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Insight Report

The Global Information Technology Report 2013

Growth and Jobs in a Hyperconnected World

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TOPLINE REPORT: MALAYSIA

TOPLINE REPORT OF THE GLOBAL INFORMATION TECHNOLOGY REPORT (GITR) 2013: *Growth and Jobs in a Hyperconnected World*

1. Overall Performance

- 1.1. Malaysia ranks 30th out of 144 economies with an index score of 4.82 a decline by 1 position compared to last year at 29th position with an index score of 4.80 ; 8th out of 22 in Asia Pacific economies and 2nd in ASEAN. According to WEF, Malaysia remains the best-ranked economy in Developing Asia. Malaysia's performance in the past two years in terms of index score had been showing an upward trend from 4.80 (2012) to 4.82 (2013).
- 1.2. This was revealed in the 12th edition of The *Global Information Technology Report (GITR) 2012: Growth and Jobs in a Hypeconnected World* produced by the World Economic Forum (WEF) in collaboration with INSEAD. It is aimed at measuring the degree to which 144 economies across the world leverage on ICT for enhanced competitiveness and covers issues on digitization, the mass adoption of connected digital services by consumers, enterprises and governments that has emerged in recent years as a key economic driver that accelerates growth and facilitates job creation. This report will be released on 10th April 2013, 4.00pm in Switzerland (Wednesday 10th April 2013, 10.00pm Malaysian time).
- 1.3. Two groups of economies dominate the Networked Readiness Index (NRI): Northern European economies, and the so-called Asian Tigers. Finland, Sweden, Norway and Denmark continue to feature in the top 10 (Table 1). Singapore, Taiwan, the Republic of Korea, and Hong Kong, recorded outstanding business and innovation environment that are consistently ranked among the most conducive in the world. They also stand out for their governments' leadership in promoting the digital agenda, and the impact of ICTs on society tends to be larger in these economies.

Table 1: Malaysia and Top 10 Countries

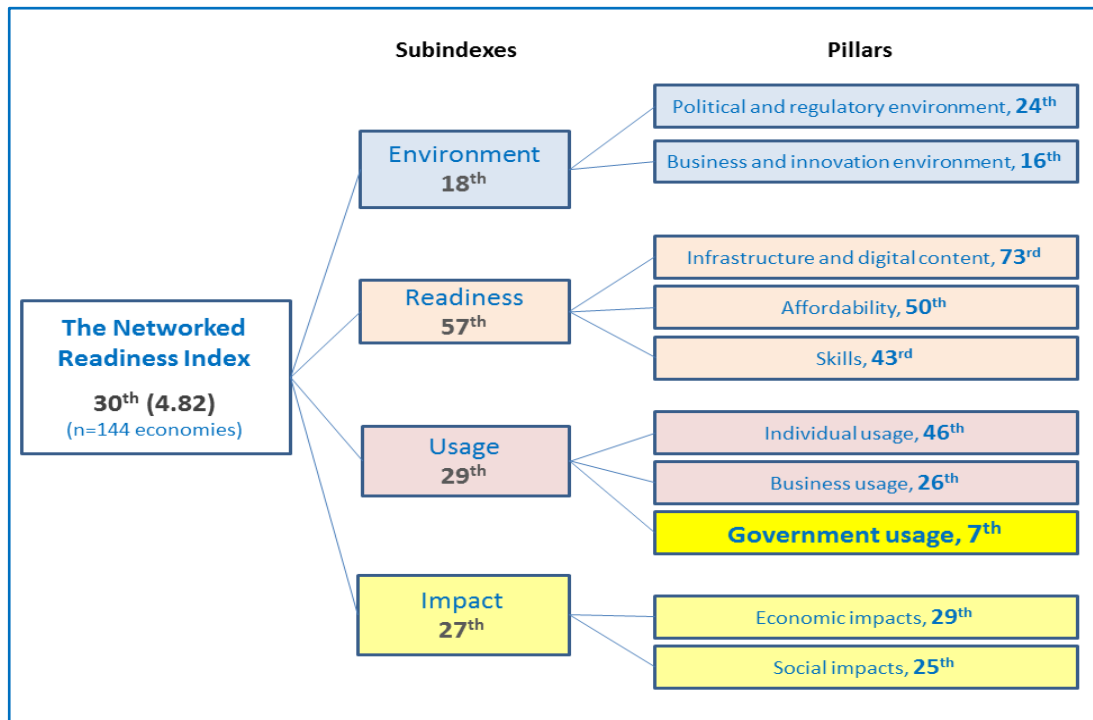
Rank	Country/Economy	GITR 2013		GITR 2012	
		Rank (2012)	Score	Rank	Score
1	Finland	3	5.98	3	5.81
2	Singapore	2	5.96	2	5.86
3	Sweden	1	5.91	1	5.94
4	Netherlands	6	5.81	6	5.60
5	Norway	7	5.66	7	5.59
6	Switzerland	5	5.66	5	5.61
7	United Kingdom	10	5.64	10	5.50
8	Denmark	4	5.58	4	5.70
9	United States	8	5.57	8	5.56
10	Taiwan	11	5.47	11	5.48
30	Malaysia	30	4.82	29	4.80

