Connectivity Scorecard 2009

Malaysia – Very constant performer and top-scoring emerging nation for the 2nd time around

Overview

Malaysia finishes at the top of the Connectivity Scorecard 2009 ranking of resource and efficiency-driven[1] economies with a strong performance and a score of 7.07 that left it with a clear gap over the second-placed nation, Turkey (6.71). Indeed only Turkey and Chile (6.59) finish within one point of Malaysia, which emphasizes the distance between those economies that are making significant progress in harnessing the potential of Information and Communications technology, and the majority that have only really begun to scratch the surface.

	Score	Weight
Consumer Infrastructure	0.75 (0.81)*	0.15
Consumer Usage & Skills	0.84 (0.84)*	0.15
Business Infrastructure	0.57 (0.73)*	0.28
Business Usage & Skills	0.74 (0.74)*	0.35
Government Infrastructure	0.79 (0.93)*	0.04
Government Usage & Skills	0.68 (0.92)*	0.04

* The score of the leading performer for this component

As in Connectivity Scorecard 2008, Malaysia's performance is summed up by the word "consistency." All of its six scores across the three domains – business, consumer and government – are over 0.5, and two of its scores are the highest in the entire resource and efficiency-driven portion of the Scorecard.

Strengths and weaknesses

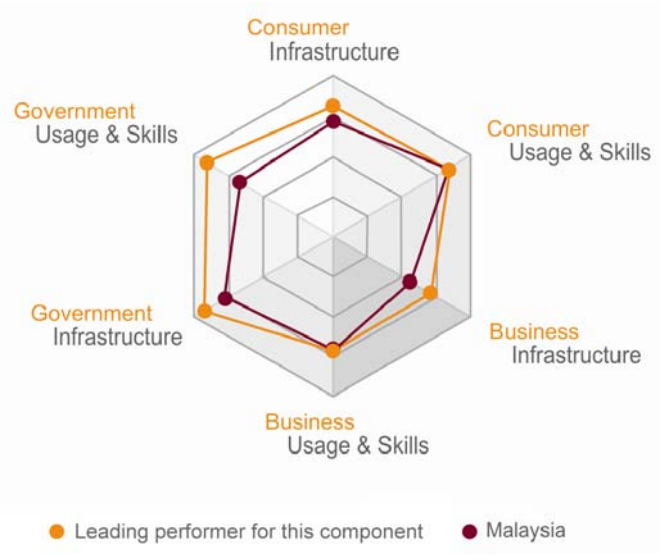
As the CIA World Factbook reports, Malaysia has a "modern" communications system with "excellent international service."

This is reflected in a high consumer infrastructure score (0.75) and a population well equipped to make good use of it, as its consumer usage and skills score is 0.84, the highest of any country on the resource and efficiency-driven list. Although it is not at the top of any one metric except for Internet users per 100 inhabitants, Malaysia shows consistency with the attainment of relative scores of 0.8 or higher on most consumer infrastructure and consumer usage and skills metrics.

In Connectivity Scorecard 2008, Malaysia did not fare particularly well on the government metrics that were used. Malaysia does now secure a very favorable ranking on Brooking's e-government index, scoring 0.98. It also ranks well for government spending levels on software, hardware and computer

[1] As defined by the World Economic Forum

services. Its scores of 0.79 for government infrastructure and 0.68 for government usage and skills are therefore much closer than a year ago to the top scores in the segments, which in 2009 are 0.93 and 0.92 respectively.



In comparison to its peers on the list, there are few significant weaknesses in the Malaysian performance, but, relative to its own high scores, the business infrastructure metric is a disappointing 0.57 – against a top score in the segment of 0.73. The business infrastructure category is weighted heavily in the case of Malaysia at 28 per cent, so improvement in this area would definitely boost the overall score.

Business usage and skills is a much more impressive 0.74, the top score in this area, making performance on the business metrics overall somewhat variable. This is illustrated by the underlying data, as Malaysia tops the list on personal computer penetration and scores very highly in terms of corporate data revenue per capita – but attains relatively low scores on international bandwidth availability and only a moderate score on business spending on hardware and software. Malaysia continues to top score on outgoing international traffic usage, which is used in the Connectivity Scorecard as a proxy for business-driven usage of international connectivity. However, spending by businesses on computer services is relatively moderate.

Analysis

Despite its strong performance, it is worth noting that while Malaysia performs well in a comparative ranking of resource and efficiency-driven (mostly poorer) economies, it would not look as favorable if compared to economies such as the US in the innovation-driven rankings, and as such Malaysia has some distance to travel before it can truly be described as an information economy.

In most respects, the solid performance of the Malaysian business sector – even the “disappointing” scores are relatively good when compared to peers – suggests that the country has created a good environment for businesses to invest in ICT and also in the complementary skills that go along with ICT.

The real question for Malaysia is about moving to the “next level” – which is the innovation-driven economies. The country has high broadband penetration, for example, relative to its peers in the resource and efficiency-driven economy grouping. But the broadband penetration in Malaysia (as a proportion of households) is below that of Poland, Greece, Hungary and the Czech Republic (all of which are in the bottom six of the 25 innovation-driven economies). This illustrates just how large the gap is between innovation-driven economies and resource and efficiency-driven economies.

