the United Arab Emirates), triggering the incumbent Saudi Telecom to decrease activation fees and deposits, as well as to roll out prepaid services, both of which effectively extended the reach of mobile technologies to those with more modest means. According to Pyramid Research, popular anticipation of a new entrant to the mobile sector helped to push subscriber numbers from some 7m at the end of 2003 to well over 9m by the end of 2004, and another year of 20% or more growth is expected. In Turkey, state ownership of the incumbent carrier, Turk Telecom, ended with the sale of more than 55% of the company's shares. The move is one of many taken by Turkey as part of its bid to gain membership in the EU, for which talks will begin in October this year.

Wanted: a safer web environment

E-commerce is slowly emerging in Sub-Saharan Africa. The Postal Corporation of Kenya, for example, uses satellite technology to link its approximately 500 postal offices across the country; the organisation hopes that the deployment will enhance traditional delivery services as well as enable introduction of new services, such as money transfer, hybrid mail and e-commerce. But further development in the region of such encouraging e-commerce initiatives will require business and government attention to electronic security. A survey conducted recently by CyberSource named Nigeria as the riskiest country in the world for e-commerce, owing to the risk of fraud. Nigeria has become notorious as a base of operations for advance-fee frauds, often perpetrated by e-mail, known as "419" schemes. Governments across the region must step up their efforts to provide a safe environment for e-commerce to take root.

Conclusion: E-readiness means not going it alone

The Internet is beginning to live up to its promise—it is connecting the world and allowing individuals and companies to communicate and conduct business globally, with speed and efficiency. E-readiness is thus rightly seen as an enabler of globalisation. Yet the relationship is also increasingly converse, as sources of digital services and support emerge in some corners of the world that help to increase the e-readiness of countries in others.

Domestic e-readiness is still key: the combination of solid ICT infrastructure and clear regulatory structures gives rise to strong domestic digital economies. Silicon Valley is not the only high-tech entrepot in the US, and Switzerland and Denmark score highly in all e-readiness categories, which allows for global leadership in their respective IT service and biometrics industries. E-readiness at home allows national economies to foster the development of unique industries that define their long-term economic success.

Perhaps the greatest economic benefit of ICT is its ability to help individuals and enterprises conduct processes more efficiently—anywhere in the world. Computers, software and networking technology have in this way been instrumental in enabling skilled workers with cost advantages in emerging markets to take over labour-intensive back-office processes and data management from developed-country firms, thus helping the recipient country to ensure that its own infrastructure and services are sparkling.

One country's digital competitiveness, then, cannot be developed in isolation. The United Nations Conference on Trade and Development has estimated that nearly US$600bn will be spent on IT-enabled outsourcing this year, and nearly every dollar will flow from digital "haves" to digital "have-nots". E-business in rich countries depends, to one degree or another, on digital workers in other countries. Thus, e-readiness is not so much a function of succeeding over other countries as its success in partnering with them.

Appendix 1: Methodology and category definitions

The Economist Intelligence Unit's e-readiness ranking methodology is both multi-faceted and constantly updated, reflecting both the variety of social, economic and technological factors that influence e-commerce, and the rapid pace with which they can change. Again in 2005, the ranking model consists of nearly 100 separate quantitative and qualitative criteria, which are scored by Economist Intelligence Unit country analysts and organised into six primary categories. These are, in turn, weighted according to their assumed importance as influencing factors. Changes—the inclusion of new ranking criteria, the retiring of less relevant items and/or the reweighting of criteria—are carried out by an Economist Intelligence Unit analyst panel led by the director of global technology research.

Major data sources include the Economist Intelligence Unit, Pyramid Research, the World Bank and The World Information Technology and Services Alliance (WITSA), among others. These assessments are, in turn, reviewed by our senior economists. The six categories (and their weight in the model) and criteria are as follows:

1. Connectivity and technology infrastructure
Weight in overall score: 25%
Category description: Connectivity measures the access that individuals and businesses have to fixed and mobile telephony services, personal computers and the Internet. Given the rapid pace of change in access technology development, this category has been adjusted in 2005. Beyond availability, the security and reliability of Internet services and Internet-enabled transactions is a key issue, so we have augmented our "security" criteria this year with quantitative measurements of the penetration of Secure Socket Layer (SSL) encrypted servers in the country. Two new criteria have also been created to measure more precisely the extent to which the population can access the Internet (both geographically and financially): wireless "hotspot"

penetration and Internet affordability, the latter measured by the percentage of income per head that a month's worth of Internet access represents. The connectivity category is weighted more heavily towards broadband penetration (20%) this year, a reflection of its growing importance for ICT development.
Category criteria: Narrowband penetration; broadband penetration; mobile-phone penetration; Internet penetration; PC penetration; WiFi hotspot penetration; Internet affordability; security of Internet infrastructure.

