
chapter 12
Business
Services

Chapter 12: Driving High-Income Growth Through Business Services

"Our aspiration is to see Business Services become a catalyst in Malaysia's transformation into a knowledge economy. Although currently small with a GNI contribution of RM19.5 Billion in 2009, the Business services sector has a unique role to play in driving the competitiveness of a wide range of industries by offering differentiated world-class IT Outsourcing, Accounting and other related services. Services which in turn help further differentiate these industries. We intend to more than quadruple the GNI contribution of business services to bring it to RM 78.7 Billion by 2020. To achieve this we will build on Malaysia's existing strengths in IT outsourcing, MRO services and accelerate the growth in these sectors while at the same time positioning Malaysia as a regional leader in exportable differentiated high value services such as pure-play engineering design services, Green Technology and Islamic Banking Knowledge Process Outsourcing. We have also identified a set of initiatives to increase the percentage of skilled workforce in business services from 35% in 2010 to 46% by 2020 by building local capacity, attracting global talent and increasing women participation in the workforce. As Minister of Human Resources, I am committed to unleashing the potential of this sector and hope that all Malaysians will support me and my team in this endeavor"

YB Datuk Dr S Subramaniam
Minister of Human Resources

Malaysia's business services sector contributes only 2.9 percent to GNI, creating significant opportunity for growth. In other emerging economies, like China and the Philippines, the business services sector is forecast to grow by around 11 percent over the next decade[1]. In line with the target of achieving high-income status by 2020, Malaysia should aim to match or even surpass these levels. By 2020, we would like to move closer to the benchmark of developed economies like the United Kingdom, where the business services sector contributes roughly 20 percent of both GDP and employment and 14 percent of exports[2].

[1] *Global Insight*
[2] *Department for Business, Innovation and Skills, "Professional and Business services: A 2020 Vision for Growth", 2010*

DEFINITION OF THE BUSINESS SERVICES NKEA

The business services sector encompasses a large number of industries and professions, including the accountants, lawyers and tax experts that facilitate and support growth of an economy. It also includes the architects, engineers and designers that spearhead the expansion of industries as diverse as construction, aerospace and automotive. Lastly, it contains sizeable industries in their own right, including IT services and outsourcing, and future growth areas like green technology services.

MARKET ASSESSMENT

Industry Growth Drivers

At the global level, growth in business services is driven by several key long-term trends.

- **Globalisation and outsourcing:** Organisations continue to adopt global sourcing strategies to increase efficiency by leveraging low-cost labour in emerging economies;

- **Sustainability:** Climate change and the shift towards a low-carbon economy are driving growth in a number of areas, including energy and waste management, urban planning, smart buildings and renewable energy;

- **IT-enabled services:** Advances in IT-enabled technologies will continue to spur demand for business services, such as data centres, business process outsourcing and cloud-computing services;

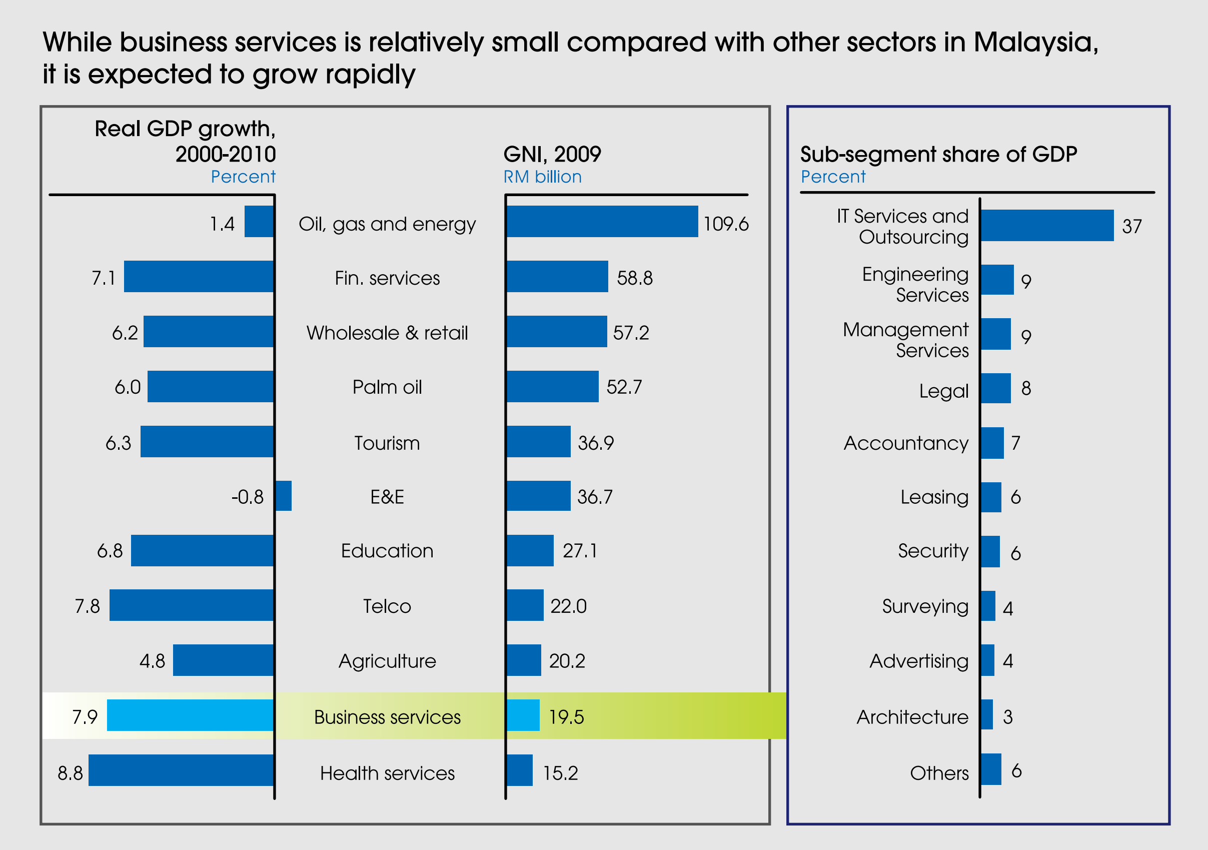
- **Rise of social media:** The advent of Web 2.0 and explosion of social media will create demand for services such as IT consulting, systems integration and creative services; and

- **Public sector efficiency:** In the context of a challenging economic climate, calls for greater efficiency and transparency in the public sector are increasing demand for business services across governments.

Malaysia's Business Services Sector

The business services sector in Malaysia contributed RM19.5 billion to gross national income (GNI) in 2009. While relatively small at present, the sector is growing quickly. Between 2000 and 2010, the gross domestic product (GDP) contribution of business services grew by 7.9 percent a year, making it the second fastest growing sector of our economy. Within business services, IT Services and Outsourcing is the largest sub-segment, contributing 37 percent of the sector's GNI. Engineering services, management services, legal and accountancy are also significant contributors (*Exhibit 12-1*).

Exhibit 12-1



SOURCE: PEMANDU; EPU

Challenges

The business services sector in Malaysia faces a number of challenges that are impeding growth.

- **Shortage of talent:** As the business services sector is knowledge-intensive, availability of high quality talent is critical for success. Malaysia faces multiple challenges in building and retaining a skilled workforce within the country to support the growth of business services. Malaysia has a small pool of skilled workers. For example, Malaysia has a pool of 83,000 finance and accounting professionals compared with 2.3 million in India. The small talent pool is compounded by low levels of employability. For example, just 25 percent of Malaysia's finance and accounting professionals are of sufficient quality to work for a multinational company, compared with 30 percent in the Philippines and 40 percent in the Czech Republic;

- **Bandwidth costs:** The cost of bandwidth is a critical enabler of IT-enabled business services, such as data centres and outsourcing services. Malaysia's internet bandwidth cost is higher than other regional hubs, reducing the international competitiveness of Malaysia's business services companies; and

- **No niche focus:** Many Malaysian business services companies occupy an unsustainable middle ground between low-cost providers in large emerging economies and high-value competitors in more advanced economies. The outsourcing industry is a good example of this. In 2009, the average annual salary of an IT employee in Malaysia was RM46,000, compared with RM40,000 in India and RM35,000 in the Philippines, leaving us unable to compete on cost. Yet at the same time, most Malaysian outsourcing companies lack the specialised skills and capabilities to compete in higher-value segments, such as knowledge process outsourcing (KPO), which involves work being carried out by highly-skilled staff in areas such as investment, market and legal research services.

The Case for Change

We believe a vibrant and rapidly growing business services sector will be beneficial for Malaysia for a variety of reasons.

- Business services is a high value-add sector. Business services are highly differentiated, providing a range of high-value skills and services. This allows companies within the industry to charge a premium, which translates into high wages and margins. For example, the US Bureau of Labor Statistics reports the average annual salary in the USA within business services was RM218,000 in 2009, higher than both telecommunications (RM185,000) and finance and insurance (RM182,000);

- Many business services are increasingly exportable. Rising broadband penetration has increased the exportability of IT-enabled business services, driving the emergence of industries such as offshore outsourcing . Between 2004 and 2007, the World Trade Organization reported exports of business services increased by 17 percent per year;

- Business services has a significant multiplier effect on the wider economy. Consider skilled professionals (e.g. architects, engineers, urban planners) within the green technology sector as an example. The energy efficient buildings and transportation systems they design stimulate significant demand in adjacent industries and further down the value chain, such as construction and building materials, and for devices such as smart meters; and