In addition, Malaysia’s net enrolment rate in secondary education is below that of several other countries such as Russia, Argentina and Ukraine. Thus even within the group of leading resource and efficiency-driven economies, Malaysia has some ground to cover. The continued high ranking of Malaysia on the Scorecard should therefore not be cause for any complacency.

Malaysia has tended to follow a carefully calibrated approach of government intervention in strategic sectors of the economy. The experience of other Asian nations (such as South Korea) shows that the benefits from government-supported infrastructure expansion and technology adoption are limited if they are not accompanied by corresponding efforts from consumers and businesses.

In order to improve connectivity, where Malaysia needs to focus its efforts most is on the broadband sector. One way of quickly expanding penetration is to follow a government-supported model (like Korea and Japan) which offers support or subsidy for expansion of broadband infrastructure. The pitfalls of this approach are that it could end up crowding out market-orientated investment in the sector, and may prove ineffective without complementary improvements in the private sector anyway.

Another option is to follow a private-led model, as in the United States, and offer the incumbent telecom firm substantial incentives to invest in Next-Generation broadband infrastructure. However, in Malaysia's case, it may be most efficient to first expand broadband penetration utilizing existing infrastructure by further opening up the existing infrastructure to competition and then offering the right incentives for Next-Generation investment.

Although Malaysia's performance on consumer infrastructure and usage is strong, disappointingly (and perhaps surprisingly) some measures of spending by business and government on hardware and software appear to be weaker (scores of below 0.5) than might have been expected *a priori*.

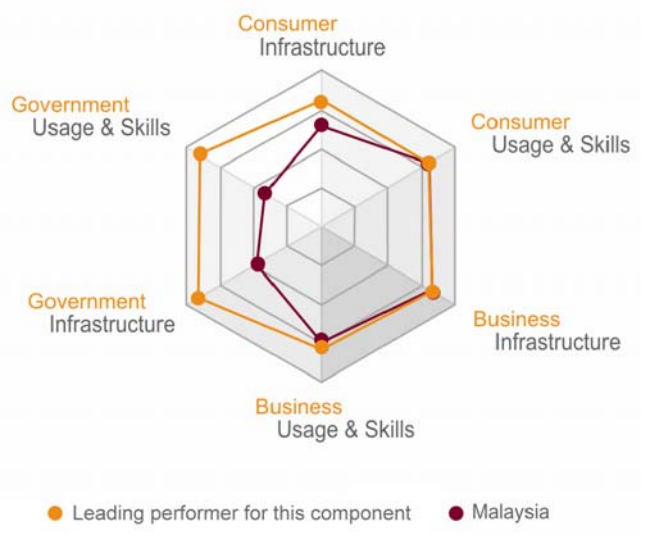
Malaysia differs, however, from sixth-placed Russia which has a human capital stock roughly similar to that of an OECD nation. Malaysia clearly has work to do in further developing adult literacy and in increasing primary, secondary and tertiary enrolment and completion rates. Again these areas fall outside the traditional remit of ICT policy, but ought to be highly relevant to any policy agenda that aims to maximize the economic benefits from ICT.

According to the ITU, Malaysia has full competition in most segments of its telecommunications market, with the exception of DSL services, which the ITU classifies as "partially competitive." Thus Malaysia has already liberalized and opened up its market in line with OECD practice. The country appears to have followed "best practice" in terms of having an independent and sector-specific telecoms regulator, which appears relatively well-staffed.

However, for Malaysia to move to the next level of both connectivity and economic development, the focus of policy should not be narrowly on the ICT sector, but on the human capital that forms such an essential complement to this sector.

APPENDICES

2009 compared to 2008



We have repeatedly stressed the fact that the Connectivity Scorecard is designed to provide a comparison of how countries rank in relation to each other at a given point in time. As with other indices of relative rankings, it is hard to interpret absolute scores and it is hard to make comparisons of absolute scores over time.

In addition, we substantially expanded and revamped the information base for the current version of the Scorecard and we also expanded greatly the list of countries that we included for consideration in 2009. These factors mean that it is not possible to generate very direct comparisons between absolute scores over time and to easily interpret these as “improvements” or “deteriorations.”

However, the picture of consistent performance for Malaysia that we obtained in 2008 remains very true in 2009. (For Malaysia’s 2008 performance see also the comparative star diagram on this page.) Thus Malaysia has (impressively) been minimally affected by the many changes in the information base and the expansion of the sample to include countries with higher human development rates such as Argentina and Chile.

About Connectivity Scorecard

Connectivity Scorecard is a global ICT index, which measures the extent to which governments, businesses and consumers make use of connectivity technologies to enhance social and economic prosperity. Unlike other research available, Connectivity Scorecard also measures "usage and skills," such as literacy, the use of enterprise software and the accessibility of women to ICT.

Nokia Siemens Networks has commissioned the study, which is the first of its kind to rank countries not only on their deployment of ICT infrastructure but also on the extent to which people, governments and businesses put this infrastructure to economically productive use.

The study is created by Leonard Waverman, Fellow of the London Business School and Dean and Professor at the Haskayne School of Business at the University of Calgary, and conducted under his direction by international economic consulting firm LECG.

For more information on Nokia Siemens Networks' Connectivity Scorecard, visit www.connectivityscorecard.org

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