2. Business environment
Weight in overall score: 20%
Category description: In evaluating the general business climate, the Economist Intelligence Unit screens 70 indicators covering criteria such as the strength of the economy, political stability, the regulatory environment, taxation, competition policy, the labour market, the quality of infrastructure, and openness to trade and investment. The resulting business environment rankings measure the expected attractiveness of the general business environment over the next five years. Calculated regularly as part of the Economist Intelligence Unit Country Forecasts, these rankings have long offered investors an invaluable comparative index for 60 major economies.

3. Consumer and business adoption
Weight in overall score: 20%
Category description: The e-readiness rankings assess how prevalent e-business practices are in each country. What share of retail commerce is conducted online? To what extent is the Internet used to overhaul and automate traditional business processes? And how are companies helped in this effort by the development of logistics and online payment systems, the availability of finance and government investment in ICT?
Category criteria: National spending on information

and communications technology as a proportion of GDP; level of e-business development; degree of online commerce; quality of logistics and delivery systems; availability of corporate finance.

4. Legal and policy environment

Weight in overall score: 15%

Category description: E-business development depends both on a country's overall legal framework and specific laws governing Internet use. How easy is it to register a new business, and how strong is protection of private property, in particular intellectual property, which can easily fall victim to digital-age piracy? Governments that support the creation of an Internet-conducive legal environment—both through policy and enforcement—receive high scores. Those more concerned with censoring content and controlling the web score lower.

Category criteria: Overall political environment; policy toward private property; government vision regarding digital-age advances; government financial support of Internet infrastructure projects; effectiveness of traditional legal framework; laws covering the Internet; level of censorship; ease of registering a new business.

5. Social and cultural environment

Weight in overall score: 15%

Category description: Basic education (as measured here by mean years of schooling) and literacy are preconditions to being able to utilise Internet

services, but this category also considers a population's "e-literacy "— its experience using the Internet and its receptivity to it—and the technical skills of the workforce. E-business, at some level, usually requires some amount of risk-taking, and the fruits of that risk-taking often culminate in the creation of intellectual property. In fact, policymakers often use e-business development as a catalyst for innovation. Thus, the rankings this year attempt to measure each country's ability to foster new products and industries, by assessing entrepreneurship and innovation levels, the latter measured by the number of patents registered. The two have been included as separate criteria for ratings in the category this year.

Category criteria: Educational level; Internet/web literacy; degree of entrepreneurship; technical skills of workforce; degree of innovation.

6. Supporting e-services

Weight in overall score: 5%

Category description: No business or industry can function efficiently without intermediaries and ancillary services to support it. For e-business, these include consulting and IT services, and back-office solutions. The rankings also take into account whether there are consistent, industry-wide technology standards for platforms and programming languages.

Category criteria: Availability of e-business consulting and technical support services; availability of back-office support; industry-wide standards for platforms and programming languages.

