

HOW SMEs CAN LEVERAGE TECHNOLOGY TO OVERCOME ECONOMIC CHALLENGES AND STAY COMPETITIVE

by

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28 May 2009 Penang







Profile of SMEs in Malaysia



Definition of SMEs

Manufacturing, Manufacturing Related Services and Agro based Industry Annual sales turnover < RM25 million <u>OR</u> Full time employees <150

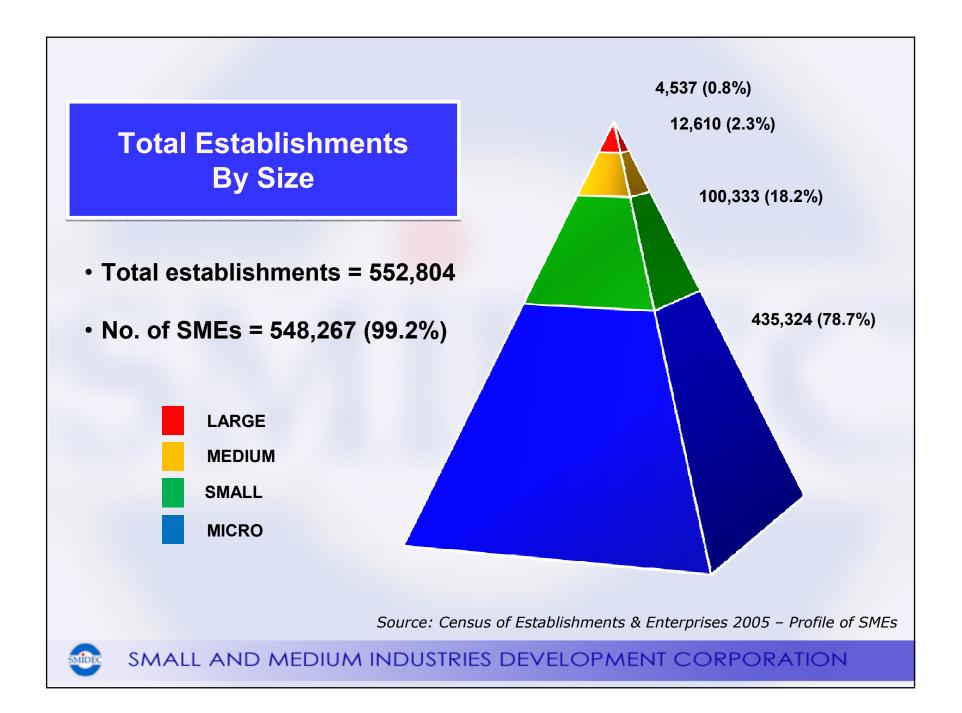
Services, Primary Agriculture, Information and Communication Technology (ICT) Annual sales turnover < RM5 million <u>OR</u> Full time employees < 50

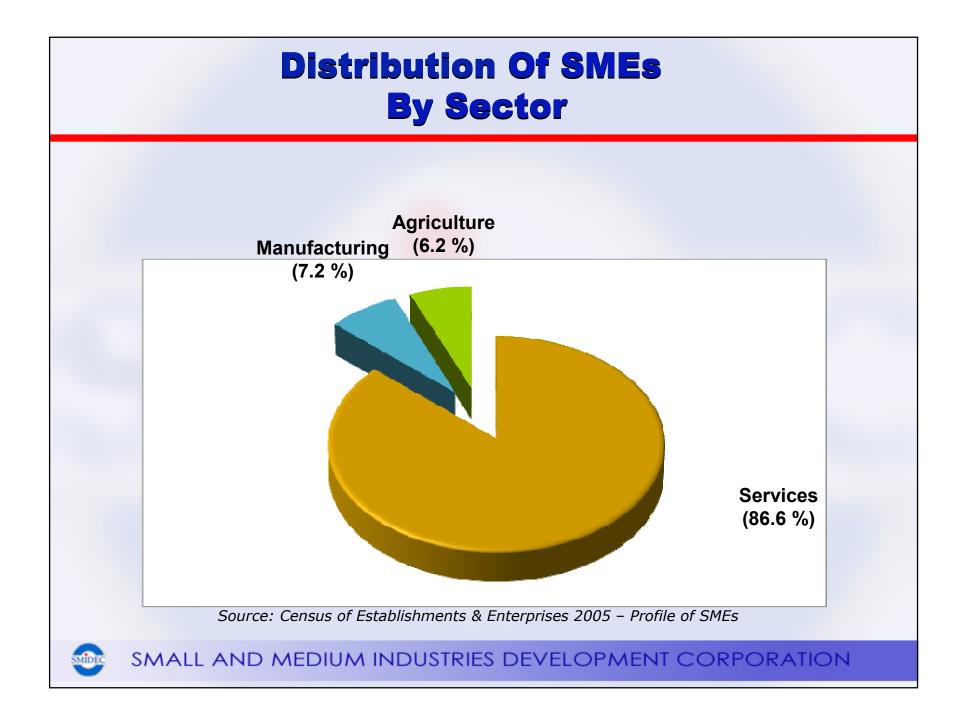


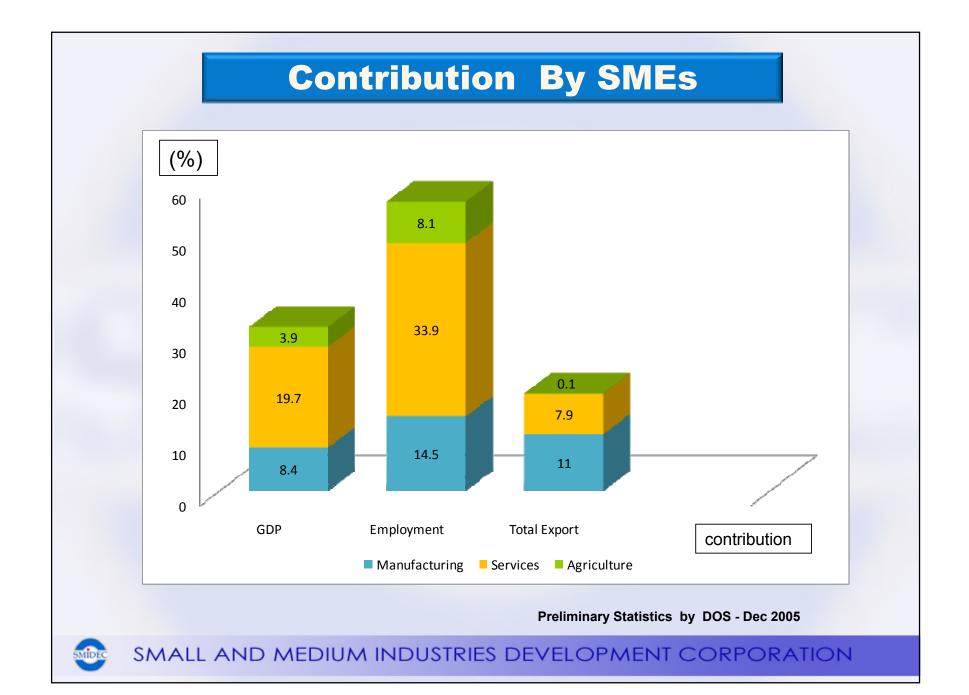
Definition of Micro, Small and Medium Enterprises

CATEGORY	MICRO	SMALL	MEDIUM
Manufacturing,	sales turnover	RM250,000 > sales	RM10 mil. > sales
Manufacturing-	< RM250,000	turnover < RM10 mil.	turnover < RM25 mil.
related services &	<u>OR</u>	<u>OR</u>	<u>OR</u>
Agro-based	full time	5 > full time	51 > full time
Industries	employees < 5	employees < 50	employees < 150
Services, Primary	sales turnover	RM200,000 > sales	RM1 mil. > sales
Agriculture and	< RM200,000	turnover < RM1 mil.	turnover < RM5 mil.
Information &	OR	<u>OR</u>	<u>OR</u>
Communication	full time	5 > full time	20 > full time
Technology (ICT)	employees < 5	employees < 19	employees < 50







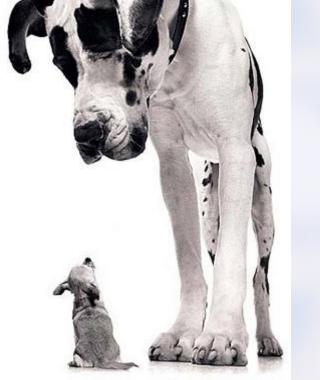


Innovation Ecosystem



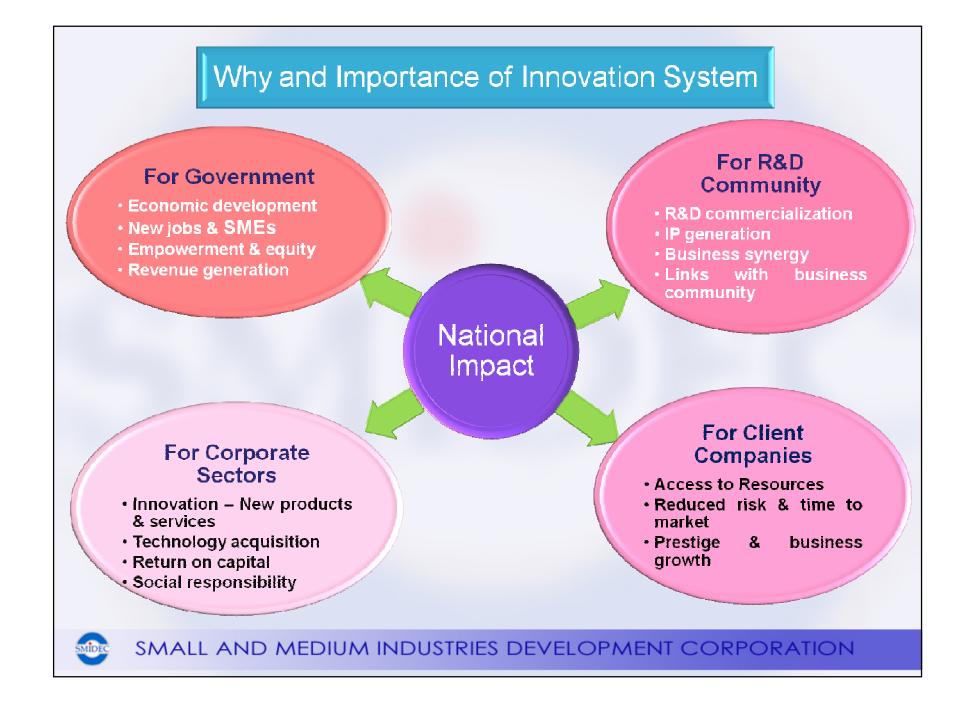
Why is Innovation Important?