2. Malaysia's Performance In The GITR 2013

2.1. WEF recognises Malaysia's long-term transformation plan with ICTs playing a critical role towards achieving an aspiration to become a high-income nation. Most government related indicators reflect this commitment and contributed to Malaysia's government usage pillar being placed at 7th position, with an index score of 5.57 (Figure 1). This performance is supported by the criteria on importance of ICTs to government vision ranked 6th and government success in ICT promotion ranked 10th. Other criteria which Malaysia is ranked among the top 10 are as follows :

- Internet & telephony competition, ranked 1st;
- Government procurement of advanced technology, ranked 4th;
- Extent of staff training, ranked 7th;
- ICT use & government efficiency, ranked 8th;
- Impact of ICTs on new organisational models, ranked 9th;
- Efficiency of legal system in challenging regulations, ranked 10th; and
- Number of procedures to start a business, ranked 10th.

**Figure 1: The Networked Readiness Index Structure -
Malaysia's Performance in GITR 2013**



2.2. The government-led efforts had a transformational impact on the economy (29th) and the society at large (25th) while Malaysia need to improve its performance in the Infrastructure (73rd) and Individual Usage (46th) pillars. Among the criteria that Malaysia needs to focus on includes ;

- Mobile network coverage, ranked 86th;
- International internet bandwidth, ranked 82nd;
- Mobile broadband subscriptions, ranked 69th;
- Broadband internet subscriptions, ranked 67th;
- Secure internet servers, ranked 57th; and
- Accessibility of digital content, ranked 40th.

Malaysia's detailed performance in the NRI is shown in Appendix 1 and Table 2 shows Malaysia's performance over the last two years.

Table 2: Malaysia's Performance in GITR 2012 - 2013

Network Readiness Index (NRI) – Overall Ranking	GITR 2013 (n=144)		GITR 2012 (n=142)	
	Rank	Score	Rank	Score
	▼ 30	4.82	29	4.80
A. Environment Subindex	▲ 18	5.07	23	4.92
Pillar 1 : Political and Regulatory Environment	= 24	4.88	24	4.87
Pillar 2 : Business and Innovation Environment	▲ 16	5.25	23	4.97
B. Readiness Subindex	▼ 57	4.87	55	5.03
Pillar 3 : Infrastructure & Digital Content	▼ 73	3.85	65	4.12
Pillar 4 : Affordability	▼ 50	5.58	41	5.69
Pillar 5 : Skills	▲ 43	5.20	47	5.29
C. Usage Subindex	= 29	4.83	29	4.60
Pillar 6 : Individual Usage	▲ 46	4.44	47	4.01
Pillar 7 : Business Usage	▲ 26	4.49	27	4.43
Pillar 8 : Government Usage	▼ 7	5.57	6	5.35
D. Impact Subindex	▼ 27	4.52	24	4.64
Pillar 9 : Economic impacts	▲ 29	4.02	31	3.97
Pillar 10 : Social impacts	▼ 25	5.02	15	5.31