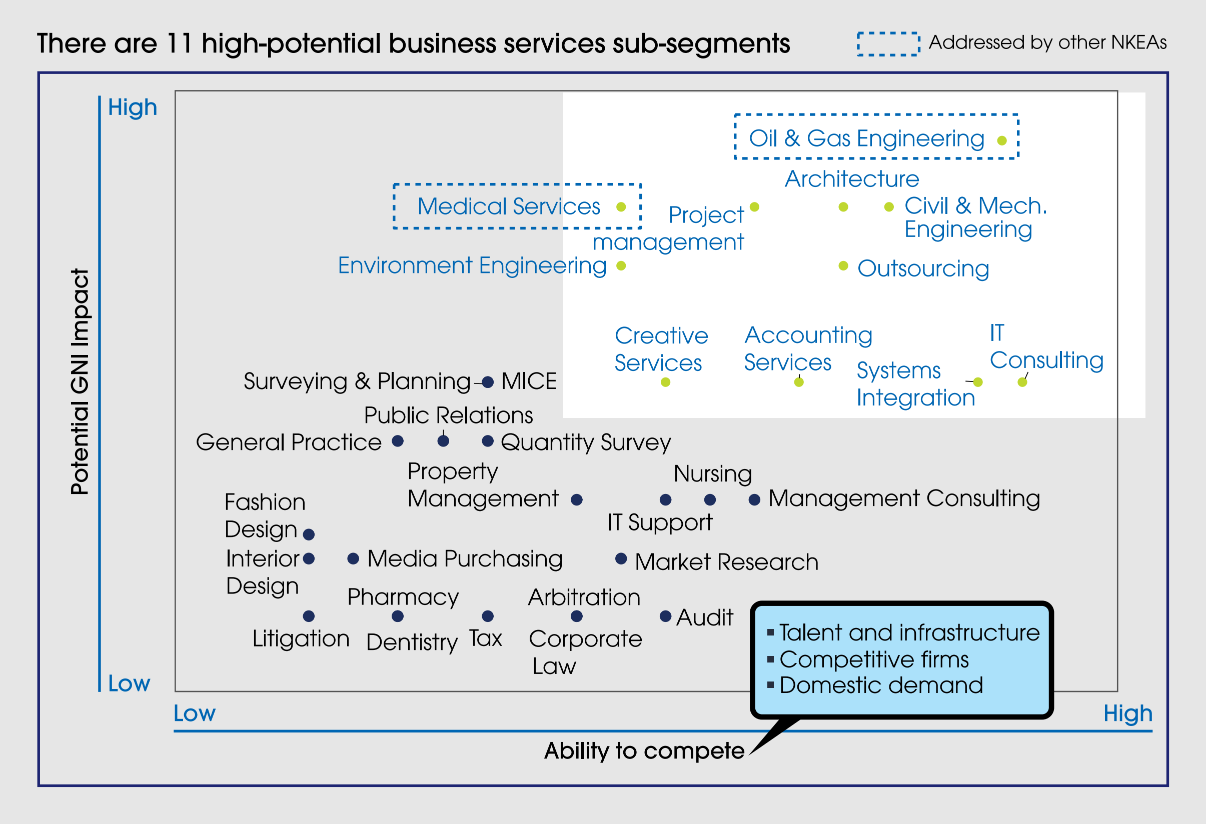
- Business services raises industry productivity. For example, business process outsourcing (BPO) helps companies increase cost efficiency and quality of service provision by using economies of scale to provide services such as payroll and accounts more efficiently. Similarly IT systems utilise technology to increase automation and efficiency.

TARGETS AND ASPIRATIONS

We aim to grow the GNI of the business services sector from RM19.5 billion in 2009 to RM78.7 billion in 2020, a total which includes EPPs, business opportunities and a sector multiplier effect.

Given the breadth of business services and the need to generate big results fast, it is important that we focus on the sub-segments that have the highest potential to raise GNI impact and those in which Malaysia's products and services are differentiated and have the ability to capture market share abroad. An analysis of potential GNI impact and Malaysia's ability to compete revealed nine high-potential sub-segments that are addressed in this NKEA and two that are addressed in other NKEAs (*Exhibit 12-2*).

Exhibit 12-2



Six EPPs to Deliver RM36.5 Billion Incremental GNI

In order to accelerate the growth of business services we have identified six entry point projects (EPPs) that span these nine high-potential sub-segments. These EPPs are categorised into two themes. First, we plan to accelerate the growth of differentiated sectors in which Malaysia has enjoyed a degree of success and in which we have the potential to be globally competitive. Secondly, we will develop future growth segments in areas that boast high potential for growth and job creation.

Theme 1: Accelerate the growth of differentiated sectors

- **EPP 1:** Growing aviation maintenance, repair and overhaul services, led by MAS Aerospace Engineering;
- **EPP 2:** Building globally-competitive outsourcers; and
- **EPP 3:** Positioning Malaysia as a world-class data centre hub.

Theme 2: Develop future growth segments

- **EPP 4:** Jump-starting a vibrant green technology industry;
- **EPP 5:** Growing large pure play engineering services; and
- **EPP 6:** Developing Malaysia as a global Islamic finance KPO hub.

Beyond the EPPs, we have also identified a series of business opportunities and enablers that will accelerate and support the growth of the sector (*Exhibit 12-3*).

Exhibit 12-3

EPPs, business opportunities and enablers will drive sector growth

Type of Initiative		Selection criteria	Initiatives
Entry Point Projects	Accelerate growth of differentiated sectors	Segments with current competitive advantage, with differentiated products and services	1. Growing MRO services, led by MAE 2. Building globally-competitive outsourcers 3. Positioning Malaysia as a world-class data centre hub
	Develop future growth segments	Segments that will drive future growth and jobs	4. Jump-starting a vibrant green technology industry 5. Growing large pure play engineering services 6. Developing Malaysia as a global Islamic finance KPO hub
Business opportunities		Projects that will support the expansion of business services	1. Multi-disciplinary practice construction firms 2. Accounting sector 3. Creative multimedia content industry
Key enablers		Enablers that are critical to accelerating growth	1. Increase skilled workforce to meet growth of Malaysia's services sector[1] 2. Reduce bandwidth costs (covered in Communications Content and Infrastructure NKEA)

1 Also considered a business opportunity

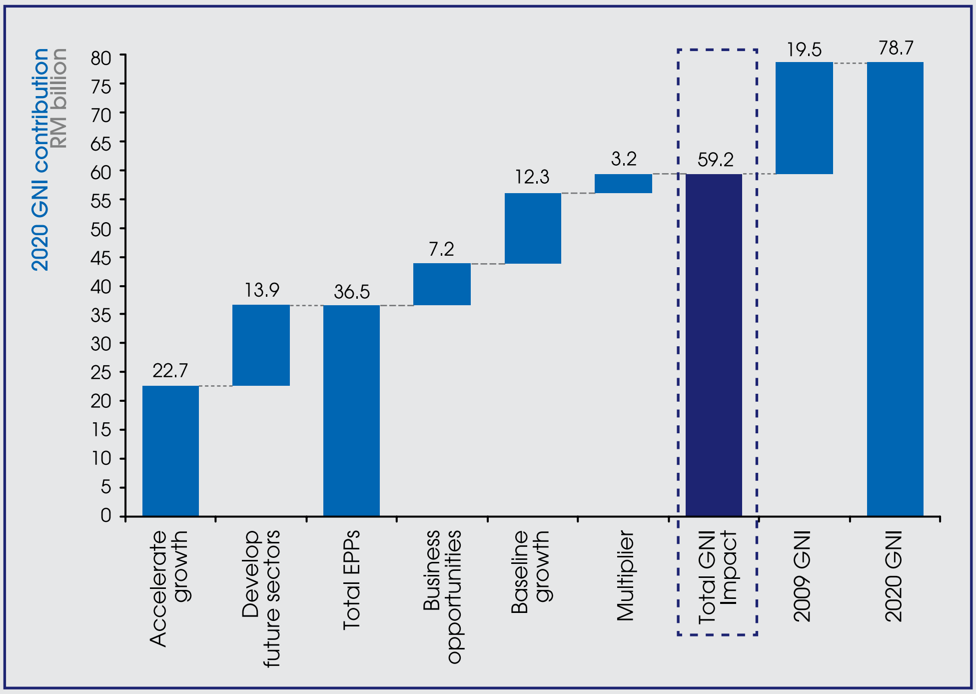
Impact

Taken together, we estimate that our EPPs and business opportunities (including common enablers and multiplier) will raise the overall GNI contribution of business services to RM78.7 billion in 2020 (*Exhibit 12-4*).

This also includes approximately RM3.2 billion of GNI from the multiplier effect created by EPPs from other sectors. The largest sources of this multiplier effect are NKEAs including Wholesale and Retail, which will in turn increase the Business Services GNI contribution. For example, it may be the case that the expansion of retailers and wholesalers will result in increased demand for professional services including accountants, lawyers, web design and programming specialists and outsourcing professionals.

Exhibit 12-4

Six EPPs, three business opportunities, baseline growth and multiplier effect in the industry will deliver RM59.2 billion incremental GNI by 2020



ACCELERATE THE GROWTH OF DIFFERENTIATED SECTORS

As a small country, Malaysia's supply of talent is dwarfed by regional giants such as China and India. For example, it is estimated that China has a total pool of 1.6 million engineers, compared with just 49,000 in Malaysia. Likewise, India has a pool of around 2.3 million finance and accounting professionals, compared with Malaysia's 83,000.

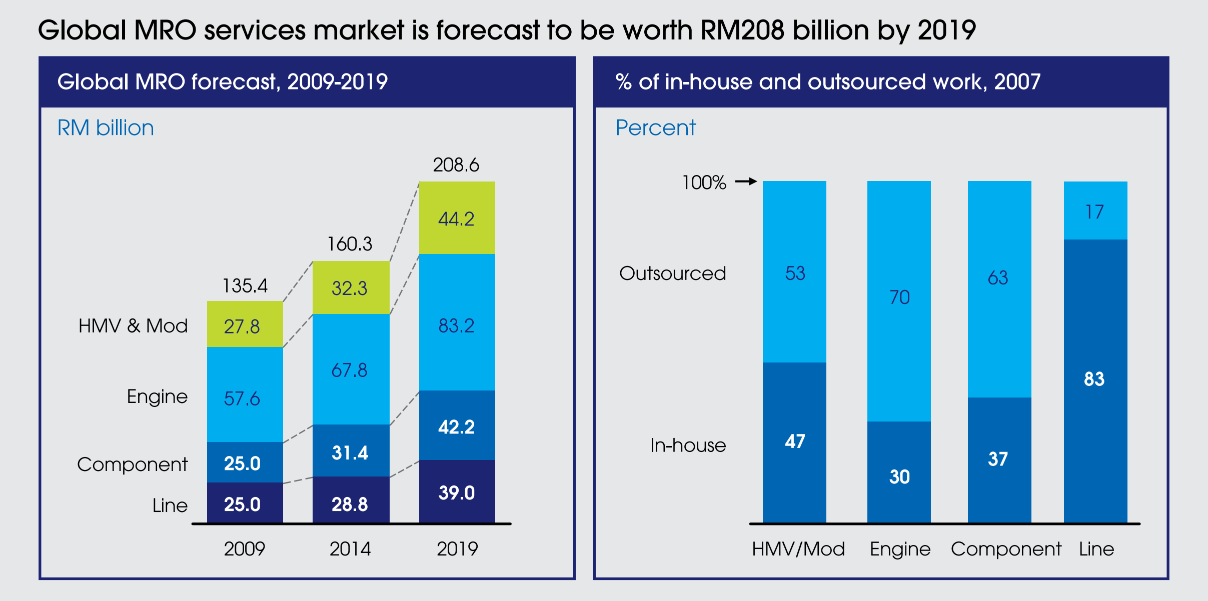
To compete, Malaysia needs to sharpen the focus of its business services sector. This means concentrating attention on the sectors in which it has an advantage and where its products and services are differentiated.

EPP 1: Growing Maintenance, Repair and Overhaul Services, Led by MAS AerospaceEngineering

Rationale

Our aspiration is to establish MAS Aerospace Engineering (MAE) as the anchor maintenance, repair and overhaul (MRO) provider in Malaysia, and in doing so, develop Malaysia into a regional MRO hub.
The global aviation MRO services industry is projected to grow at a compound annual growth rate of 4.4 percent from 2009 to 2019, and is forecast to be worth RM208 billion in 2019 (*Exhibit 12-5*).

Exhibit 12-5



SOURCE: Team, SAI Consultancy, MRO forecast, 2007

We believe that rapid regional demand – driven by the growth of major economies like India and China – coupled with an intensified focus on cost-effectiveness in the airline industry will increase demand in the regional market for MRO services.