You need a competitive edge to play with the big dogs Productivity & Economic Growth Creates Wealth Creates Jobs Creates Markets Higher Standard of Living Meet Significant Social Needs



Source: Sandy Ping - 4-P's Workshop





Value of Innovation?



Powerful Public Image

More Sustainable Growth

Increased Margins

More Effective and Efficient Marketing

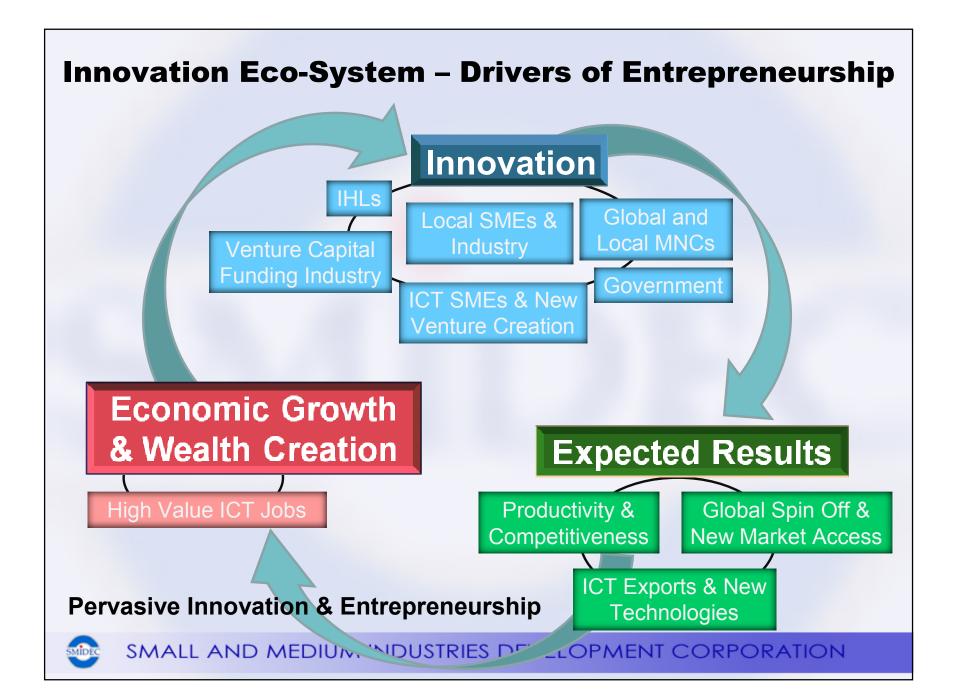
Increased Employee Retention

Improved Efficiencies and Cost

Ability to Redefine the Existing Business & Enter New Markets

Source: Sandy Ping - 4-P's Workshop





Types of Innovation

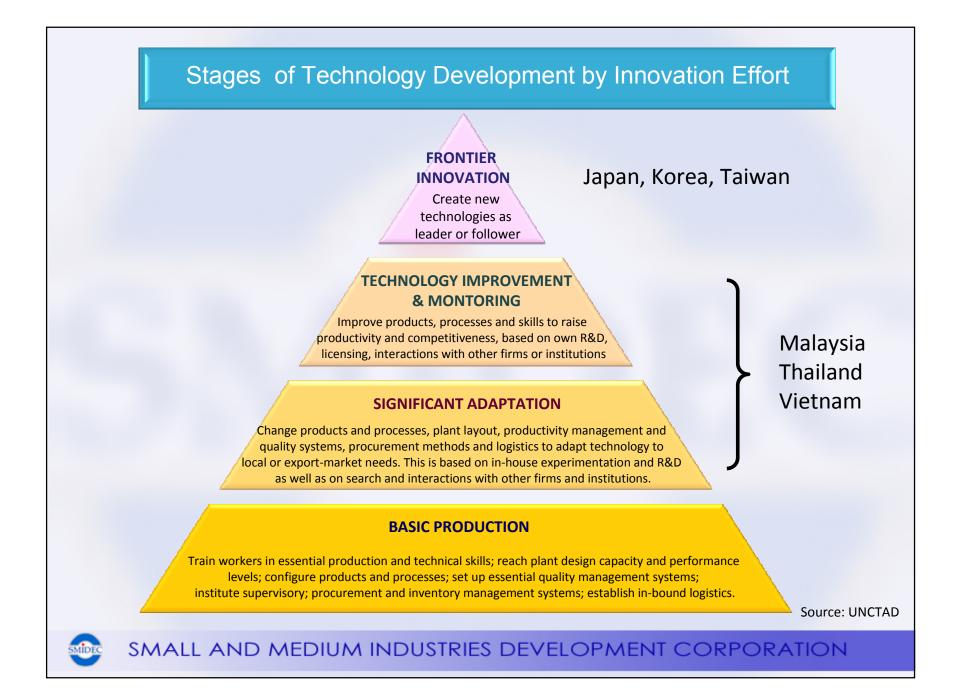
Technology Innovations

- R&D Driven
- Scientific Discoveries & Inventions
- Non-R&D Driven
- Acquisitions, Recombinations, Replications

Non-Technological Innovations

- New Business Models
- Financial Products & Services
- Organization Models
- Operation Strategies
- Human Resources Strategies
- Marketing/Branding Strategies
- Delivery Systems
- Strategic Alliances & Collaboration
- Trade Strategies





Innovation Ranking			
	UNCTAD Innovation Capability Index	UNIDO Competitive Industrial Performance Index	
Bangladesh	106	56	
Cambodia	-	-	
India	83	40	
Indonesia	87	38	
Korea	19	10	
Malaysia	60	15	
Mongolia	69	-	
Nepal	-	69	
Pakistan	100	49	
Philippines	64	25	
Sri Lanka	79	62	
Singapore	26	1	
Thailand	54	23	
Vietnam	82	-	

REGIONAL INNOVATION SYSTEM





Source: [PDF] Developing a Regional Innovation Strategy for Northern Ireland



Key Dimension within a Regional Innovation System

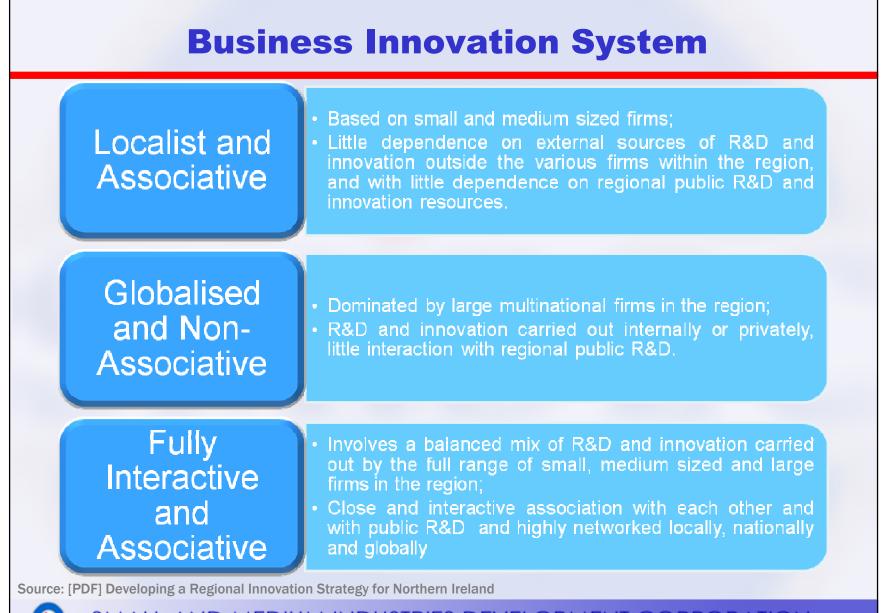
Many diverse factors can influence a regional innovation system and the literature concludes that both public and private sectors have an important role to play in embedding it in the company

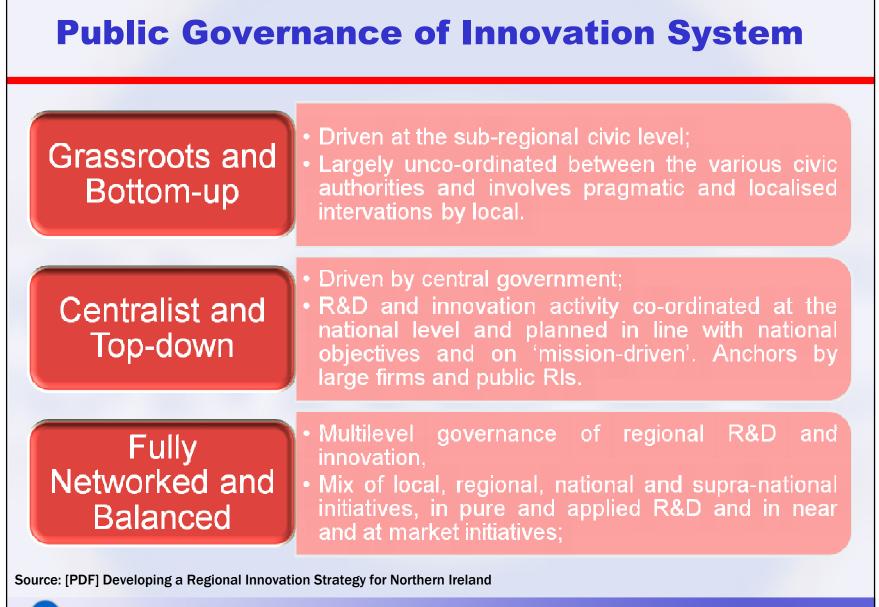
Two key dimensions of regional innovation activity within the regional innovation system are