3. Regional Performance

3.1. In the Asia Pacific region, Malaysia remained at 8th position among 22 economies and continues to be ahead of Brunei Darussalam (9th), China (10th), India (12th), Thailand (14th), Indonesia (15th), Vietnam (16th) and Philippines (17th). Singapore is ranked first with a score of 5.96 followed by Taiwan, with a score of 5.47 (Table 3).

Table 3: Asia-Pacific Countries in GTR 2012 - 2013

Country	GTR 2013			GTR 2012		
	Regional rank	Rank	Score	Regional rank	Rank	Score
Singapore	1	2	5.96	1	2	5.86
Taiwan	2	10	5.47	2	11	5.48
Korea, Rep of	3	11	5.46	3	12	5.47
Hong Kong	4	14	5.4	4	13	5.40
Australia	5	18	5.26	5	17	5.36
New Zealand	6	20	5.25	6	14	5.29
Japan	7	21	5.24	7	18	5.25
Malaysia	8	30	4.82	8	29	4.80
Brunei Darussalam	9	57	4.11	9	54	4.11
China	10	58	4.03	10	51	4.04
Mongolia	11	59	4.01	11	63	3.95
India	12	68	3.88	12	69	3.89
Sri Lanka	13	69	3.88	13	71	3.88
Thailand	14	74	3.86	14	77	3.78
Indonesia	15	76	3.84	15	80	3.75
Vietnam	16	84	3.74	16	83	3.70
Philippines	17	86	3.73	17	86	3.64
Pakistan	18	105	3.35	18	102	3.39
Cambodia	19	106	3.34	19	108	3.32
Bangladesh	20	114	3.22	20	113	3.20
Kyrgyz Republic	21	118	3.09	21	115	3.13
Nepal	22	126	2.93	22	128	2.92

3.2. In the ASEAN region, Singapore and Malaysia remain as the top 2 countries with index scores of 5.96 and 4.82 respectively (Table 4).

Table 4: ASEAN Countries in GTR 2011 - 2012

Country	GTR 2013			GTR 2012		
	Regional rank	Rank	Score	Regional rank	Rank	Score
Singapore	1	2	5.96	1	2	5.86
Malaysia	2	30	4.82	2	29	4.80
Brunei Darussalam	3	57	4.11	3	54	4.04
Thailand	4	74	3.86	4	77	3.78
Indonesia	5	76	3.84	5	80	3.75
Vietnam	6	84	3.74	6	83	3.70
Philippines	7	86	3.73	7	86	3.64
Cambodia	8	106	3.34	8	108	3.32

4. Conclusion

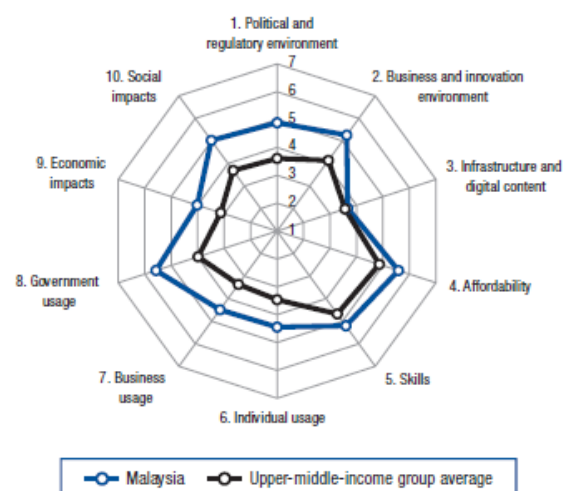
The GTR 2013 acknowledges that the world has become increasingly hyperconnected, where the immediateness and sense of constant accessibility are changing economic and social relations as well as opening a wide range of new opportunities for new products, services and business models. Unsurprisingly, both developed and developing economies have turned to ICTs as a toolbox that can potentially boost competitiveness, growth, and employment in this rapidly changing and uncertain context.