MAE, the engineering and maintenance division of Malaysia Airlines, is well-positioned to capture this opportunity. It has been successful in offering MRO services to other airlines, and serves more than 100 global customers, including major airlines such as Lufthansa, United Airlines and Emirates. Revenues from third parties (i.e. parties other than Malaysia Airlines, whose fleet it predominantly services), increased from RM179 million in 2005 to RM384 million in 2009.

However, as a division of a major airline, MAE is currently not free to fully capitalise on this opportunity. In addition, outdated aviation policies and procedures, insufficient talent availability and the lack of a spare parts ecosystem in Malaysia are hindering the growth of the industry.

Actions

In order to build the MRO industry, Malaysia must improve industry structure and regulation, expand geographically and into higher value-added services and develop MRO-specific human capital.

Improve industry structure and regulation. While MAE already serves airlines other than Malaysian Airlines, an autonomous MAE will be free to set its own strategy, service more customers, become more responsive to customers and raise capital for expansion. Strategic partners will be invited to invest in the autonomous MAE in order to build its existing capabilities (for example in airframe maintenance) and develop strong expertise in key areas such as engine repair, avionics and components.

Another step towards creating a viable MRO industry structure will be to improve key civil aviation regulations. The Ministry of Transport will corporatise the Department of Civil Aviation (DCA) and establish a governing board comprising industry and Government, as per Malaysian Aerospace Blueprint (2003).

DCA will also replace the British Civil Aviation Regulations and update DCA practices to be on par with those enforced by the European Aviation Safety Authority (EASA). As such, DCA policies and procedures with regards to regulations, certification, approval and examinations will be replaced by EASA standards by September 2011.

Expand geographically and into higher value-added services. Malaysia Airport Holdings Bhd (MAHB) is a key partner in international airports at Hyderabad, New Delhi and the Maldives, which can be developed into strategic satellite centres to feed MRO work back to MAE's MRO facility at Subang Airport. In particular, MAE can route airframe and line maintenance work to the satellite centres and route the component and engine repair work to Subang. This operational strategy will help to expand Subang into a full-fledged engine and component repairs centre. To achieve this, MAE will engage with MAHB to build additional hangars at these foreign airports by 2011.

An effective spare parts supply chain is needed in Malaysia to offer MRO customers a comprehensive service. To address this, MAE will establish a rotable spare parts supply chain at Subang Airport by 2013, with the aim of supplying component spares to customers in the ASEAN, Indian subcontinent and Middle East markets.

Develop MRO human capital to ensure a sufficient supply of talent for the industry. MAE will develop a dedicated training facility for aviation engineering in Subang from 2010 by inviting higher education establishments to partner with it and establish campuses in Malaysia. Possible partners could be Cranfield University (UK), University Colorado (USA), University of Southern California (USA), Korea Aerospace University (South Korea) and Beihang Aerospace University (China).

We propose that the Ministry of Human Resources and DCA implement 40 hours per annum of compulsory continuous learning on critical aspects of aircraft repair by 2011, which will be required for personnel to maintain their aircraft engineer, mechanic and technician licences.

Funding

RM11.6 billion in capital expenditure will be contributed by the private sector by 2020. Almost all – RM11.5 billion – will be private sector capital used to build additional hangars in Subang, Delhi, Hyderabad, Surabaya and Jakarta, acquire more land to expand operations, set up a new rotable spare parts business unit and establish training campuses for MRO-specific human capital. The remaining funds of approximately RM61 million will be provided by the Government.

Impact

We target to build a RM13.4 billion GNI MRO industry in Malaysia, led by MAE, by 2020. In achieving these targets, we aim to create over 20,700 jobs.

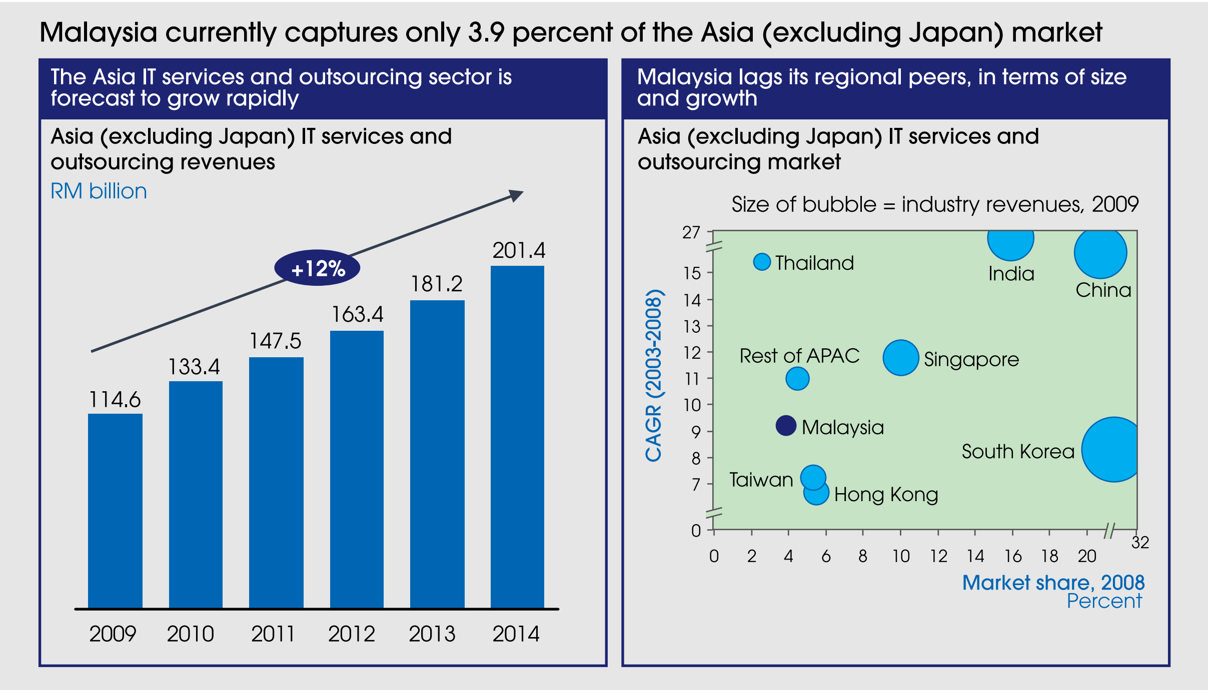
EPP 2: Building Globally Competitive Outsourcers

Rationale

The global and regional outsourcing industry is forecast to grow robustly over the next few years, with the Asia Pacific market expected to expand by 12 percent per year between 2009 and 2014. Malaysia currently captures only 3.9 percent of the Asia (excluding Japan) market, roughly RM3.5 billion per year (*Exhibit 12-6*).

Between 2003 and 2008, the Malaysian outsourcing industry grew by 9 percent, a healthy growth rate but lower than the regional average and significantly slower than regional leaders, such as India (27 percent) and China (16 percent). Malaysian outsourcing companies lag their regional peers because they are small and fragmented, lack niche focus areas, are over reliant on the domestic market and lack a credible track record.

Exhibit 12-6



SOURCE: Gartner

The most competitive outsourcing markets globally have one thing in common: they have provided the base for the emergence of globally-competitive companies within outsourcing, such as India's Infosys, TCS and Wipro. Starting from a strong domestic base, these companies achieved the scale, awareness and credibility to become the largest and most respected companies around the world.

Our aspiration is to create at least two globally-competitive outsourcing companies and, in the process put in place the policy incentives and marketing initiatives to allow smaller companies to flourish.

Actions

We will work on three fronts to achieve our aspiration. We will reach critical scale by setting up a Government-shared services centre through a public-private partnership and then use policy to grow industry leaders and encourage consolidation. Simultaneously we will work to build global awareness and ensure that customers in target markets are aware of the skills and capabilities of Malaysian outsourcers. To enhance industry capability and credibility, especially overseas, we will raise industry standards and foster greater competitiveness in order to challenge established foreign competitors.

Reach critical scale by setting up a Government shared-services centre. The Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) will run pilot projects to consolidate data centres and unified messaging services (including e-mail and voicemail) across key ministries and agencies, beginning in 2011. MAMPU will also commission a Government-wide study to identify duplication across non-core business processes, with the aim of establishing a Government-shared services centre by 2012. The design and implementation of the Government-shared services centre will be overseen by a project management office based on a public-private partnership, with MAMPU as the central coordinating agency. This set of initiatives will aim to reduce Government spending on non-core IT and business processes by up to 20 percent.

Including Government-linked companies (GLCs) in this effort will be a vital step in achieving scale and credibility. The Putrajaya Committee on GLC High Performance, in conjunction with the industry association Outsourcing Malaysia (OM), will organise a roundtable discussion in 2011 between key GLC stakeholders and Malaysian outsourcing providers. OM will also publish a brochure in 2011, highlighting progress and success to date.

Government will use policy incentives to encourage consolidation. Ministry of Finance shall establish a tiered procurement framework, stipulating that outsourcing companies must be of a minimum size to bid for the largest Government outsourcing contracts (i.e. revenues greater than RM96 million). In addition, it is proposed that Malaysia Debt Ventures amend its charter to allow funding of M&A deals by 2010 and provide soft loans to cover due diligence costs.

Build global awareness. To establish a baseline and measure progress, OM will conduct an annual marketing assessment, surveying buyers in its target markets of the United States, United Kingdom and Middle East to measure brand awareness and assess the values of buyers. OM will also run a two-year marketing campaign in conjunction with the Malaysia Truly Business campaign, focusing on key print and online publications in target markets. OM will also establish annual outsourcing awards to recognise high performance and raise the industry's profile. We aim to increase brand awareness of Malaysian outsourcing companies by 50 percent by 2015.

Multimedia Development Corporation (MDec) and OM will work together to increase Malaysia's presence abroad through dedicated sales representation and trade missions. MDeC will hire eight sales representatives for three years, with the aim of doubling revenues in these markets by 2015 (four based in the US, two in the UK and two in the Middle East). OM will also run trade missions to the United States and United Kingdom in 2011 and 2012 to meet current and potential clients as well as subsidise private sector participation at key industry conferences, such as the International Association of Outsourcing Professionals Outsourcing World Summit.

Enhance capability and credibility. To increase the number of certified outsourcing professionals in Malaysia, MDeC will fund 15 to 20 percent of the cost of certification for two Malaysian outsourcing companies and 100 outsourcing professionals per year, for 10 years.

Transparency about Malaysia's outsourcing capability will aid credibility. MDeC will publish an annual ranking of Malaysian outsourcing companies. In addition, OM will ensure that all of its members participate in key international rankings, such as Neo Advisory's Global Services 100.

Funding

Of the RM2.28 billion required for this EPP, RM2.1 billion (93 percent) will come from the private sector. The remaining funding will come from the Government and will be used to roll out shared services within the public sector.

Impact

In building our own global champions and capturing market share abroad, we aim to grow outsourcing revenue from RM3.5 billion in 2009 to RM12.8 billion in 2020, contributing RM6.9 billion in additional GNI in 2020 and creating approximately 43,000 jobs.