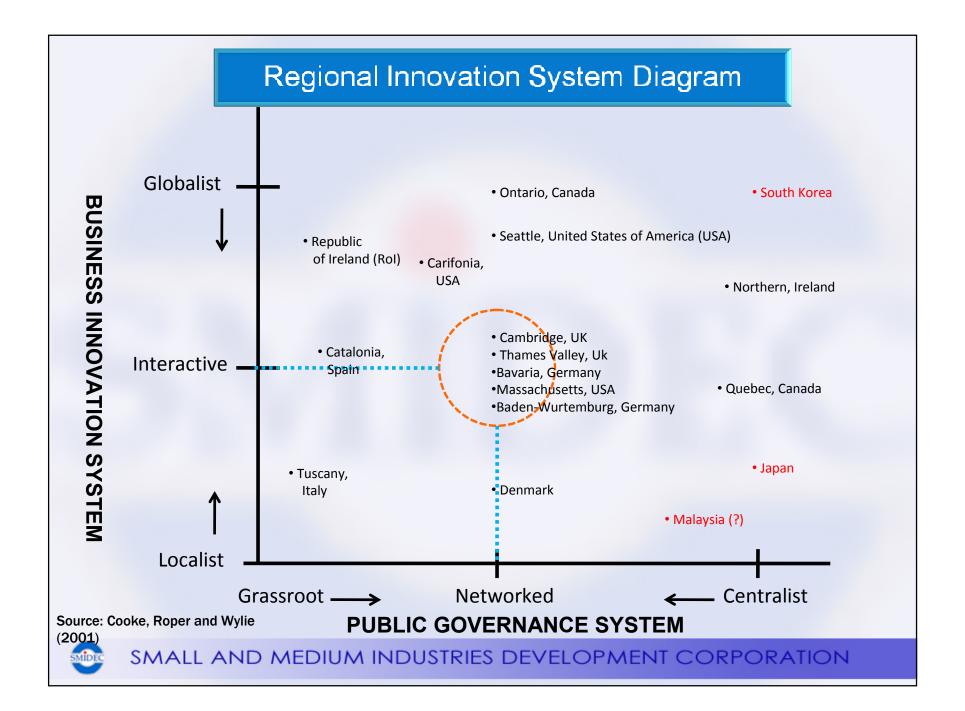
- Business Innovation System (largely in the private sector)
- Public Governance of Innovation System

Source: [PDF] Developing a Regional Innovation Strategy for Northern Ireland

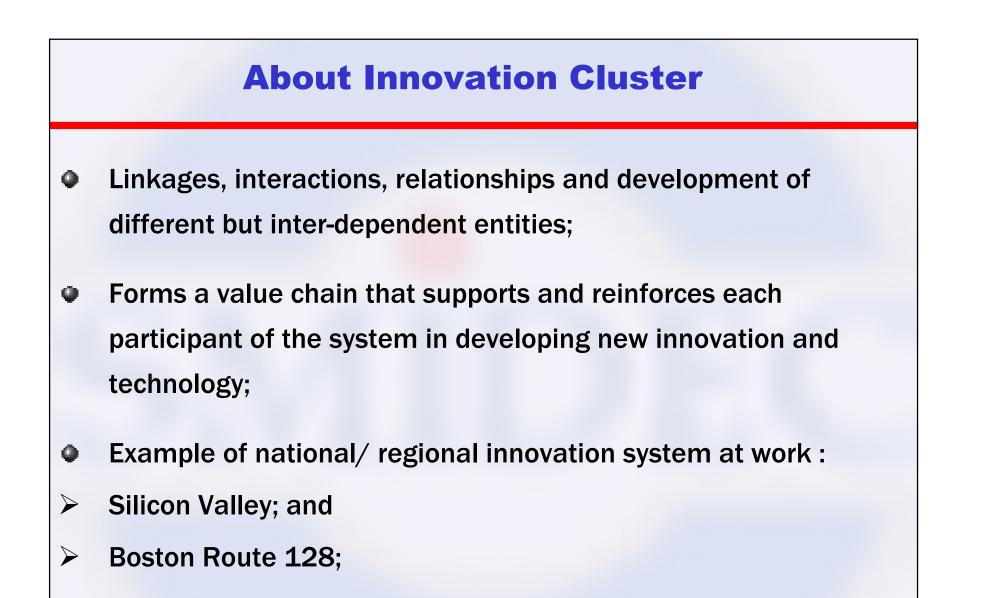












Source: Clusters of Innovation : Regional Foundations of U.S. Competitiveness

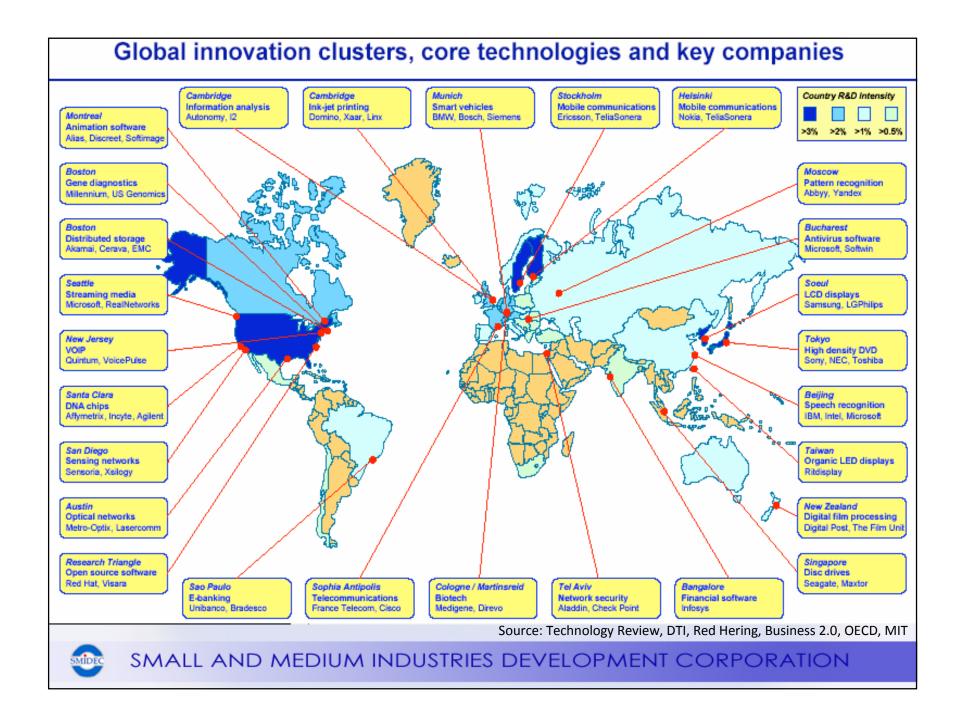


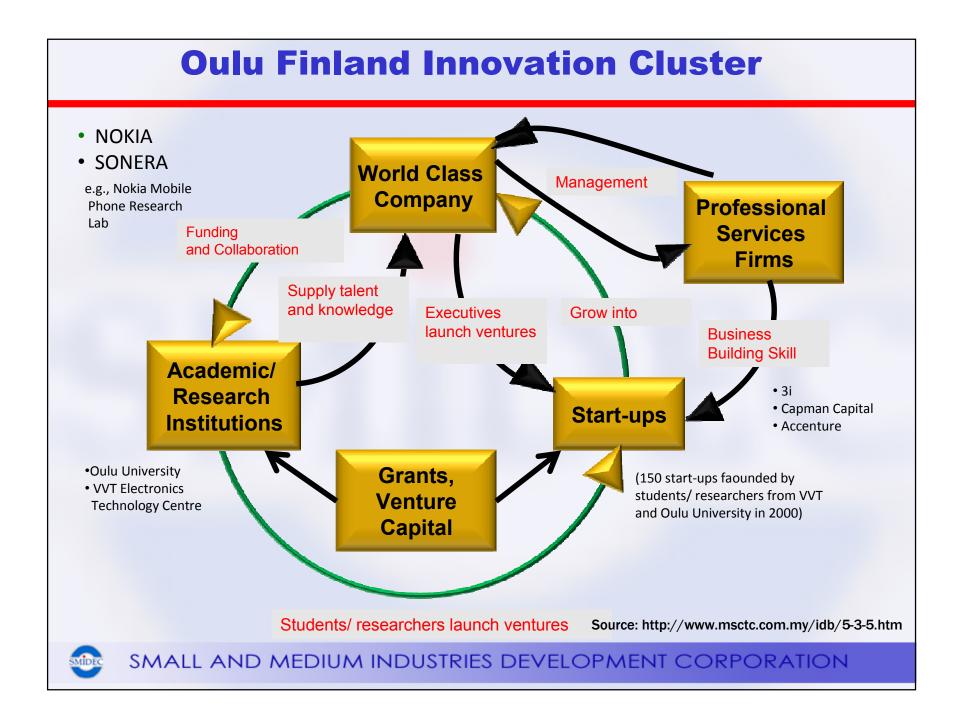
About Innovation Cluster cont.