The ASEAN is acknowledged by WEF as recording impressive progress, especially in terms of strengthening their ICT infrastructure and higher rates of ICT uptake and the Malaysian government's efforts in pursuing a long term transformational plan with the ambition of achieving high income status by the end of the decade, with ICTs playing a critical role was highlighted.

Malaysia

Appendix 1

	Rank (out of 144)	Score (1-7)
Networked Readiness Index 2013	30	4.8
Networked Readiness Index 2012 (out of 142).....	29	4.8
A. Environment subindex	18	5.1
1st pillar: Political and regulatory environment.....	24	4.9
2nd pillar: Business and innovation environment.....	16	5.3
B. Readiness subindex	57	4.9
3rd pillar: Infrastructure and digital content.....	73	3.8
4th pillar: Affordability.....	50	5.6
5th pillar: Skills.....	43	5.2
C. Usage subindex	29	4.8
6th pillar: Individual usage.....	46	4.4
7th pillar: Business usage.....	26	4.5
8th pillar: Government usage.....	7	5.6
D. Impact subindex	27	4.5
9th pillar: Economic impacts.....	29	4.0
10th pillar: Social impacts.....	25	5.0



The Networked Readiness Index in detail

INDICATOR	RANK/144	VALUE
1st pillar: Political and regulatory environment		
1.01 Effectiveness of law-making bodies*.....	12	5.1
1.02 Laws relating to ICTs*.....	23	5.2
1.03 Judicial independence*.....	43	4.6
1.04 Efficiency of legal system in settling disputes*.....	14	5.1
1.05 Efficiency of legal system in challenging regs*.....	10	5.1
1.06 Intellectual property protection*.....	31	4.9
1.07 Software piracy rate, % software installed.....	47	5.5
1.08 No. procedures to enforce a contract.....	15	2.9
1.09 No. days to enforce a contract.....	43	4.25
2nd pillar: Business and Innovation environment		
2.01 Availability of latest technologies*.....	35	5.8
2.02 Venture capital availability*.....	11	4.0
2.03 Total tax rate, % profits.....	20	24.5
2.04 No. days to start a business.....	16	6
2.05 No. procedures to start a business.....	10	3
2.06 Intensity of local competition*.....	36	5.4
2.07 Tertiary education gross enrollment rate, %.....	63	40.2
2.08 Quality of management schools*.....	26	5.0
2.09 Gov't procurement of advanced tech*.....	4	4.9
3rd pillar: Infrastructure and digital content		
3.01 Electricity production, kWh/capita.....	58	3,759.7
3.02 Mobile network coverage, % pop.....	86	96.2
3.03 Int'l Internet bandwidth, kb/s per user.....	82	10.7
3.04 Secure Internet servers/million pop.....	57	54.4
3.05 Accessibility of digital content*.....	40	5.6
4th pillar: Affordability		
4.01 Mobile cellular tariffs, PPP \$/min.....	43	0.19
4.02 Fixed broadband Internet tariffs, PPP \$/month.....	76	34.82
4.03 Internet & telephony competition, 0-2 (best).....	1	2.00
5th pillar: Skills		
5.01 Quality of educational system*.....	14	5.1
5.02 Quality of math & science education*.....	20	5.0
5.03 Secondary education gross enrollment rate, %.....	103	68.3
5.04 Adult literacy rate, %.....	72	93.1