Appendix 2: Category scores

Economist Intelligence Unit e-readiness rankings, 2005
Category scores

	Overall score	Connectivity	Business enviroment	Consumer and business adoption	Legal and policy environment	Social and cultural environment	Supporting e-services
Category weight		0.25	0.20	0.20	0.15	0.15	0.05
Denmark	8.74	8.20	8.58	8.85	8.65	9.60	9.25
US	8.73	7.65	8.57	9.80	8.41	9.20	10.00
Sweden	8.64	7.80	8.41	9.10	8.57	9.60	9.25
Switzerland	8.62	8.25	8.51	8.90	8.23	9.20	9.25
UK	8.54	7.80	8.56	9.80	8.34	8.00	9.25
Hong Kong	8.32	8.10	8.57	9.20	9.16	6.20	8.75
Finland	8.32	7.10	8.57	8.85	8.50	8.80	9.25
Netherlands	8.28	7.50	8.62	8.65	8.37	8.20	9.25
Norway	8.27	7.55	8.21	9.10	8.35	8.00	9.25
Australia	8.22	6.75	8.27	8.65	9.06	9.00	8.75
Singapore	8.18	7.65	8.62	9.05	8.74	6.60	8.75
Canada	8.03	6.85	8.70	8.20	8.72	7.80	9.25
Germany	8.03	6.40	8.23	9.10	8.09	8.60	9.25
Austria	8.01	7.20	8.06	8.40	8.38	8.00	9.25
Ireland	7.98	6.35	8.48	8.80	8.57	8.00	9.00
New Zealand	7.82	6.10	8.25	8.20	8.62	8.60	8.50
Belgium	7.71	6.40	8.26	8.40	7.82	7.60	9.25
South Korea	7.66	7.20	7.32	7.60	8.14	8.20	8.50
France	7.61	6.30	8.24	8.00	8.05	7.60	8.75
Israel	7.45	6.85	7.67	7.40	7.24	8.00	8.75
Japan	7.42	6.90	7.34	8.00	7.27	7.60	8.00
Taiwan	7.13	6.70	8.15	7.10	7.46	6.00	7.75
Spain	7.08	6.20	7.97	6.50	7.88	6.80	8.75
Italy	6.95	6.10	7.39	6.40	7.87	7.00	8.75
Portugal	6.90	6.15	7.72	6.50	8.04	6.00	8.25
Estonia	6.32	5.20	7.83	5.60	6.84	6.20	7.50
Slovenia	6.22	5.50	7.42	5.25	6.40	6.60	7.25
Greece	6.19	4.40	6.88	6.00	7.39	6.60	8.25
Czech Republic	6.09	4.90	7.49	5.70	6.73	5.60	7.50
Hungary	6.07	4.80	7.37	5.70	6.71	5.80	7.50
Chile	5.97	3.80	7.99	5.60	7.72	5.60	6.00
Poland	5.53	4.00	7.34	4.50	6.43	5.60	7.25
South Africa	5.53	2.10	6.94	6.10	7.48	6.00	7.50

© The Economist Intelligence Unit 2005

	Overall score	Connectivity	Business enviroment	Consumer and business adoption	Legal and policy environment	Social and cultural environment	Supporting e-services
Category weight		0.25	0.20	0.20	0.15	0.15	0.05
Slovakia	5.51	4.05	6.98	4.50	6.18	6.20	7.00
Malaysia	5.43	4.10	7.27	5.45	5.95	4.80	5.00
Mexico	5.21	3.15	6.97	4.50	6.98	5.20	6.00
Latvia	5.11	3.45	7.21	3.65	5.89	5.60	7.00
Brazil	5.07	2.55	6.54	5.40	6.86	4.80	6.00
Argentina	5.05	3.00	5.95	5.30	6.49	5.20	6.00
Lithuania	5.04	3.45	7.31	3.50	5.79	5.40	6.75
Jamaica**	4.82	2.90	6.00	4.80	6.60	4.80	4.50
Bulgaria	4.68	3.60	6.44	3.30	5.47	4.80	5.75
Turkey	4.58	3.30	6.49	4.15	4.71	4.40	5.25
Thailand	4.56	3.05	6.96	3.45	6.06	4.00	4.25
Venezuela	4.53	2.70	5.28	4.40	6.20	4.60	6.00
Saudi Arabia	4.38	2.90	6.27	4.45	4.42	4.00	5.00
Romania	4.19	2.65	6.25	2.25	5.44	4.80	5.75
Colombia	4.18	2.20	6.07	3.70	5.90	3.60	5.00
India	4.17	1.40	6.29	4.25	4.86	4.40	6.50
Peru	4.07	1.70	5.84	3.30	6.29	4.00	5.50
Philippines	4.03	2.15	6.51	2.90	4.50	4.80	4.25
Russia	3.98	3.00	6.16	2.00	4.05	5.00	4.75
Egypt	3.90	2.20	5.48	3.65	4.74	4.00	4.25
China	3.85	2.50	6.37	2.75	3.86	4.20	3.75
Ecuador	3.83	1.80	5.42	3.00	5.63	4.20	4.50
Sri Lanka	3.80	1.40	6.19	3.35	4.81	4.20	3.75
Ukraine	3.51	2.20	5.49	1.80	3.84	4.60	4.75
Nigeria	3.46	1.00	4.65	3.50	4.60	4.60	4.00
Iran	3.08	2.35	4.61	2.00	2.70	4.00	3.25
Indonesia	3.07	1.40	5.69	2.80	2.75	2.80	3.75
Vietnam	3.06	1.25	5.52	2.10	3.64	3.60	2.75
Kazakhstan	2.97	1.70	5.37	1.70	2.83	3.60	3.25
Algeria	2.94	1.85	5.06	2.00	2.86	3.40	2.50
Pakistan	2.93	1.25	5.20	1.95	3.80	3.20	2.75
Azerbaijan	2.72	1.70	5.29	1.60	2.34	2.80	3.00