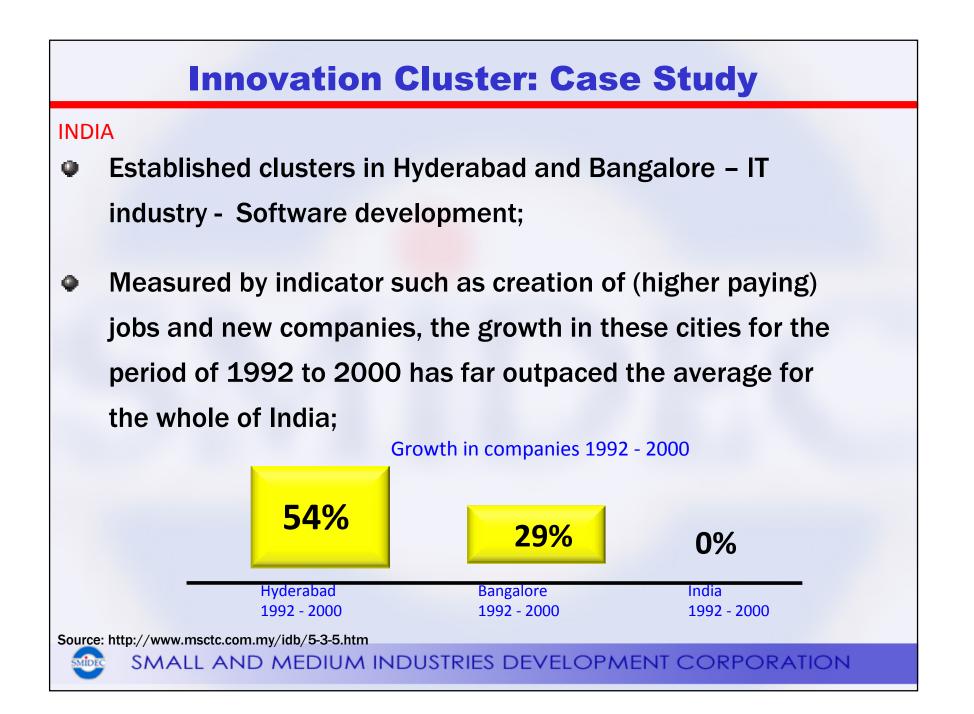
- In healthy regions, competitiveness and innovation concentrated in clusters, or interrelated industries, in which the region specializes;
- The nation's ability to produce high-value products and services that support high wage jobs depends on the creation and strengthening of these regional hubs of competitiveness and innovation;
- To accelerate the development of this technology clusters or innovation system, there must be incentives and programs to promote R&D, build capacities for Small Medium Industries (SMEs), and to provide funding.

Source: Clusters of Innovation : Regional Foundations of U.S. Competitiveness









Leveraging on Technology SMALL AND MEDIUM INDUSTRIES DEVELOPMENT CORPORATION

How to Leverage Technology

Spend money on your technology as an investment

Use the Internet to reach beyond your traditional definition of customer sets

- E-Commerce e-lodgment, payment online
- Social networking blogs, Facebook, LinkedIn, MySpace, Twitter, etc.

Automate business process

• Workflow

Mobile technology empowers small business

- Laptop
- Smart phones sms, email, voicemail

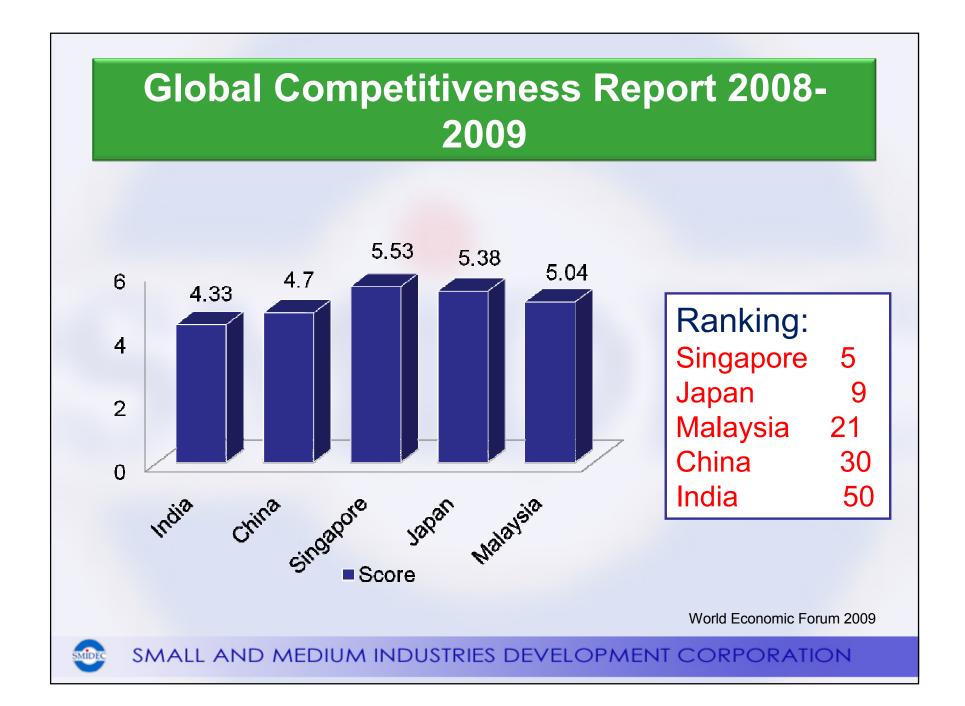
Outsource

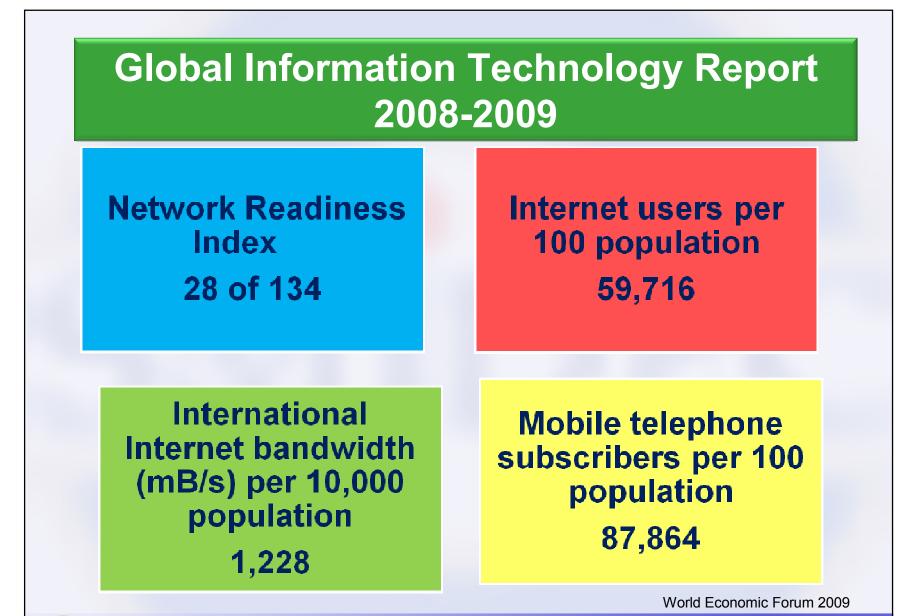
• The latest report by A T Kearney's Global Services said that India, China and Malaysia are among the most favoured outsourcing destinations in the world. Source from http://economictimes.indiatimes.com/Outsourcing-offers-less-economic-value/articleshow/4561565.cms

Don't let the "fear of technology" constrain your business vision

http://smallbiztechnology.com/sixrules/

http://www22.verizon.com/about/community/supplier_diversity/sdsub/sdleverages.html





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How Conducive Malaysian's Market to Internet Based Opportunities

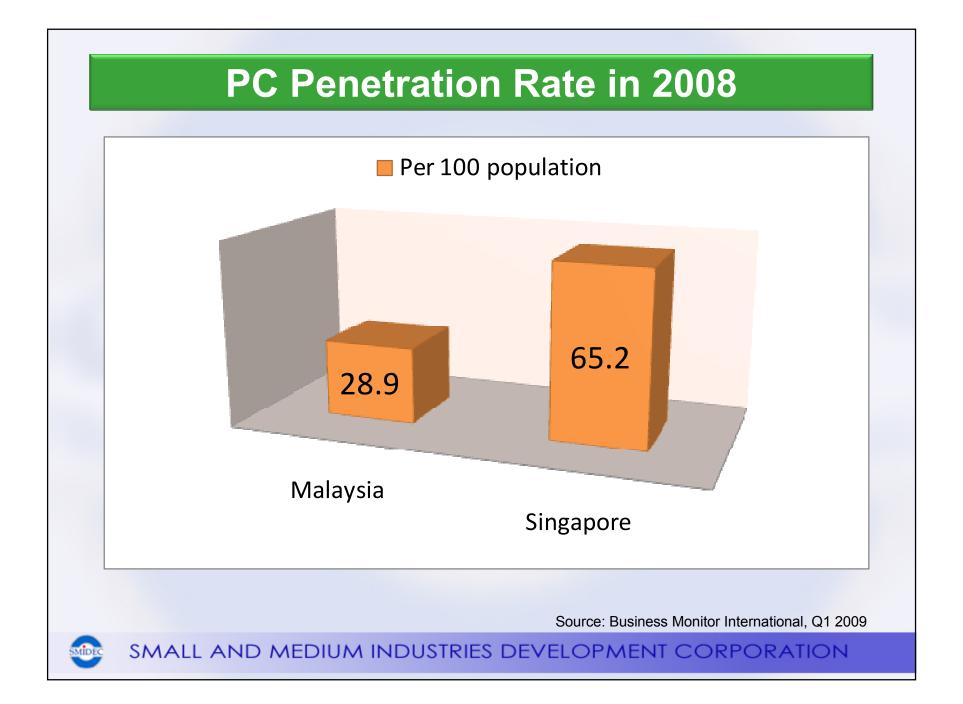
• 36th out of world's 69 largest economies