In the process, we will (1) build two global champions based in Malaysia (each with revenue greater than RM1.5 billion); (2) certify two outsourcing companies and 100 professionals per year; (3) increase the brand awareness index score of Malaysian outsourcing companies in target markets by 50 percent by 2015; and (4) achieve a 20 to 30 percent reduction in Government and GLC spending on non-core IT and business processes.

EPP 3: Positioning Malaysia as a World-class Data Centre Hub

Rationale

Data centres (DCs) are specialised secured facilities that house sophisticated computer systems and telecommunication equipment and have become a key structural component for an enterprise's IT infrastructure ecosystem. They support the day-to-day operations of applications and data processing as well as disaster recovery. Apart from creating high-value jobs in the IT ecosystem, DCs also create a positive spill-over effect to other industries (i.e. telecommunications, IT hardware and software and construction services).

The DC industry in Asia Pacific is expected to grow by 16.3 percent annually, reaching RM10.9 billion by 2014.

We believe there is a compelling opportunity to develop a world-class DC hub in Malaysia based on the following trends:

- **Increased foreign demand.** Foreign demand results from (1) multinationals looking to consolidate regional operations in Asia Pacific to achieve economies of scale; (2) content providers setting up regional nodes in Asia Pacific to be closer to their end users; (3) cloud service providers looking to expand their user base in the region; and (4) international service providers looking to expand partnerships with local players;

- **Rising cost of doing business for current market leaders:** Whilst Hong Kong and Singapore have established themselves as ASEAN market leaders, a combination of higher wages and rising real estate costs in those countries are opening up opportunities for other countries in ASEAN; and

- **Increased domestic demand for IT outsourcing (ITO), business process outsourcing (BPO) and creative content:** DC growth is already being spurred by the local ITO, BPO and creative multimedia content industry. MDeC expects Malaysia's creative content industry to grow at an average of 11.4 percent to reach RM16 billion by 2013.

We believe Malaysia has the potential to emerge as a world-class DC hub. We define this as having a significant share of Asia Pacific's DC revenue, credible local DC service providers and a recognised capability in providing high-value managed services.

We aspire to establish Malaysia as the preferred destination for DC investors and increase the supply of DC space in Malaysia from 0.5 million square feet to 5.0 million square feet by 2020 to capitalise on the strong growth of DC revenue in Asia Pacific.

Actions

To develop Malaysia as a world-class DC hub, industry and Government will work to coordinate sales efforts. We will also improve the credibility of Malaysia as a DC hub through benchmarking services and improving privacy standards and develop human capital to capitalise on higher-value managed services and increase the number of certified companies.

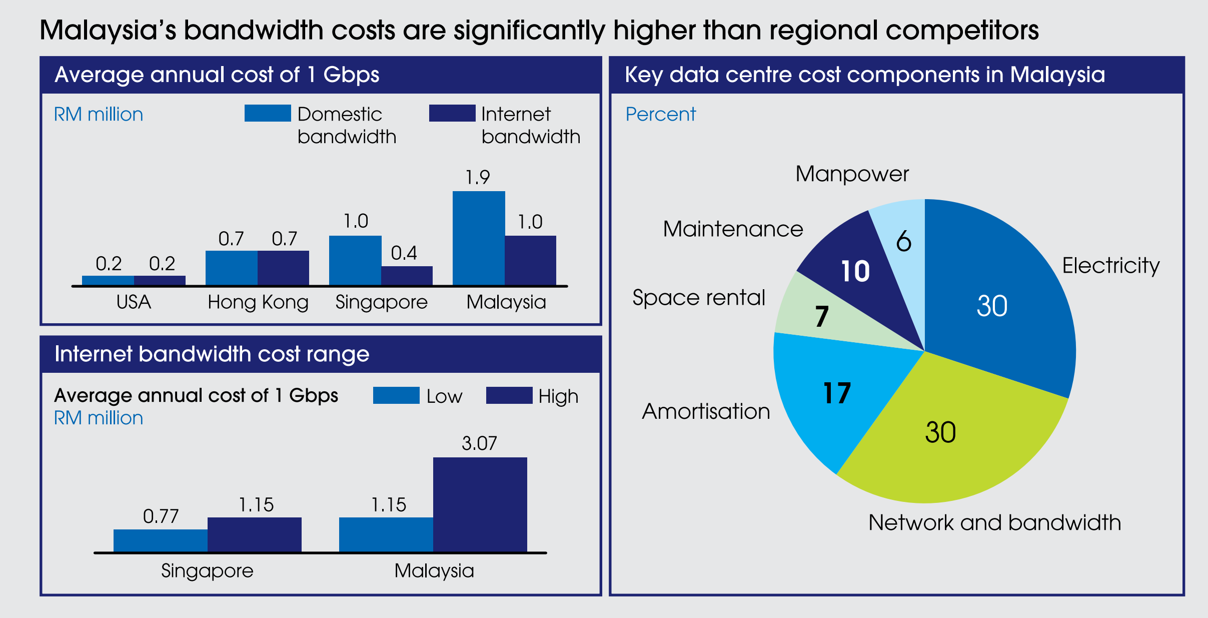
Increase sales of Malaysia DC floor space to 2.5 million square feet by 2015 and 5 million square feet by 2020, as a measure of Malaysia's success in capturing Asia Pacific's growing market revenue. With 0.5 million sq ft in 2010, Malaysia currently supplies approximately 4 percent of Asia Pacific's DC floor space. We plan to increase sales by 2015 through focusing industry efforts, targetting regional counterparts and increasing our cost competitiveness.

OM will set up a DC focus group consisting of 16 key DC companies in Malaysia. The focus group will collaborate with MDeC to improve the ease by which foreign companies can operate in our market and to also increase the supply of DC floor space according to a forecast demand pipeline. Apart from this, the focus group, via OM, will stimulate knowledge sharing in the Malaysian DC sector through conferences, workshops and human capital development in collaboration with MDeC's K-Workers Development Initiative.

In collaboration with MITI, MDeC and OM will launch roadshows and trade missions focused on mobilising regional investment.

Concurrently, the Communications Content and Infrastructure NKEA will drive efforts to reduce bandwidth costs to increase Malaysia's competitiveness on this significant cost component. Malaysia's ability to establish itself as a world-class DC hub is dependent on the ability to offer competitive bandwidth. Malaysia's bandwidth cost – which can vary from RM96 to RM256 per megabits per second per month – currently represents 30 percent of a DC's operational cost and is two times higher than Singapore and three times higher than Hong Kong, (*Exhibit 12-7*).

Exhibit 12-7



Improve the credibility of Malaysia as a DC hub. To attract DC investors, there is a need to increase credibility regarding the quality of our local DCs and the strength of our privacy standards. MDeC and OM will work in collaboration with Uptime Institute to bring 16 DCs in Malaysia up to a global certification standard. The overall baseline benchmarking will be conducted in 2010, followed by the development of a roadmap for each of the 16 DCs to achieve Uptime certification by 2013.

MDeC will lead an aggressive campaign to market Malaysia as a preferred regional location for DCs. This includes industry reviews by Broadgroup and IDC, participation in international and regional road shows and increased presence at international DC conferences.

With the gazetting of the Personal Data Protection Act, the Ministry of Information, Communications, Culture and Arts will be setting up a commission office by January 2011 and raising public awareness and seeking public feedback to develop regulations related to data privacy protection by December 2011.

Build human capital to capitalise on higher-valued managed services. To support the growth of Malaysia as a world-class DC Hub, there is a need for a pool of skilled DC workers. This will be achieved through four initiatives centred on education and knowledge sharing. We will build a DC foundation at universities by having MDeC, OM and the Ministry of Higher Education (MoHE) introduce DC relevant courses at universities (including network, server virtualisation, green IT), as part of existing or potentially new degree programmes. A review of DC courses will be held annually to ensure that they meet industry's needs. To tie learning to experience, we will leverage MDeC's U-Grad model. Beginning June 2011, MDeC will place interns with DC service providers as part of the students' industrial training.

DC lecturers will be certified as Certified DC Experts (CDCEs), accredited by Examination Institute for Information Science, beginning in January 2011. This will fall under the Multimedia Super Corridor Capability Development Programme led by MDeC.

Bi-annual workshops and annual conferences will be driven by OM and MDeC to enable knowledge-sharing amongst the DC community in Malaysia.

Funding

Total funding of RM4.25 billion is required, of which RM4.23 billion will be sourced from the private sector and the remaining portion will be public funded.

Impact

By establishing a world-class DC hub in Malaysia we will generate approximately RM2.4 billion in incremental GNI for 2020 and create over 13,000 jobs.

We will measure impact by achieving our targets of 5 million square feet of DC space and 9,000 certified DC professionals by 2020 as well as 16 DCs operating to internationally benchmarked standards (Uptime) by 2013 and an enforced Personal Data Protection Act (PDPA) by 2011.

DEVELOP FUTURE GROWTH SEGMENTS

In a world of accelerating change and increasing competition, Malaysia cannot afford to stand still. While capitalising on our current strengths, we must also look to the future, to identify the industries and jobs that will drive growth in the next decade and beyond.

There are numerous examples of forward-looking countries that have stolen a march on their rivals by investing early in nascent sectors. For example, in the early 2000s, South Korea invested heavily in broadband connectivity, resulting in the highest broadband penetration in the world. This spurred growth across a range of products and services, including smart phones, wireless technologies and home entertainment services such as video on demand. More recently, Malta has committed RM288 million to fund the construction of the world's first national smart grid. By 2012, it will install 250,000 smart electrical metres in residences and businesses. As well as reducing energy consumption, Malta is set to become a test bed for smart buildings and technologies, spurring investment and creating jobs.

EPP 4: Jump-starting a Vibrant Green Technology Industry

Rationale

Green technology is defined as products and services that reduce energy consumption and minimise pollution (*Exhibit 12-8*). Some segments like alternative energy are experiencing rapid growth of 30 to 40 percent per annum globally.

Exhibit 12-8

Green services offer RM295 billion in potential energy savings by 2020

Green services involve architects, engineers, energy managers and corbon managers

NON-EXHAUSTIVE

Energy management firms
- Energy audits and recommendations
- Energy performance contracting

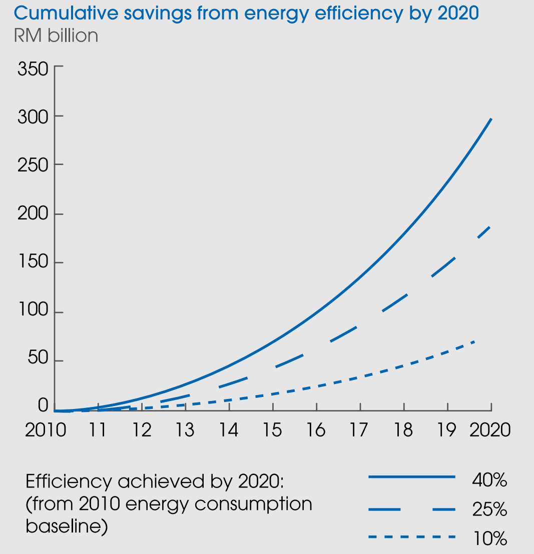
Water management firms
- Water audits and recommendations
- Advise on in-house water recycling and related

Sustainable design services
- Develop and retrofit buildings to be green, e.g. Green Building Index

Waste management firms
- Provide expertise on waste strategies, such as recycling and the management of toxic waste

Renewable energy service providers
- Consultancies for renewable energy projects
- Services such as economic viability assessments, project design, provision of technical expertise in the construction of renewable energy plants

These services enable potentially RM295 billion in energy savings by 2020



Creating a green technology industry in Malaysia will be beneficial for the following reasons:

- **Help achieve Malaysia's emission reduction targets:** Malaysia has announced plans to reduce carbon emissions by 40 percent by 2020, based on 2005 levels. Growing the supply and demand of green products and services will be vital to achieving these targets;

- **Generate sizable cost savings:** It is estimated that increasing energy efficiency by 40 percent by 2020 would result in cost savings of RM295 billion (*Exhibit 12-8*); and

- **Create a significant number of jobs:** Building a vibrant green technology industry will bring with it the creation of a range of highly-skilled positions, as has been the case in other nations that have made similar investments. For example, green employment in Scotland is anticipated to produce as many as 60,000 green sector jobs by 2020 .

