

# Knowledge-Based Economy and ICT

## **Knowledge-Based Economy**

The knowledge-based economy is the basis to sustain a rapid rate of economic growth and enhance international competitiveness so as to achieve Vision 2020. The development thrusts for the knowledge-based economy are based on the followings:

Building the knowledge manpower base, among others, through a comprehensive review of the education and training system, the implementation/expansion of a system for life-long learning and programmes to attract, motivate and retain the skilled talent needed for a high-income economy;

Intensifying efforts in demand-driven S&T and R&D initiatives;

Expanding the development of info structure to facilitate the development of the knowledge-based economy;

Financial system which is in line with the development of knowledge-based activities;

Raising the knowledge content in the agriculture, manufacturing and services sectors;

Getting the SMEs to prepare themselves with greater urgency for the knowledge-based economy as well as identify and exploit the opportunities that will be generated;

Proficient public sector in acquisition, utilisation, dissemination and management of knowledge;

Ethical utilisation of knowledge; and

Taking affirmative action to bridge the digital divide between income, ethnic and age groups, urban and rural communities, and across regions.

In addition, the Knowledge-based Economy Master Plan (KEMP) launched in 2002 contains 136 recommendations encompassing human resource development, information structure, incentives, science and technology development, reorientation of the private and public sectors as well as addressing the digital divide.

## **ICT**

### **» Positioning Malaysia as a Major Global ICT and Multimedia Hub**

Focus will be given towards shifting Malaysia from an average producer of general ICT products and services to a niche producer of selected ICT products and services, and progress from a net importer to a net exporter. Issues of lack of product acceptability, weak product branding and lack of cross discipline expertise will be addressed in stages.

Steps to ensure local ICT products are in compliance with international standards will be further infused to assist local ICT companies to penetrate international market.

### **» Upgrading And Expanding Communications Infrastructure To Increase Accessibility Throughout The Country As A Means Of Bridging The Digital Divide**

Efforts will be focused on upgrading communications network in line with technological advancements, providing broadband access on affordable rate bandwidth-based on charges that are affordable, extending ICT infrastructure to rural areas to provide more equal digital opportunity, and consequently, achieving a balanced development between urban and rural areas.

### **» Improving ICT Human Capital Development**

With the requirements of the 21st century human capital needs, efforts to increase ICT skills from schools up to tertiary institutions will be continued and strengthened. However, the focus will be on the content and the enhancement of skills related to ICT. This is to ensure that ICT can be a major catalyst in improving the knowledge, skills and competencies. Emphasis will also be given to the content to ensure they are relevant to the needs and requirements of the current and future workforce needs. Firms will be encouraged to ensure that their workforce will be able to improve their skills and knowledge through an emphasis on lifelong learning.

### **» Promoting E-Commerce and Enhancing Its Use To Enable Malaysia To Compete More Effectively In The Global Market**

Special focus will be given towards promoting and encouraging wider use of e-commerce as a new way of doing business through the digital network. The Government will also undertake measures to build trust and confidence in e-commerce including security and user privacy. Infrastructure and logistical support, which encompass networks, payment systems and logistics, will also be provided to enhance the development of e-commerce. Business and communities will be encouraged to respond and participate actively in the development and the usage of e-commerce.

### **» Fostering Local Capabilities in Creative Content Development**

In developing Malaysia as a competitor in the area of creative multimedia, several initiatives are being undertaken to foster local capabilities in creative content development. To further support and encourage the development of creative content industry locally, the Government will develop clear and precise rules on intellectual property rights protection. This will be complemented by affective enforcement to combat piracy.

## **» Implementation Of Key Strategies To Propel ICT Industry Through MSC Malaysia**

MSC Malaysia will identify and support the development of niche areas in software and e-solutions, creative multimedia, shared services and outsourcing as well as e-business. FDI strategy will be to attract MNCs to anchor these selected focus areas, with clusters of knowledge-based SMEs around the MNCs. A tiered benefits scheme will be established whereby financial and non-financial benefits will be provided based on the company's needs, size stage of maturity and criteria such as the ability to catalyse the development of SMEs in priority sectors and induce high spill-over effects.

The Government will aggressively promote the use of ICT in all industries in parallel with the development of the ICT sector. Cloud computing services will be developed to provide SMEs with critical software applications for customer relations management, enterprise resource planning, supply-chain management, human resource management, and financial and accounting management. Niche areas for applications development include healthcare, education and financial services especially in Islamic Banking.

The National Transformation Programme or Digital Malaysia is undertaken to stimulate the development of the digital economy by 2020. This programme will create an ecosystem that promotes the pervasive use of ICT in all aspects of the economy to connect communities globally and interact in real time, resulting in increased Gross National Income (GNI), enhanced productivity and improved standards of living. Overall, the implementation of the Digital Malaysia will benefit the Government and business communities as well as citizens.