INDICATOR	RANK/144	VALUE
6th pillar: Individual usage		
6.01 Mobile phone subscriptions/100 pop.....	35	127.0
6.02 Individuals using Internet, %.....	41	61.0
6.03 Households w/ personal computer, %.....	41	64.1
6.04 Households w/ Internet access, %.....	42	61.4
6.05 Broadband Internet subscriptions/100 pop.....	67	7.4
6.06 Mobile broadband subscriptions/100 pop.....	69	12.3
6.07 Use of virtual social networks*.....	30	6.0
7th pillar: Business usage		
7.01 Firm-level technology absorption*.....	29	5.6
7.02 Capacity for innovation*.....	17	4.6
7.03 PCT patents, applications/million pop.....	31	12.0
7.04 Business-to-business Internet use*.....	33	5.6
7.05 Business-to-consumer Internet use*.....	26	5.4
7.06 Extent of staff training*.....	7	5.2
8th pillar: Government usage		
8.01 Importance of ICTs to gov't vision*.....	6	5.4
8.02 Government Online Service Index, 0-1 (best).....	20	0.8
8.03 Gov't success in ICT promotion*.....	10	5.5
9th pillar: Economic impacts		
9.01 Impact of ICTs on new services and products*.....	13	5.5
9.02 ICT PCT patents, applications/million pop.....	27	6.1
9.03 Impact of ICTs on new organizational models*.....	9	5.3
9.04 Knowledge-intensive jobs, % workforce.....	51	26.8
10th pillar: Social impacts		
10.01 Impact of ICTs on access to basic services*.....	26	5.4
10.02 Internet access in schools*.....	38	5.1
10.03 ICT use & gov't efficiency*.....	8	5.6
10.04 E-Participation Index, 0-1 (best).....	31	0.50

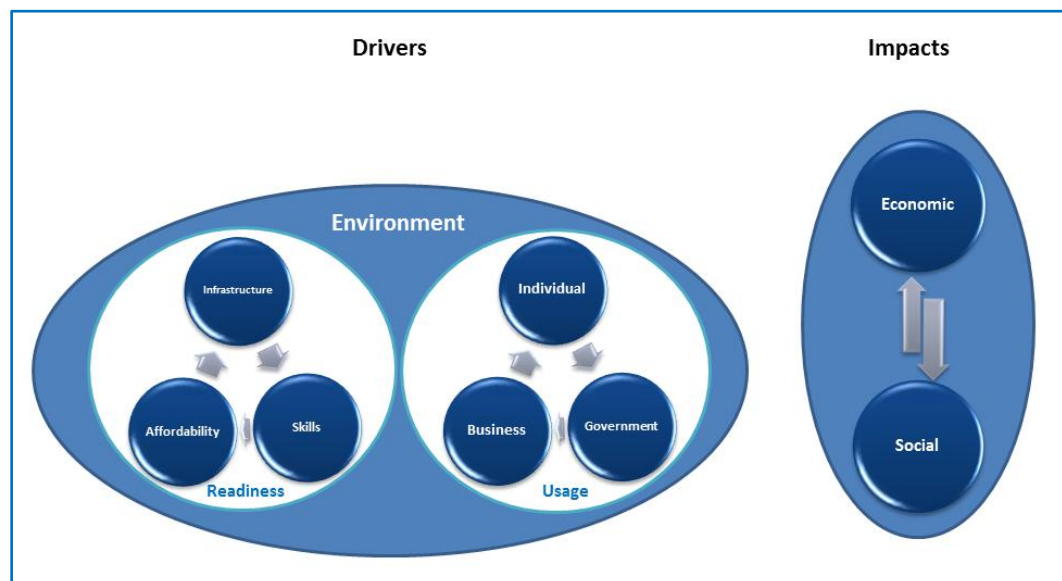
Note: Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 139

THE NETWORKED READINESS FRAMEWORK

The Networked Readiness Index (NRI) highlights the valuable contribution of comprehensive models of ICT usage and impact. It included features related to access and usage that cover not only the affordable ICT infrastructure but also digital resource, including software and skills as well as proxies for assessing some of the economic and social impacts accruing from ICTs. The design of the framework for the calculation of the NRI has been guided by five principals:

- i. Measuring the economic and social impacts of ICTs is crucial,
- ii. An enabling environment determines the capacity of an economy and society to benefit from the use of ICTs,
- iii. ICT readiness and usage remain key drivers and preconditions for obtaining any impacts,
- iv. All factors interact and co-evolve within an ICT ecosystem, and
- v. Providing clear policy orientations and identify opportunities for public-private collaboration.