Steps have already been taken in Malaysia to grow the green technology sector. However, progress has been held back by fuel subsidies, which increase the relative costs of green technology, leading to low levels of awareness among businesses and consumers, a lack of available finance for green services companies and a limited of supply of green products and services. For example, since 2004, only 15 products have been submitted for eco-labelling.

Our aspiration is to jump-start the green technology sector in Malaysia, in order to build a vibrant green technology industry and create jobs in this fast-growing sector and, in the process, generate substantial cost savings and reduce Malaysia's carbon footprint.

Actions

To achieve our target, we will act to boost demand for green products and services, strengthen suppliers and measure, monitor and publicise Malaysia's environmental progress.

Boost demand for green products and services. Government will take the lead in raising efficiency and growing the green technology industry. First, the Ministry of Energy, Green Technology and Water (KeTTHA) will set efficiency targets stipulating that all ministries must reduce electricity and water consumption by 10 percent per year from 2011 to 2013. Second, KeTTHA will set the target across ministries that 50 percent of the goods and services purchased by the public sector should be eco-labelled by 2020. To this end, a green public procurement policy shall be put in place by October 2011, to give preference to local producers, establish buying guidelines for eco-labelled products and specify the required energy efficiency certification for specific products.

Government will also examine available policy levers to reduce Malaysia's environmental impact and spur growth of the green technology industry. KeTTHA will promote a culture of conservation and efficiency. It will coordinate outreach programmes and incorporate environmental awareness into school curriculums in 2011, for example through the promotion and encouragement of activity books produced by Centre for Training Renewable Energy and Energy Efficiency.

Strengthen suppliers of green products and services through accreditation, skills development and access to finance. KeTTHA will develop an accreditation framework for energy services companies to improve and regulate the quality of energy services companies in 2011. The framework will take into account the level of technical expertise, capital base and depth of services offered by companies.

Green technology requires new skills for new jobs such as carbon traders, environmental engineers, smart grid consultants, sustainability consultants, wind turbine designers, Clean Development Mechanism consultants and energy managers. Green technology skills will be incorporated into the curriculum of existing courses, including architecture, engineering and urban planning by 2012. In addition, a list of green technology jobs under the NOSS (National Occupational Skills Standard) and SKM (Malaysian Skills Certificate) will be developed by mid-2011, establishing a common standard for green technology practitioners.

Green projects rely on knowledgeable lenders. KeTTHA will run education seminars with financial institutions in 2011, to increase knowledge of green projects to boost levels of lending. These seminars will focus on the payback structure of energy efficiency projects.

Measure, monitor and publicise environmental progress. To provide the basis for an environmental management annual report, KeTTHA will track Malaysia's environmental impact and progress of the green technology sector in a database. By mid-2011, KeTTHA will determine the scope of the database and the indicators that need to be collected as well as communicate roles and responsibilities to the relevant industry associations.

Starting in 2011, KeTTHA will publish an environmental management annual report to track Malaysia's progress against KPIs and increase awareness of environmental schemes. The report will benchmark Malaysia internationally, highlighting improvements in efficiency across Government and the private sector at the national and state levels. It will also discuss the impact of any existing subsidies for energy and water.

Funding

Total funding required is RM13.5 billion, of which RM10.8 billion will come from the private sector for investment in green buildings and infrastructure. The remaining funding will be used for investment in public sector green buildings over the next 10 years.

Impact

By taking a coordinated effort to jump-start a vibrant green technology industry in Malaysia, we can generate RM7.2 billion of additional GNI in 2020 and create over 47,000 jobs. This incremental GNI is driven primarily by growth in revenue from renewable energy service providers.

EPP 5: Growing Large Pure Play Engineering Services

Rationale

The global market for aerospace and automotive engineering services is forecast to double over the next decade, surpassing RM960 billion by 2020. A high proportion of this can be performed offshore, with the offshore market forecast to be worth in excess of RM320 billion by 2012.

Engineering services has significant potential to boost Malaysia's GNI for a number of reasons:

- **Creates high-value jobs:** The engineering services industry creates high-value technology and design engineering jobs, which are independent of the progress of the domestic manufacturing industry;

- **Serves as a source of brain gain:** A vibrant engineering services industry will attract the best engineering talent to Malaysia, both Malaysian diaspora and skilled expatriates; and

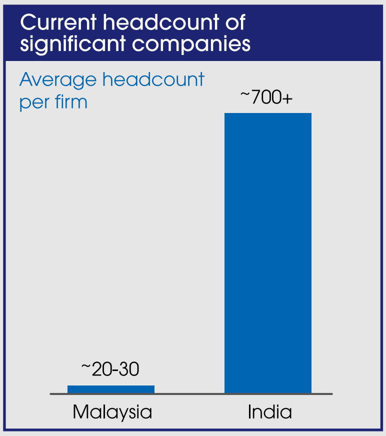
- **Builds high-value domestic capability:** Today much of the high-value design work for Malaysian products is outsourced to countries like Taiwan, Korea and Japan. By growing engineering services domestically, Malaysia can utilise domestic capabilities and manpower, moving the industry up the value chain.

With a strong existing base, Malaysia is well-positioned to grow engineering services. It has a large number of engineering graduates to fill its workforce needs. It has strong domestic demand, driven by the local automotive and aerospace industries. Moreover, some Malaysian companies already possess expertise in composite materials, which are increasingly being used across industries.

In order to effectively capture this opportunity, the industry must overcome its lack of scale and capital, fragmented expertise and talent shortfalls (*Exhibit 12-9*).

Exhibit 12-9

Several factors limit engineering services industry growth in Malaysia



Lack of scale
- Slow learning curve as firms only fulfil one contract at a time
- Volume of work insufficient for companies to expand

Lack of capital
- Lack of sufficient capital to invest in necessary technology, e.g. finite element analysis software, computer-aided design software
- Lack of sufficient capital to facilitate knowledge and technology transfer to Malaysian engineers

Fragmented expertise
- Expertise is isolated in each company, hindering the ability of the industry as a whole to fulfil total product lifecycle engineering

Talent
- Lack of communication and other soft skills
- Need for industry-specific technical skills training
- Training costs borne by players, potential for efficiencies if training is consolidated

Companies require both scale and quality of work in order to compete successfully in the global market

We have identified a set of initiatives that will allow our pure play engineering services industry to capture significant global market share.

Our aspiration is to create an aerospace engineering services company and an automotive engineering services company that are globally competitive and, in doing so, put in place the market conditions to attract high-value engineering services work to Malaysia.

Actions

To achieve the aim of creating two globally competitive engineering services companies, we have developed a set of initiatives to increase skills and capability, stimulate demand for engineering services and accelerate global expansion.

Increase skills and capabilities through training and a research and development (R&D) centre. Government will provide RM24 million in engineer training grants from 2011 to 2013. The grants will be provided to train over 700 selected engineers at Strand Aerospace Malaysia and DreamEdge Sdn Bhd so the companies can secure contracts with companies such as Nissan or Suzuki. In addition, the Ministry of International Trade and Industry will administer grants of RM60 million to equip these engineers with essential computer-aided design (CAD) software for these contracts from 2011 to 2013.

The Advanced Manufacturing Institute will establish an R&D centre for aerospace and automotive engineering by the end of 2010 and will coordinate between academia and industry to develop products relevant to the industry, which it can sell to global clients. The R&D centre will focus on areas in which Malaysia has existing expertise: composite technology and process design optimisation.

Stimulate demand for engineering services through developing a brand and leveraging Government offsets and purchases. MATRADE will establish and market the Malaysian Engineering Services brand, which will emphasise the availability of world-class engineering services in Malaysia. Overseas MATRADE staff will target specific aerospace and automotive industry clients in Europe and Japan. MATRADE will launch the brand at the Dipro Engineering Services exhibition in Japan in December 2010.

Government can leverage the existing Ministry of Defence offset policy to grow the aerospace and automotive engineering industry. Sellers must provide 50 percent of the value of foreign goods and services bought by the Ministry of Defence as offsets, i.e. agreements to purchase Malaysian goods and services in return. Starting in 2010, the Malaysian Industry-Government Group for High Technology (MIGHT) will focus on securing engineering services work as part of any new offset commitments owed to the Government of Malaysia.

In 2010 the Ministry of Defence will sign Direct Purchase Agreements with several local engineering services firms to develop aircraft structural integrity technology. This technology ensures the safety of structures and prolongs their use, reducing the cost of upgrading or replacing aircraft. This technology can be applied to civil aircraft and related aero-structures and can be marketed to Asian and Middle Eastern countries.

Accelerate global expansion. By 2013, Strand Aerospace Malaysia and DreamEdge Sdn Bhd are expected to achieve a critical mass of over 700 trained engineers and strong track records of projects executed for global clients. At this stage, the companies will seek joint venture partnerships and strategic alliances with global companies, such as Bombardier, Airbus, GKN Aerospace, Nissan and Honda. This will improve the local companies' market access and technology transfer as well as ensure sufficient workflow over the next eight years to fuel further growth of the industry. We will measure our success by targetting 17 signed contracts with local and global original equipment manufacturers (OEMs) representing 20 to 100 full-time equivalent jobs at Strand Aerospace Malaysia and DreamEdge Sdn Bhd by 2012.

Funding

This requires a capital expenditure of RM1.1 billion, with RM1 billion coming from the private sector. Public sector spending of approximately RM0.1 billion is solely for training and software grants to develop aerospace and automotive engineers from 2011 to 2013.

Impact

We believe the industry has the potential to contribute an additional RM3.5 billion of GNI in 2020 and create approximately 11,500 jobs.