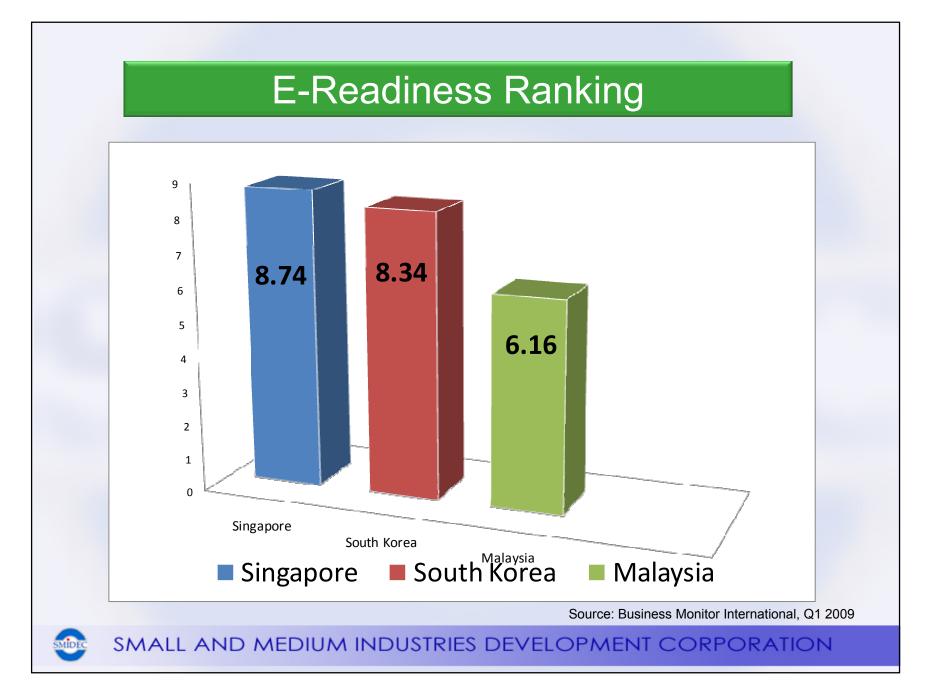
> 34th out of world's 70 largest economies

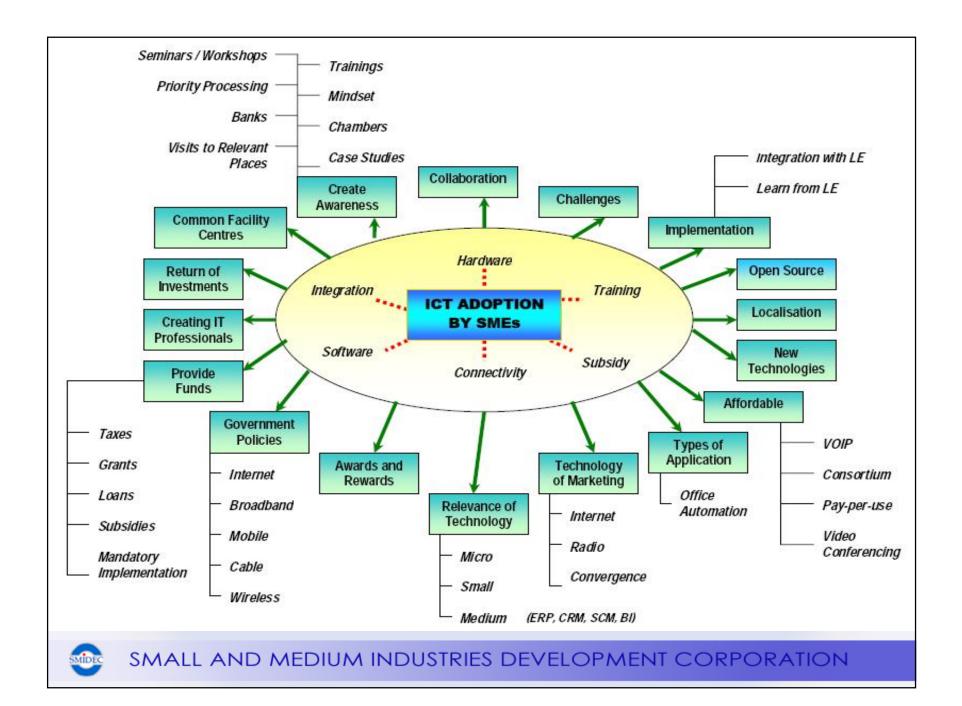
> > Source: Business Monitor International, Q1 2009

SMALL AND MEDIUM INDUSTRIES DEVELOPMENT CORPORATION

2008







Innovation and Technology – Drives of Entrepreneurship



Types of Entrepreneurship

Necessity Entrepreneurship

- Doing business to survive or earn a basic living
- Informal business i.e. night market, person-toperson sales, door-todoor sales
- Less developed economies e.g. Peru, Brazil, Indonesia, India, etc

Opportunity Entrepreneurship

- More trained and educated people looking for opportunistic ventures
- More innovative, scalable and has global market reach i.e. Internet Marketing
- More advanced economies e.g. Europe, US, Japan, UK, etc



Entrepreneurs Are Made Not Born

"The entrepreneurial mystique? It's not magic, it's not mysterious and it has nothing to do with the genes. It is a discipline. And like any discipline, it can be learned." Peter Drucker



Entrepreneurial Traits



- Innovative & opportunistic
- Willingness to take risk
- Initiative
- Self reliance
- Perseverance
- Need to achieve
- Self-confidence

Desirable

- Leadership
- Competitiveness
- Good physical health
- Creative
- High level of energy
- Versatility

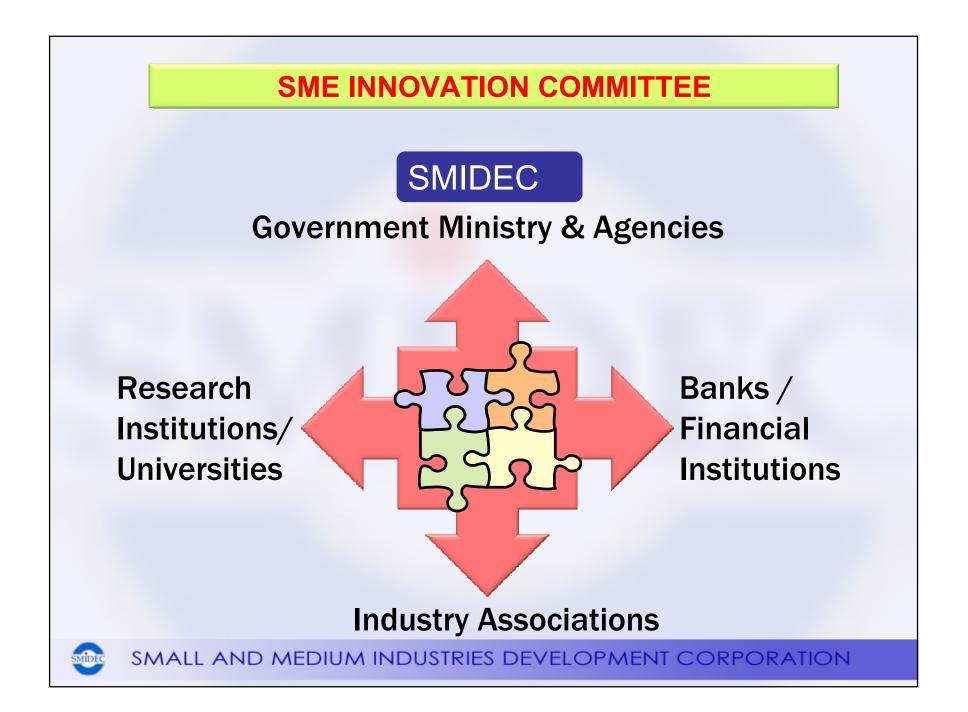
Good to have

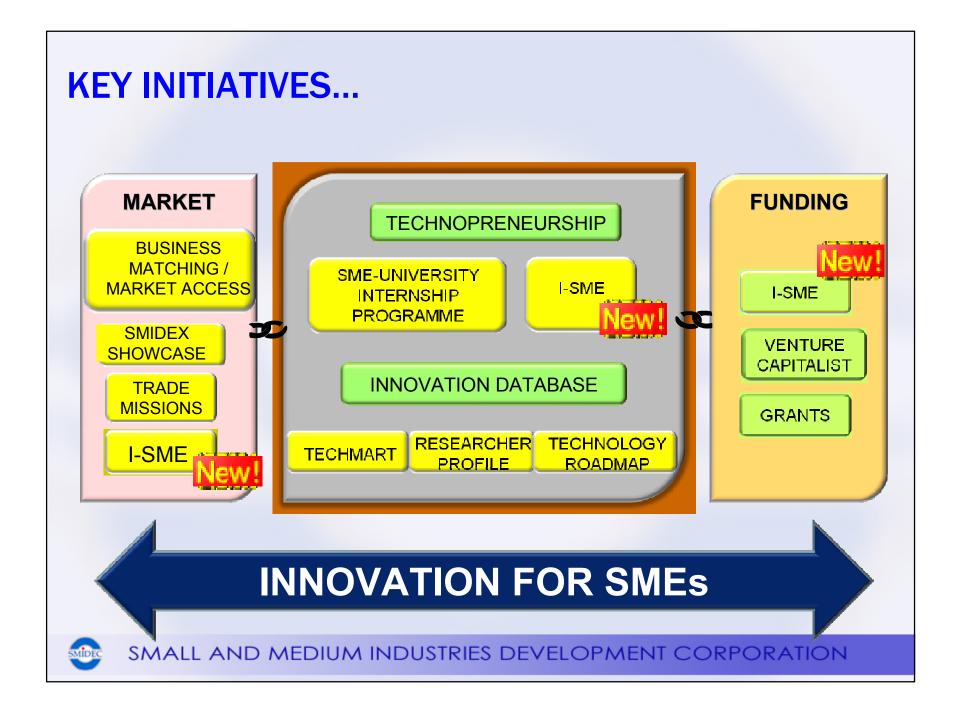
- Ability to get along
- Patience
- Well organized
- Desire for money
- Tolerate
 uncertainty
- Need for power
- Need for affiliation