The networked Readiness Index Framework



The report comprises 144 economies that cover almost 98% of the world. The five new economies were Gabon, Guinea, Liberia, Seychelles and Sierra Leone. Libya is re-included in 2013 report. There three countries excluded for this year, Belize or Angola in Syria and Tunisia. As the last edition, this report contains both quantitative and qualitative data. Over the 54 data, 27 or 50% were quantitative or statistical data which is collected primarily from the international organisations while the other 27 variables or 50% were qualitative data that captured from the Executive Opinion Survey (EOS).

The Elements of the Networked Readiness Index

Environment Subindex (18 variables)	Readiness Subindex (12 variables)	Usage Subindex (15 variables)	Impact Subindex (8 variables)
It gauges the friendliness of a country's market and regulatory framework in supporting high level of ICT uptake and the development of entrepreneurship and innovation-prone conditions.	It measures the degree to which a society is prepared to make good use of an affordable ICT infrastructure and digital content.	It assesses the individual efforts of the main social agents to increase their capacity to use ICT, as well as their actual use in their daily activities with other agents.	It gauges the broad economic and social impacts accruing from ICT to boost competitiveness and well-being and that reflect the transformations toward an ICT-and technology-savvy economy and society.
Pillar 1 : Political And Regulatory Environment It assesses the extent to which the national legal framework facilitates ICT penetration and the safe development of business activities, taking into account general features of the regulatory environment as well as more ICT-specific dimensions.	Pillar 3 : Infrastructure and Digital Content It captures the development of ICT infrastructure as well as the accessibility of digital content.	Pillar 6 : Individual Usage It measures ICT penetration and diffusion at the individual level, using indicators such as the number of mobile phone subscriptions, individuals using the internet and mobile broadband subscriptions.	Pillar 9 : Economic Impacts It measures the effect of ICT on competitiveness thanks to the generation of technological and non-technological innovations in the shape of patents, new products or processes, and organizational practices.

Environment Subindex (18 variables)	Readiness Subindex (12 variables)	Usage Subindex (15 variables)	Impact Subindex (8 variables)
<p>Pillar 2 : Business and Innovation Environment</p> <p>It gauges the quality of the business framework conditions to boost entrepreneurship, taking into account dimensions related to the ease of doing business.</p> <p>It also measures the presence of conditions that allow innovation to flourish.</p>	<p>Pillar 4 : Affordability</p> <p>It assesses the cost of accessing ICT, either via mobile telephony or fixed broadband Internet, as well as the level of competition in the Internet and telephony sectors that determine this cost.</p>	<p>Pillar 7 : Business Usage</p> <p>It captures the extent of business Internet use as well as the efforts of the firms in an economy to integrate ICT into an internal, technology-savvy, innovation-conducive environment that generates productivity gains.</p>	<p>Pillar 10 : Social Impacts</p> <p>It assesses the ICT-driven improvements in well-being thanks to its impacts on the environment, education, energy consumption, health progress, or more-active civil participation.</p>
	<p>Pillar 5: Skills</p> <p>It gauges the ability of a society to make effective use of ICT thanks to the existence of basic educational skills captured by the quality of the educational system, the level of adult literacy, and the rate of secondary education enrollment.</p>	<p>Pillar 8: Government Usage</p> <p>It provides insights into the importance that governments place on carrying out ICT policies for competitiveness and the well-being of their citizens, the efforts they make to implement their visions for ICT development, and the number of government services they provide online.</p>	