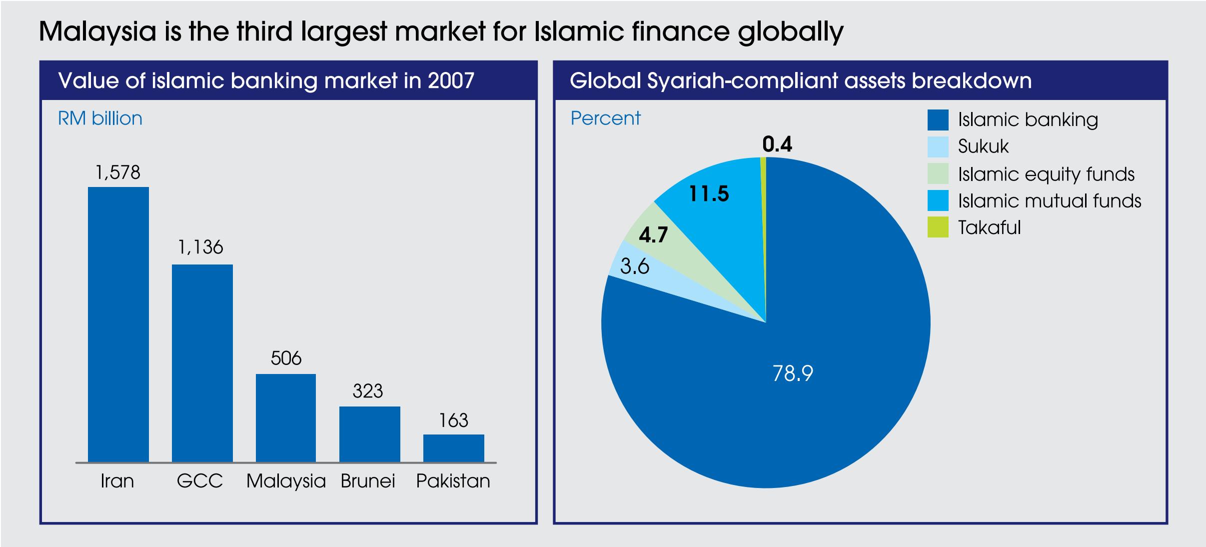
EPP 6: Developing Malaysia as a Global Islamic Finance KPO Hub

Rationale

Our aspiration is to capitalise on our leading position in Islamic finance by establishing high-value Islamic finance advisory services to the global market via a common platform focusing on new industry growth and innovation.

Malaysia is the third largest market for Islamic finance globally and a leader in the *sukuk* issuance market, with 48 percent of global *sukuk* issuance originating from Malaysia (*Exhibit 12-10*). This lead position is supported by the world's first Syariah-compliant commodity trading platform and is underpinned by a dispute resolution framework that is also compliant with Syariah.

Exhibit 12-10



SOURCE: The Banker, 2009; Top 500 Islamic Financial Institutions (TIFI)

Building on our competitive advantage in Islamic finance – experience, infrastructure and knowledge – Malaysia will set up a consortium that will actively promote Malaysia as a premier Islamic finance hub, through the provision of high value Islamic finance advisory and consultancy services (I-FACS).

I-FACS will consist of Syariah scholars and practitioners, Islamic finance lawyers, accountants, actuaries and Syariah auditors who will carry out Syariah-compliance functions. It will offer a wide breadth of services in Islamic capital markets, Islamic fund management, Islamic corporate advisory and finance.

The concerted efforts of the industry players via the I-FACS consortium will provide an avenue to address global industry challenges effectively:

- **Complex origination process:** The *sukuk* process requires end-to-end expertise from sourcing issuance to product sales. I-FACS would combine the resources of the group to issue *sukuk* and meet global benchmarks for financial standards and time to market;

- **Product development:** The majority of Islamic financial products are currently based on a conventional framework with adaptations to suit Syariah requirements, which translates into long product development cycles of 12 to 17 months. The consortium will be able to offer innovative products to capture new industry growth that are based on Syariah from the beginning of product development;

- **Standards harmonisation:** Malaysia is recognised as an Islamic financial centre that is receptive towards the opinions of various schools of thought. We will maintain this flexibility in order to continue to draw a variety of international issuers to utilise Malaysia for *sukuk* issuance and Islamic financial product development; and

- **Access to expertise:** Many countries lack an immediate pool of local expertise that is required to ensure the efficient delivery of Islamic finance products and instruments (i.e. Islamic scholars, lawyers, auditors, accountants and Syariah-compliance experts). The I-FACS consortium will address this need by identifying which specialised skills are required for the provision of advisory and consultancy services and how to provide these at globally competitive rates, through integrating the expertise of currently provided by ISRA, INCEIF, IBFIM and local specialised firms in Islamic finance.

Various Malaysian regulators are devising best-practice parameters that will culminate in guidelines mandating Syariah audit reviews for our Islamic banks and financial institutions. This will spur a new industry for specialised skills in Syariah-compliance functions that would be carried out by Syariah auditors. We expect global financial institutions to follow our move towards Syariah compliance, and I-FACS is poised to seize the opportunity of being at the forefront of this industry growth.

Actions

In order to integrate the provision of Islamic finance advisory and consultancy services that can capture global market demand, the following actions will be undertaken to reach out target of having 10 banks from two regions (Southeast Asia and Gulf Cooperation Council countries) as clients of I-FACS by 2015.

Leadership Committee to conduct feasibility study. A Leadership Committee will be created and consist of representatives from Islamic banks and financial institutions, regulators, industry players and Islamic scholars and experts. The Committee will conduct a feasibility study on the mechanism to offer Syariah advisory and consultancy services to the international market, and its recommendations will incorporate the Financial Services Masterplan for the next ten years currently being developed by Bank Negara Malaysia.

Integrate Malaysian expertise via an I-FACS consortium to offer specialised Islamic advisory and consultancy services. The I-FACS consortium will be anchored by leading industry practitioners with an internationally recognised brand name. Members of the consortium will collaborate on targetted marketing to identify opportunities in Islamic finance in collaboration and under guidance of MIFC. As a milestone, the Islamic Finance Advisory and Consultancy Services platform (I-FACS) will commence activities in mid-2011.

Market capabilities overseas. Malaysia will be positioned as the premier Islamic finance outsourcing hub, and from mid-2011, MATRADE grants will be used to fund marketing expenses in Gulf Cooperation Council countries (including Saudi Arabia, UAE and Kuwait) and in Southeast Asia (including Singapore, Hong Kong and Indonesia). This work will be carried out through MATRADE branch offices and trade fairs. Our milestone is to attend international trade conferences and fairs including the International Islamic Finance Forum, World Islamic Economic Forum (WIEF) and the World Halal Forum (WHF) in target countries every month until 2013.

Develop Syariah-compliance auditing competencies. There is a lack of Syariah auditors, and the I-FACS platform will capture the market for this new industry growth by providing clients with easy access to a large number of highly-skilled professionals and experienced firms with proven competencies. The consortium will also encourage knowledge-sharing and training across firms to grow the number of Syariah auditors.

Funding

Capital expenditure is expected to be RM217 million, with RM192 million from the private sector.

Impact

We aim to create an RM3.1 billion GNI impact and 2,010 new jobs by 2020.

BUSINESS OPPORTUNITIES

Beyond the EPPs, there are additional business opportunities that will support the growth of the industry. In additional to business as usual growth in the sector, we outline three specific business opportunities in areas beyond EPPs. A fourth area – increasing skilled resources – serves as both a business opportunity and common enabler for the sector, and is described in the Common Enablers section.

In total, these business opportunities are expected to contribute RM19.5 billion incremental GNI impact in 2020, which consists of RM12.3 billion from the specific opportunities described here and RM7.2 from organic sector growth. In addition, these business opportunities are expected to create 107,000 new jobs by 2020.

Business Opportunity 1: Multi-Disciplinary Practice Construction Firms

There is a strong link between construction-related professional services and the wider construction industry, with professional services-related fees for building projects accounting for approximately 13 to 15 percent of project value. The Malaysian construction sector is still over-reliant on Government demand with 40 to 60 percent of revenues coming from Government contracts.

Multi-disciplinary practice (MDP) construction firms provide an end-to-end solution in a turnkey manner, including architectural and engineering services, construction services and potentially even the real estate management under a single contract. Globally, multi-disciplinary contracts are gaining prominence as clients look for centralised accountability rather than having to manage a number of separate contracts.

Since Government contracts represent the bulk of the market, Government procurement processes have the potential to positively influence the skills and capabilities demanded of the industry.

We will recognise and award projects to MDP firms for Government procurement contracts. MDP firms will be recognised and allowed to bid for professional construction services tenders by mid-2011. The Ministry of Finance will enable registration as an MDP firm and award three pilot projects to MDP firms by the end of 2011. Going forward the Ministry of Finance will award larger contracts to MDP firms following a set timeline to bring the industry in line with international best practices.

Business Opportunity 2: Accounting Sector

The growth of the accounting sector has traditionally been linked to the size of the overall economy. Demand is primarily driven by domestic reporting requirements as well as domestic tax regulations. Furthermore, the level of competition within the sector is relatively low. Client contracts are relatively stable over time, as switching auditors sends unfavourable signals to financial markets.

However, as markets deregulate and global reporting standards converge, opportunities exist to export accountancy services in the future. To be able to capitalise on those opportunities, Malaysia must increase the quality of its accountants and develop specialised skill sets in areas such as international taxation, forensic accounting and carbon accounting, in line with future growth areas.

We will strengthen the quality of Malaysia's chartered accountants by introducing a requirement to hold a recognised professional qualification (e.g. ACCA, CPA, ICCA) before being admitted as a chartered accountant in Malaysia. The chartered accountant qualification is currently awarded automatically to Malaysian graduates after three years of experience within the industry. The Malaysian Institute of Accountants will introduce the additional requirement to hold a professional qualification to qualify as a chartered accountant by mid-2012.

Through education and adjustments to policies on granting visas, Malaysia can develop expertise in indirect taxation, international taxation, transfer pricing, forensic accounting and carbon accounting to increase export opportunities. The Ministry of Higher Education will improve domestic capabilities by launching new Masters programmes at local universities in these areas by 2012, and the Ministry of Home Affairs will facilitate knowledge transfer by easing restrictions on the entry of foreigners with specialised skills by mid- 2011.

Business Opportunity 3: Creative Multimedia Content Industry

The subscription revenue reported by Global Insight for the online gaming market in Asia Pacific stood at RM9.0 billion in 2007, with a CAGR of 14.8 percent expected until 2012, mainly led by China and Korea. In Malaysia, our creative multimedia industry's revenue of RM9.4 billion in 2008 contributed to 1.27 percent of GDP. This is projected to grow by a CAGR of 11.4 percent to achieve RM20 billion in 2013. As the creative multimedia industry is still young in the Asia Pacific region, it is imperative for Malaysia to lay the foundations to capture market share. The key challenges include:

- **Low level of industry exposure, profile and reputation:** This results in companies having limited access to funding and investment for production, marketing and expansion;

- **Lack of awareness and enforcement of policies and regulations:** There is currently a lack of awareness and understanding of intellectual property rights for creative industries as well as methodologies to evaluate and protect intellectual property;

- **Lack of access to global market:** Malaysian content creators currently generate most of their revenues from the domestic market. To ensure sustainable growth there is a need for the local content creation companies to reach out to the global market; and

- **Lack of competency and capacity:** Malaysian content creators are unable to effectively secure international deals due to internal structural issues such as the lack of high quality talent on the pre-production side (writers and storyboard artists) and production managers. We will need to enhance the quality and competency of our human capital as we step up to service the needs of the global market.