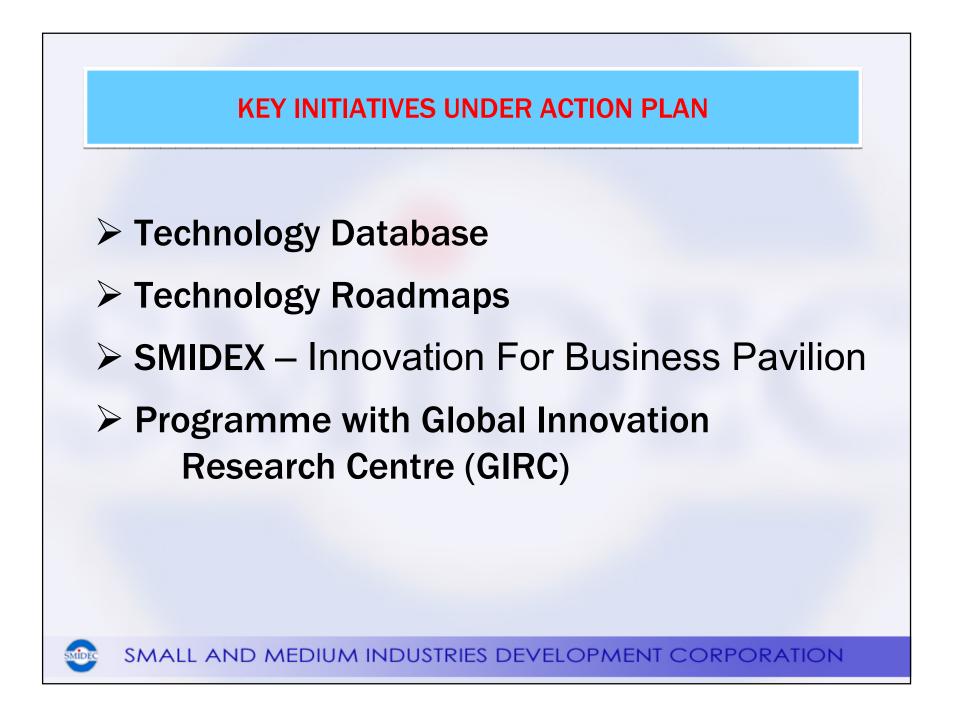


SMIDEC'S INNOVATION & TECHNOLOGY DRIVEN INITIATIVES





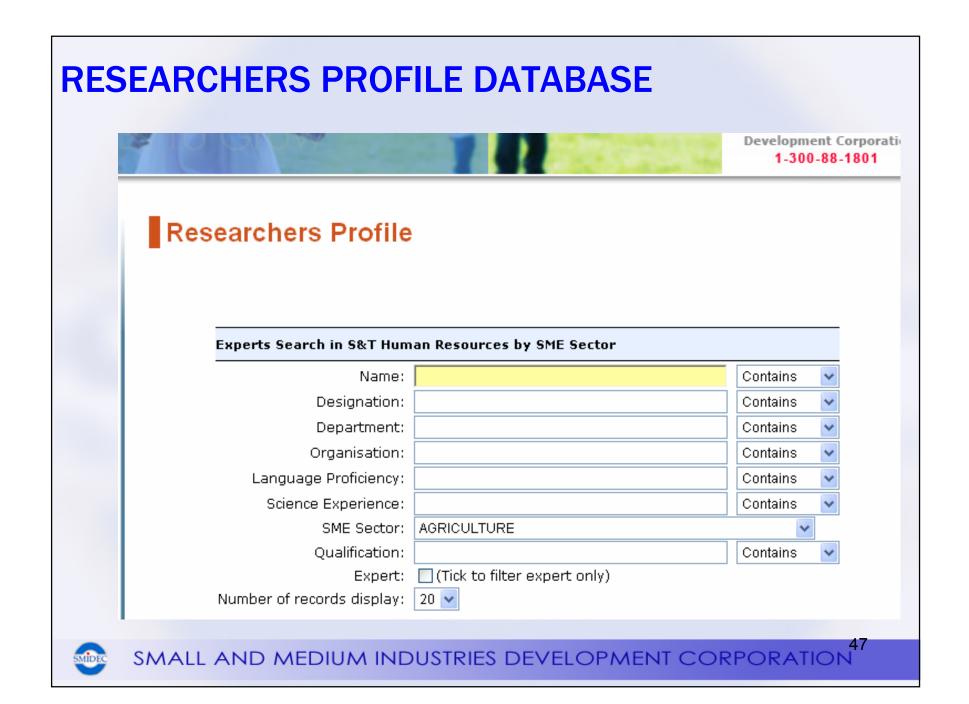




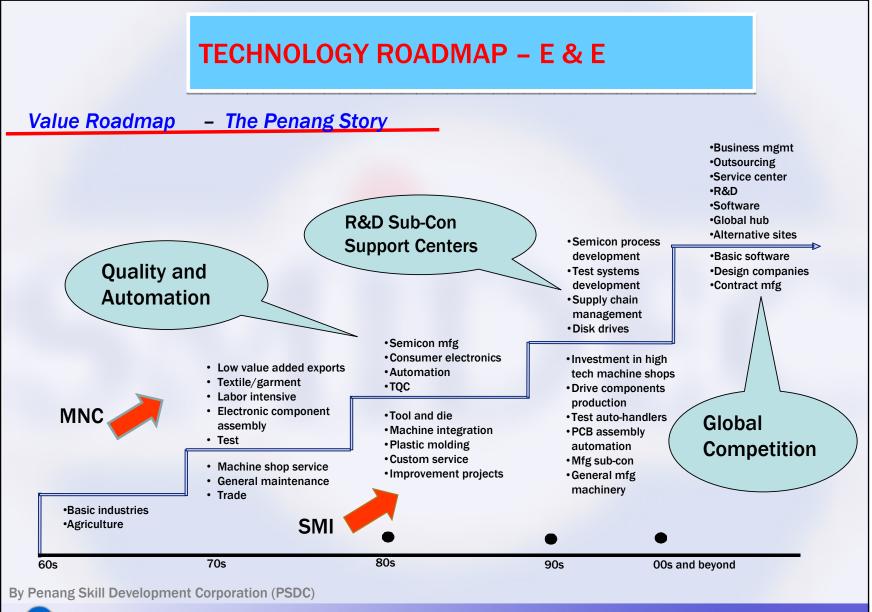
KEY INITIATIVES – TECHNOLOGY DATABASE

- Establishment of Database on Research Findings, namely the Technology Database in the SMIDEC portal in collaboration with MASTIC, MOSTI.
 - 956 technologies are available for commercialisation by SMEs in all sectors; and
 - Establishment of database of expert profiles through SMIDEC's website, collaboration with MASTIC, MOSTI.
 - A total 18,413 researcher's profile is currently available SMALL Ain the database DUSTRIES DEVELOPMENT CORPORATION

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🦉 🦉 SME Information & Advisory Centre	III Information O	Sanal and Median B		
		Development Care 1-304-83-180		
Home	TechMart			
Definition of SHES	•	t to accelerate industrial development and economic prowth of a ce		
SME Dev. Programmes		enhance their competitiveness, they will need to enhance or acquire apacity, capability and productivity.		
List Of Companies		NSTIC has put together an array of technologies suitable for comment To further assist SMEs, the type of available funding for the uptag		
FAQ Useful Links	technology is also listed. Tech Research Institutes and Univer	Mart comprises a listing of locally produced technologies on offer the sities.		
USERT LINKS	The purpose of TechMar	Advanced Search in TECHM	art for SMIDEC	
ABOUT US	promote and dissemin			
	facilitate technology in	Technology Title:		Contains 🗸 🗸
	provide information or technology improvemi	Technology Area:		Contains 🗸 🗸
-	know the selection of the	SME Sector:	All Sector	
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		Development Status:		Contains 🗸 🗸
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TECHNOLOGY ROADMAP – R&D ON ICT





