The Malaysia Creative Multimedia Content Initiative (MCMCI) is the strategic framework applied by MDeC to grow the creative multimedia industry. Opportunities have been identified in two key areas within the creative multimedia industry: the development of ASEAN themed online games and the development of animation for the entertainment industry (i.e. film, television), which can be achieved by increasing marketing, increasing private investment and building a cluster of human capital with the right skills for the sector.

Malaysia will set up physical trade representative offices in the United States, United Kingdom, Japan, China and the Middle East to directly tap the needs of those markets. Trade offices coupled with strong alliances with foreign media distributors and broadcasters will enable Malaysian content companies to access markets such as MIPCOM and MIPTV.

We will target a ratio of private to public investment to 80:20 by collaborating with large regional venture capitalist firms, like Singapore-based Asia Media & Technology Capital Management Private Limited and Creative Ventures Group, to attract investors for local productions. At the same time, we will consider larger fiscal incentives – potentially including tax breaks and grants – to drive investment from our domestic private sector.

To incubate the growth of local companies in Malaysia, MDeC will focus on increasing high-valued skills (i.e. scriptwriters and storyboarders) in the next 10 years by launching a dedicated creative education syllabus. It will also extend MDeC's Digital Media Zone so that it can accelerate growth in economic corridors with an ecosystem of creative industry companies and infrastructure.

COMMON ENABLERS

Increase Skilled Workforce to Meet Growth of Malaysia's Services Sector

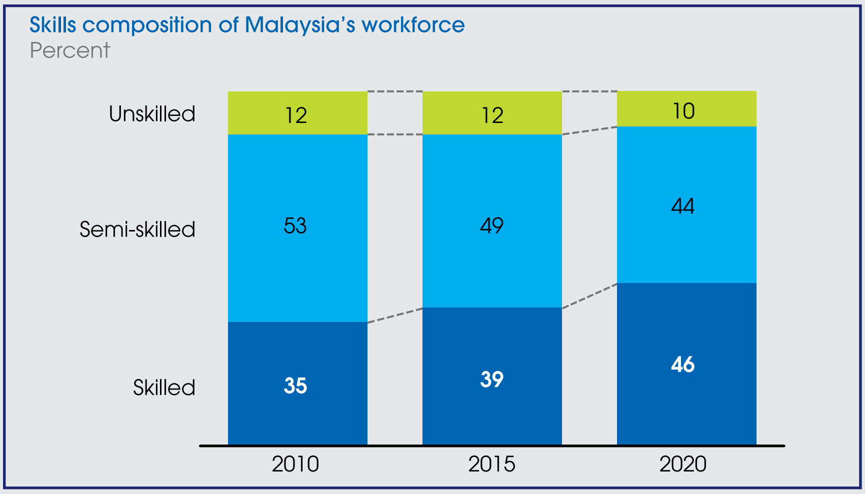
Overview

Talent is a key structural component of a knowledge-intensive economy. In most services-led economies around the world, skilled workers are a significant percentage of the total workforce. For example, Singapore's large services sector (52 percent of the country's GDP) is supported by a workforce with 49 percent skilled workers.

Malaysia's services sector is heavily dependent on skilled workers, who represent 35 percent of our business services workforce. Therefore, the growth of the services sector is dependent on our ability to increase the number and quality of skilled workers. We aspire to grow the pool of skilled labour force to 46 percent of Malaysia's workforce by 2020 to support skills demand from the services sector (*Exhibit 12-11*).

Exhibit 12-11

We project skilled labour will comprise 46 percent of our total workforce in 2020

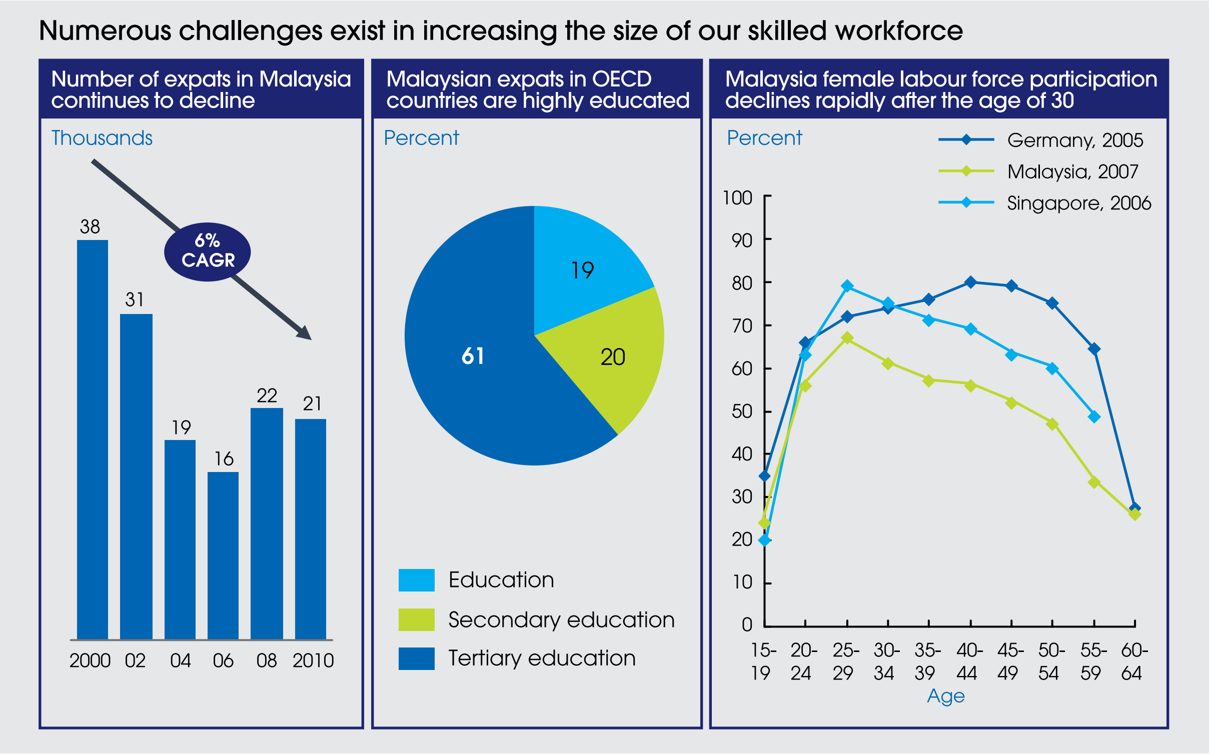


SOURCE: ISMK, 2010

Key challenges to increase skilled workers include:

- Slow adaptation of skills supply to demand results in a skills shortage, unemployment and additional retraining cost. Between 2001 and 2009, the Government spent RM900 million on retraining graduates and placing them in jobs, in addition to the RM29.5 billion it spent on tertiary education ;
- A shrinking talent pool is a result of a decline in expatriates in the services sector (which declined 6 percent per annum since 2000) and an increase in the emigration of skilled Malaysians. An estimated 1.1 million Malaysians are working and living abroad, and a large percentage of them are highly educated. In OECD countries alone, approximately 61 percent of Malaysian expatriates have tertiary education (Exhibit 12-12); and
- Low female labour force participation rate, as few qualified female graduates either enter the skilled workforce or remain in the workforce after the age of 30. Although 57 percent of Malaysia's graduates are female, women represent only 37 percent of the skilled services workforce.

Exhibit 12-12



SOURCE: ISMK, 2010

Actions

To increase the number of skilled workers for the services sector, we recommend a set of actions focused on increasing the relevance of skills education and training to industry demands, attracting global talent and increasing the number of skilled women in the skilled-services workforce to 45 percent.

Increase relevance of skills to industry demands. MoHR will analyse skills and workforce development needs at the national level. Key responsibilities include (1) producing a subsectoral skill-analysis report annually; (2) reviewing and advising on the effectiveness of the skills training programme in addressing skill shortages; and (3) partnering with MoHE, MoE and MoHA to address skills shortages in key economic regions.

To increase the effectiveness of MoHR, we will oversee the process of providing MoHR with resources, define KPIs to deliver annual subsectoral skills analyses and set up a governance structure, led by Talent Corporation, to drive implementation of initiatives to increase skill relevance.

MoHR will (1) hire and groom an additional 20 research analyst to conduct subsectoral skills analysis across five major subsectors; (2) allocate grants to external research partners (International Labour Organisation, World Bank and others) and selected local universities to aid subsector skills analysis; and (3) set up a skills database and analytics tool to collect and analyse data related to potential skills demand and supply from EPU, Department of Statistics (DOS), industry surveys, industry regulatory bodies, MoHE, MoE, external research bodies (ILO and World Bank) and other stakeholders.

MoHR will have a KPI to deliver annual subsectoral skills analyses starting from 2010. The first national skills overview report is due in 2010, and a report analysing six subsectoral skills is due in 2011. Subsequently, MoHR will report annually its analysis of eight subsectoral skills.

Talent Corporation will set up a governance structure in 2011 to drive implementation of initiatives to increase skill relevance. A governance structure consisting of MoHE, MoE, MoHA, MOSTI, MoHR, MDeC and representatives of the key economic regions will monitor and assess the implementation of initiatives across various Government agencies on increasing skill relevance. The effectiveness of these initiatives will be fed back to MoHR as inputs to guide our efforts of improving skill relevance.

Attract global talent. To increase Malaysia's talent pool, we will focus on increasing the inflow of foreign talent in high growth services subsectors and proactively engage Malaysian diaspora to increase cross-border collaboration, networking opportunities and the number of returning diaspora.

MoHA will abolish minimum paid up capital and restrictions on mid-income expatriates for foreign employment in 2011 for key services subsectors, based on a skills analysis by MoHR. It will also provide one-year working visas to foreign students with a CGPA of 3.5 and above to retain top talent in the country.

Talent Corporation will set up a central talent attraction unit in January 2011 to combine, align and enhance the ongoing disparate talent attraction initiatives. In the meantime, the Talent Corporation interim taskforce will drive initiatives. The key responsibilities of this central unit will be to (1) align foreign employment policies and talent attraction incentives to skills needs recommended by MoHR; (2) run campaigns to market Malaysia as a global destination for talent; (3) consolidate existing talent attraction portals in phases to produce a single one-stop portal targeting both Malaysian diaspora and foreign talent; and (4) collect and analyse profiles of Malaysian diaspora, e.g. launch targeted communications and match collaborative, networking and job opportunities in Malaysia to individuals overseas. Our milestones of success are to increase the number of expatriates in the services sector by an additional 41,000 by 2020 and to increase communication to 50 percent of diaspora by 2015 and 80 percent by 2020.

Increase number of skilled women in the workforce. Our target is to increase the proportion of skilled women to 45 percent of the skilled services workforce by 2020. Our main actions to reach this goal are to set up a women's organisation to encourage and mentor young female graduates, implement family-friendly employment policies and introduce policies and regulations so that families will have greater access to childcare facilities, and ensure these facilities have accredited staff.