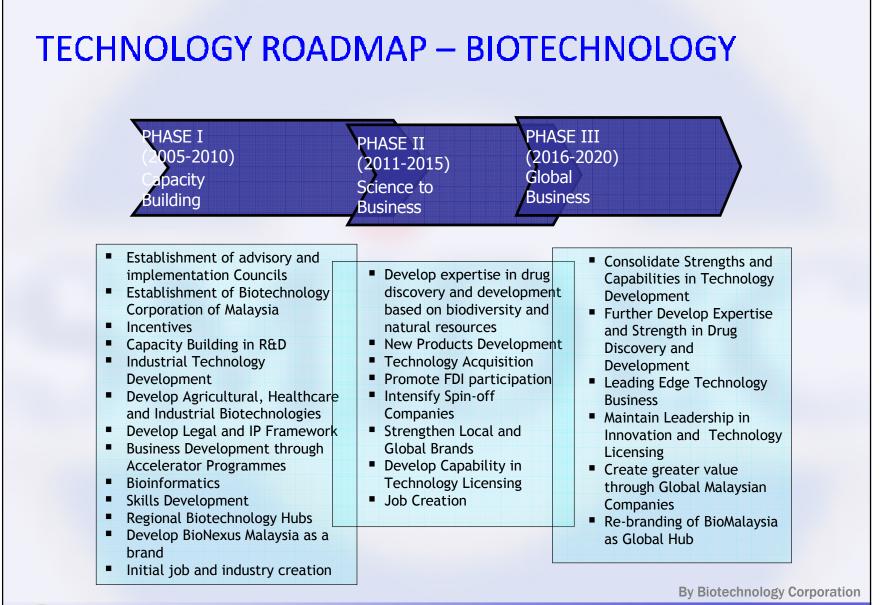




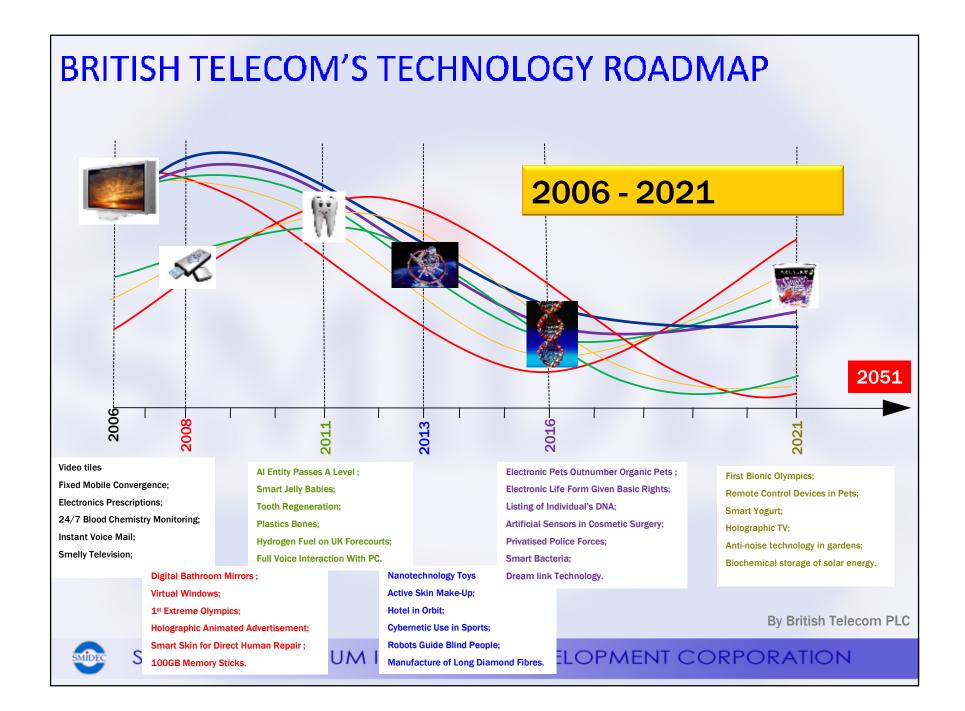
TECHNOLOGY ROADMAP – R&D ON ICT

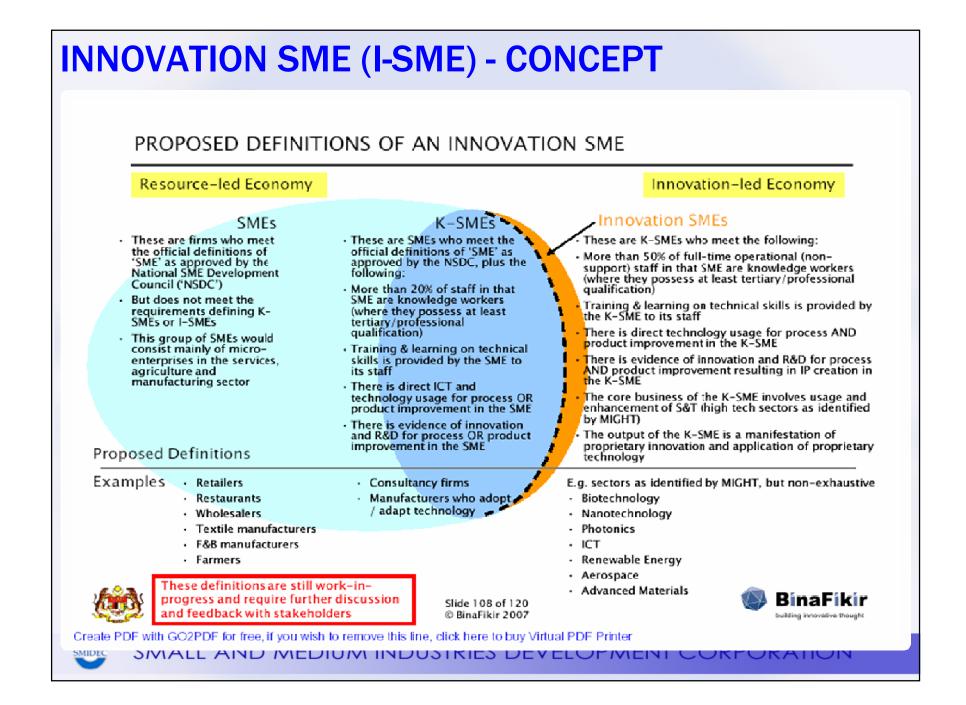
In summary, this Roadmap will serve as a methodology and framework providing overall directions to all ICT stakeholders whilst complementing other national plans

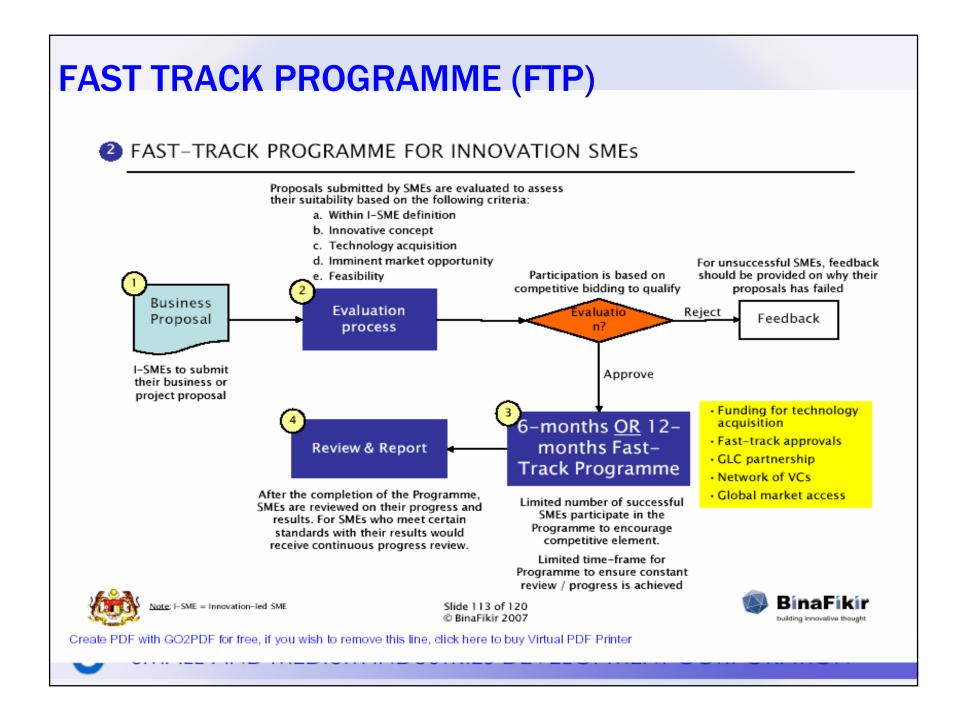
1990	1995	2000	2005	2010		
		Knowledge-based Economy Master Plan				
2 nd OPP		3 rd OPP				
6th MP 7th MP CAD/CAM/CAE E-Conomy VLSI Design E-Public Services Printed Circuit Board E-Community Network - PALMOILIS, SIRIMLINK, E-Community AGROLINK, CSL, Jaringan E-Sovereignty Pendidikan Advanced Manufacturing Advanced Materials Microelectronics Biotechnology ICT Multimedia Technology Energy Aerospace Nanotechnology Photonics Energy		NAP3 MSC Malaysia				
		Technopreneur Development Biotechnology Nanotechnology RFID Wireless Technologies		Content Development ICT Education Hub Digital Multimedia Receivers Communication Devices Embedded Components Foreign Ventures		
		MEMS Photonics 2 nd S&T Policy				
		Mimos		Laser Technology Fuel Cell Technol Robotics	ogy IMP3 &	
				RATION		



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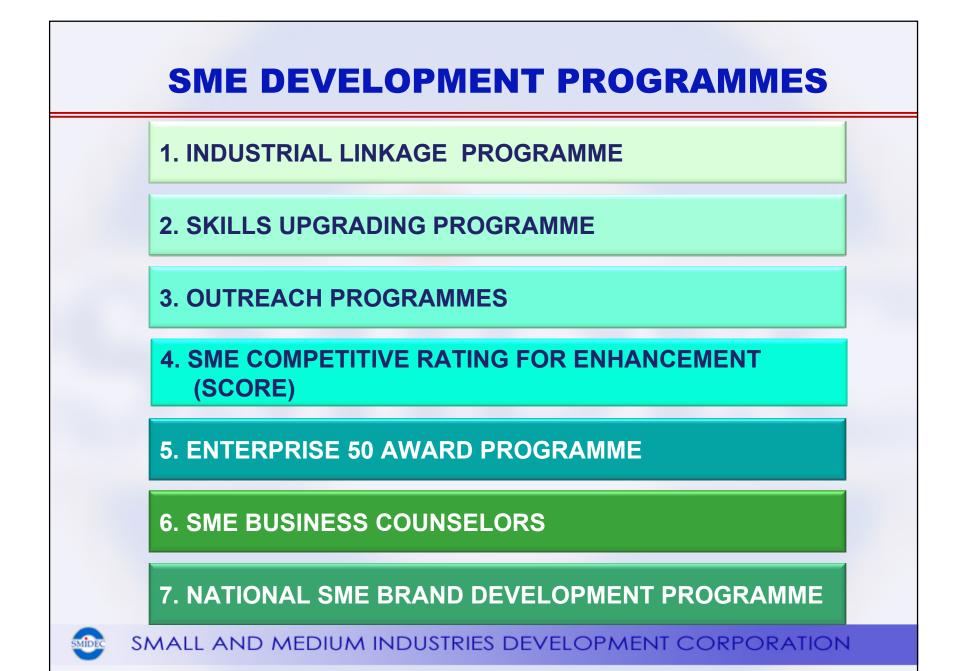