Ministry of Women, Family and Community Development will set up Advancing Women Organisation to proactively place qualified final-year female graduates in internship programmes with private sector partners. Beginning in 2010, the programme will target qualified female students from local institutions to provide structured mentorship and increase their exposure to larger services companies. Students will undergo internships of three to six months, following which they will join the alumni of Advancing Women Organisation to mentor and guide new participants.

MoHR will implement family-friendly policies in 2011 to extend paid maternity leave to 90 days and to provide greater job security for part-time employees.

Ministry of Housing and Local Government will implement compulsory childcare facility regulation in 2011 to provide for adequate childcare facilities in major business centres across Malaysia. To ensure the quality of childcare facilities, the Ministry of Women, Family and Community Development will play a role in ensuring certification of childcare professionals as part of the Early Childcare accreditation programme (under the Education NKEA).

The capital requirements for these initiatives will be sourced from the private sector (RM14 million) and the public sector (RM127 million) and is expected to contribute incremental GNI of RM2.3 billion and create 43,000 jobs by 2020.

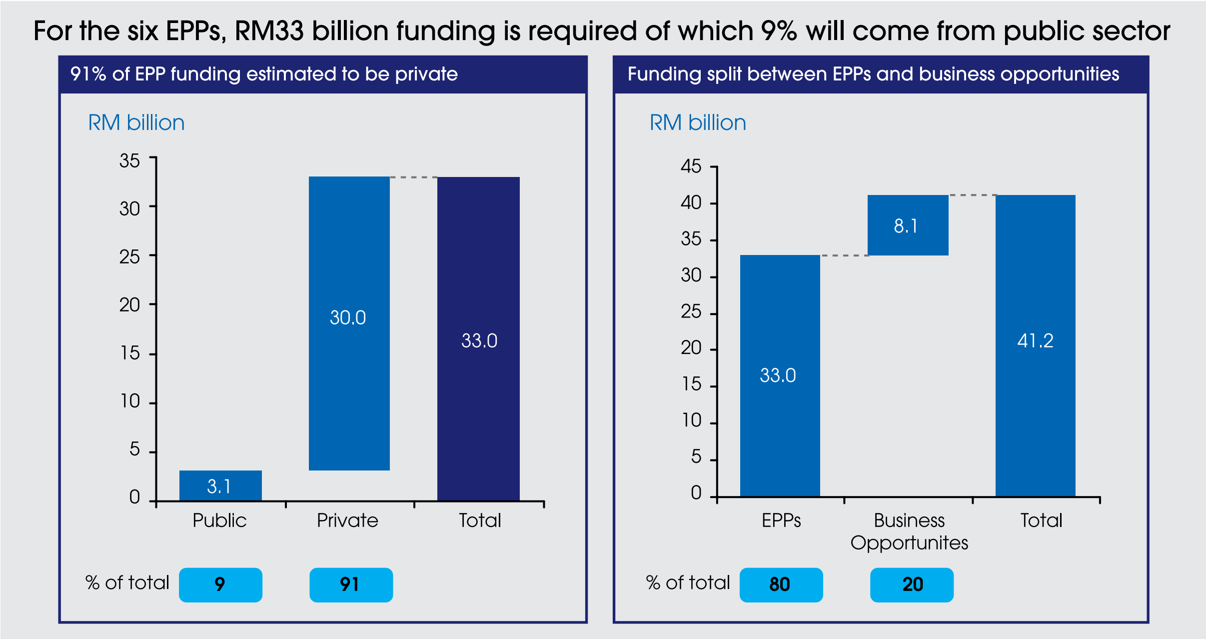
Reduce Bandwidth Costs

The cost of bandwidth is a critical enabler of business services and central to a number of our EPPs. Malaysia's ability to establish itself as a DC hub is heavily dependent on bandwidth costs, which are currently twice as high as in neighbouring Singapore. The cost of bandwidth will also have a significant impact on the competitiveness of outsourcing companies, which are central to a number of our EPPs. Efforts to reduce bandwidth costs will be driven by the initiatives described within the Communications Content and Infrastructure NKEA.

FUNDING

Achieving our EPP targets will require cumulative investment of RM33 billion from 2011 to 2020 (*Exhibit 12-13*). It is important to note that we envision 91 percent of total funding will come from the private sector, in line with the aspiration of creating a private sector-led economy. Including business opportunities, an addition RM8.1 billion is required, bringing total funding to RM41.2 billion.

Exhibit 12-13



A total of RM8.1 billion will be required to fund business opportunities and common enablers. This includes:

- **Creative multimedia content:** RM1.48 billion to fund development of infrastructure and capabilities to incubate growth of creative human capital and local creative products for distribution to the wider regional and international markets;
- **Talent:** RM140 million to set up research collaborations and a business intelligence system to facilitate annual and quarterly analyses of subsectoral skill needs as well as to launch a talent attraction marketing campaign;
- **Multi-disciplinary practice:** RM36 million to provide incentives for formation of domestic MDP construction firms, leading to increased chances of securing projects overseas and to also implement a quality-based selection system for Government contracts (e.g. incorporating lifecycle costing, clear selection criteria, open competitions);
- **Accounting:** RM3 million to develop a three-tiered accreditation scheme for tax and to develop courses for a Masters degree in taxation; and
- **Baseline growth:** RM6.5 billion in business-as-usual growth in construction professional services, engineering services, aviation MRO services, foreign outsourcing and data centre management.

As an additional benefit, our EPPs will also generate cost-savings. We estimate that rolling out shared services within Government could reduce the cost of non-core IT and business processes by up to 20 percent, saving the Government RM11.2 billion between 2011 and 2020.

GOVERNANCE AND DELIVERY

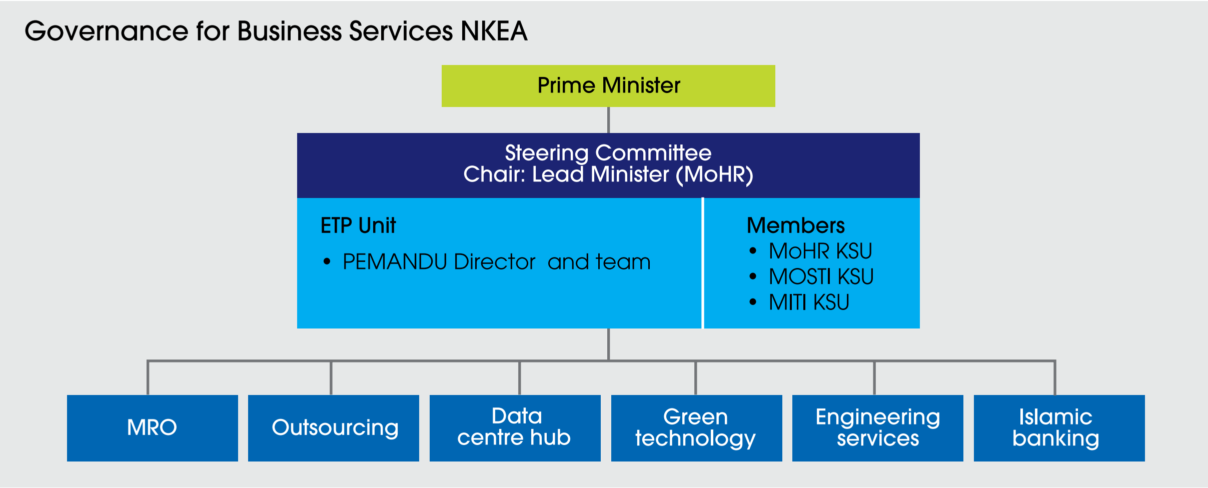
Successful implementation of the various initiatives proposed hinges on ownership and accountability for each of the projects. To ensure proper ownership and accountability, a dedicated lead owner has been identified for each project. In addition, a detailed delivery plan consisting of implementation details, KPIs and targets has been developed for each EPP as well as for the critical enabler of talent (*Table 12-1*).

Table 12-1

EPP	Lead initiative owners	Other key agencies, companies and organisations
Growing aviation maintenance, repair and overhaul services, led by MAS Aerospace Engineering	Ministry of International Trade and Industry	Malaysia Industry-Government Group for High Technology, MIDA, Ministry of Transport – Aviation Sector
Building globally-competitive outsourcers	Multimedia Development Corporation	Ministry of Science, Technology and Innovation, Malaysia Administrative Modernisation and Management Planning Unit, Putrajaya Committee of GLCs, Outsourcing Malaysia
Positioning Malaysia as a world-class data centre hub	Multimedia Development Corporation	Outsourcing Malaysia
Jump-starting a vibrant green technology industry	Ministry of Energy, Water and Green Technology	Ministry of Science, Technology and Innovation, Malaysia Green Technology Corporation
Growing large pure play engineering services	Ministry of International Trade and Industry	Malaysia Industry-Government Group for High Technology, MIDA, MATRADE Ministry of Transport – Aviation Sector,
Developing Malaysia as a global Islamic finance KPO hub	Private consortium	Malaysia International Islamic Finance Centre, INCEIF

To ensure that the EPPs are implemented according to their timelines, a proper governance structure will be established, with the Prime Minister overseeing delivery (Exhibit 12-14).

Exhibit 12-14



The Minister of Human Resources will act as the Lead Minister for the Business Services NKEA Steering Committee and will be supported by the PEMANDU Economic Transformation Programme Unit (ETP Unit).

An NKEA Steering Committee will be established to track the performance and progress of implementation of the EPPs, make the necessary decisions and provide direction and guidance to the teams. Reporting to the Minister of Human Resources, the Steering Committee will include the Secretaries General of MoHR, MITI,KeTTHA, DG of MIDA and CEO of MDeC. It will also include the proposed inclusion of Divisional Heads from EPU. I. The Steering Committee will meet once a month. As part of these meetings, EPP owners will provide progress updates and the Steering Committee will provide guidance, resolve conflicts and oversee all matters related to the NKEA. The Prime Minister will be updated once per quarter.

An NKEA Leader will be appointed to oversee all matters pertaining to the NKEA and will hold weekly discussions with both the ETP Unit to obtain feedback as well as with the Secretary General of MoHR to provide progress updates.

The ETP Unit has the mandate of coordinating the transfer of EPPs ownership to respective ministries or agencies as well as coordinating all inter-agency collaborations. The ETP Unit will provide performance management and tracking of the progress of the EPPs as well as provide analytical support to the implementation teams. All materials for presentations, workshops, public engagements, etc. will also fall under the responsibility of the ETP Unit.

The lead agencies of the EPPs will implement the initiatives according to the timelines and will be led by their respective Heads of division, who will hold fortnightly meetings with the ETP unit director and team.

Summary of Business Services NKEA	
• **Incremental GNI impact in 2020**	RM59.2 billion
• **Additional jobs in 2020**	245,000
• **Critical targets and milestones within 6 to 12 months** • MAE becomes an autonomous MRO service provider • Government shared services project management office established • Baseline benchmarking with Uptime Institute completed • 10 percent reduction in electricity and water consumption across all ministries • Industry-academia R&D collaboration through AMI established • Islamic finance advisory and consultancy services consortium established	