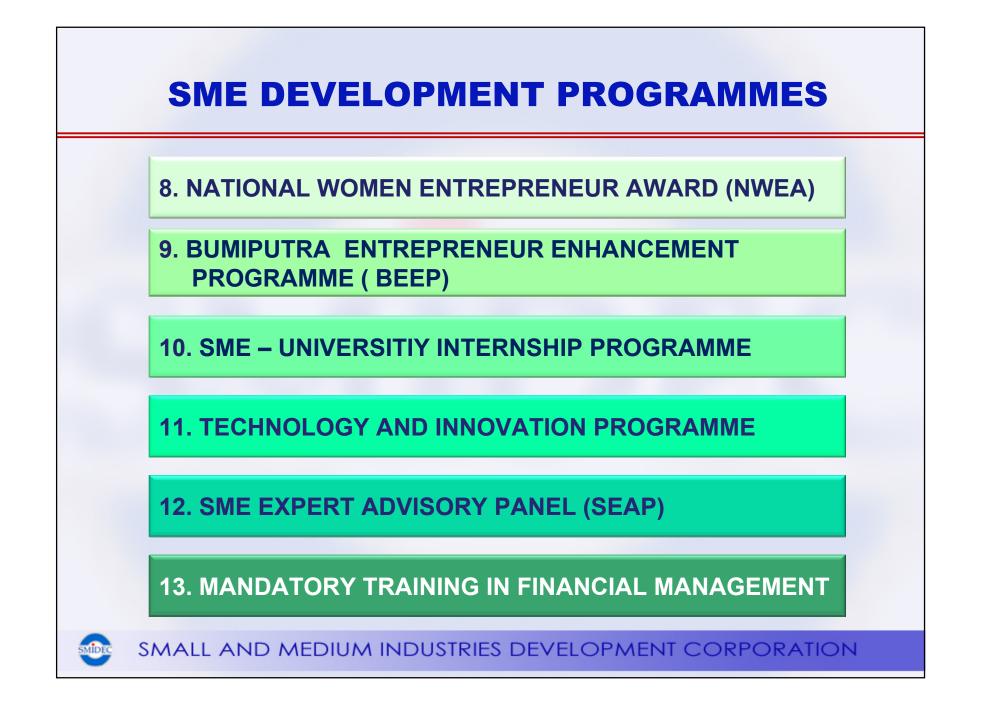


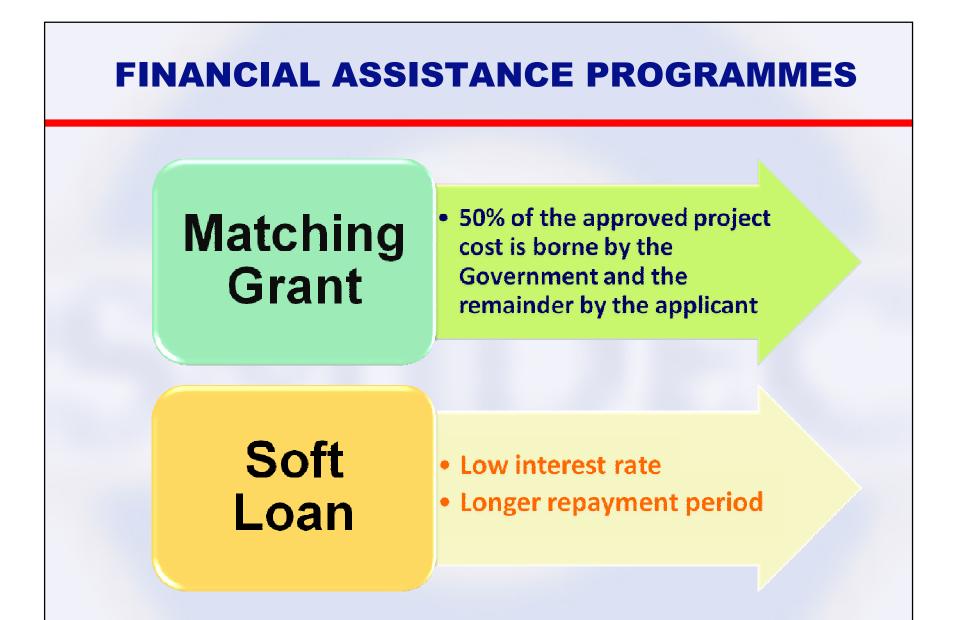


Support Programmes for SMEs







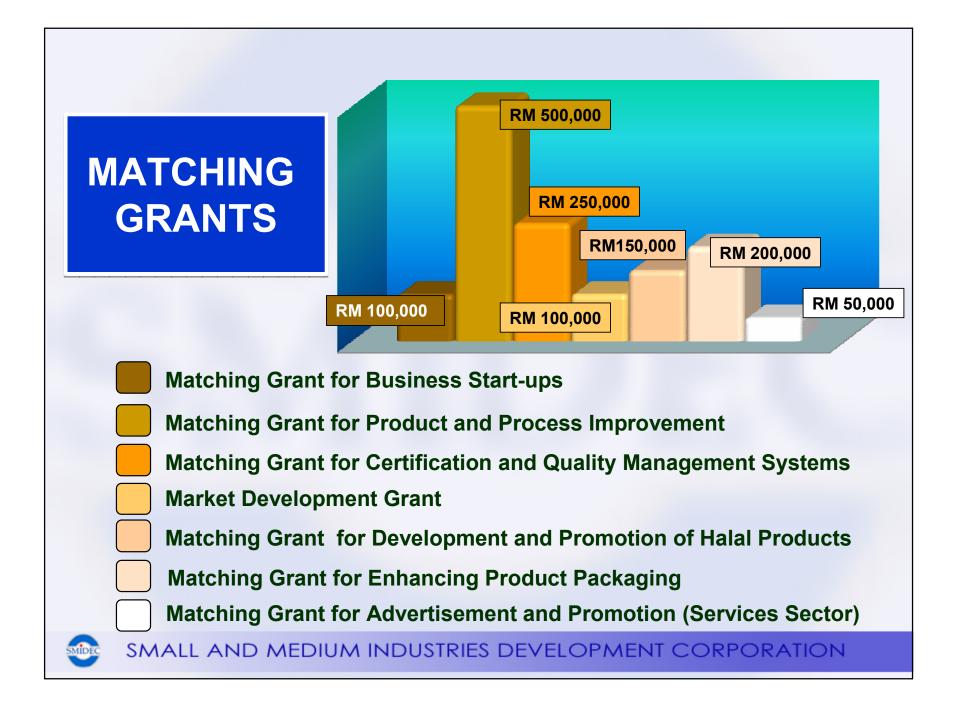


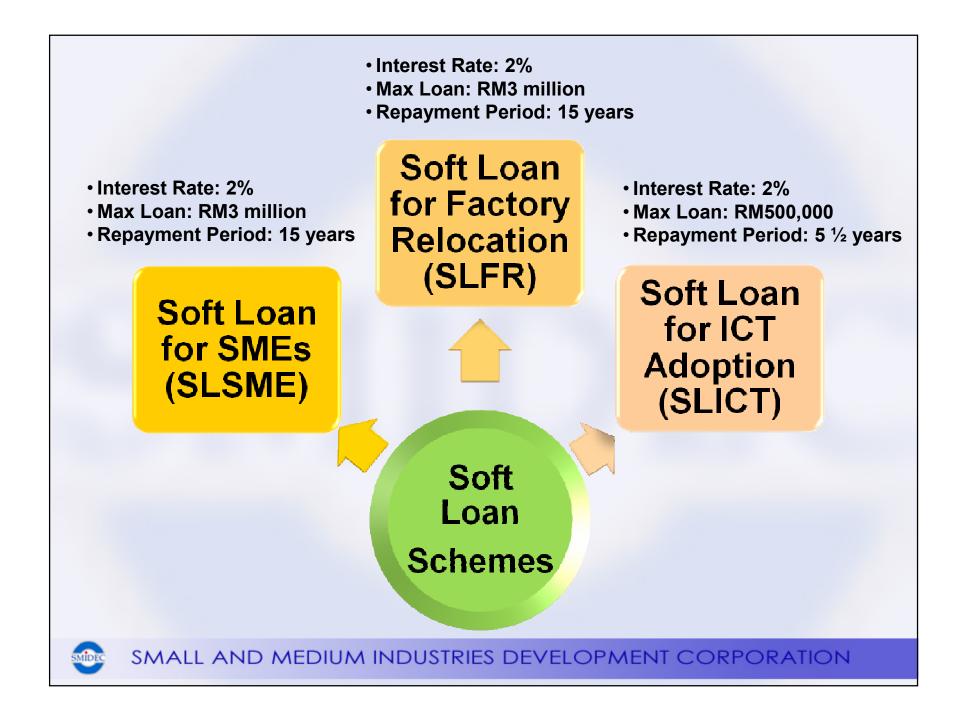
QUALIFYING CRITERIA

- Companies incorporated under the Companies Act 1965 OR enterprises incorporated under the Registration of Business Ordinance 1956 OR Certificate of Practice by Regulatory Body
- Fulfill definition of SMEs
- At least 60% equity held by Malaysian
- Possess valid premise license

SECTOR COVERAGE

- Manufacturing
- Manufacturing Related Services
- Services (Except Insurance and Financial Services)





Food for Thoughts



Food for Thoughts

"The success inherited by the country cannot be continued if creativity and innovation do not become part of the nation's culture. People are the most important factor in a knowledgebased economy, a new era which invariably leads to the subsequent knowledge management paradigm."

Tun Abdullah Ahmad Badawi





