Topic 5 – The Strategic Importance of Patents and Utility Models for Innovations and Development

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Patent Statistics & Economic Development

Top Country	PCT Applications 2010
USA	44,890
Japan	32,180
Germany	17,558
China	12,295
South Korea	9,668
France	7,288
United Kingdom	4,908
Netherland	4,078
Switzerland	3,728
Sweden	3,314

Source : WIPO

Economic Performances of These Countries

- Highly industrialized rich countries, or
- Fast emerging industrialized countries

Country	GDP Per Capital (USD)
USA	46,000 (2010 est.)
Japan	34,000 (")
Germany	34,000 (")
South Korea	25,000 (")
China	7,500 (")

Source: CIA World Factbooks 2011

Economic Performances of These Countries *(cont'd)*

Top Company	PCT Applications 2010
1st Panasonic Corp (Japan)	2,154
2nd ZTE Corp (China)	1,868
3rd Qualcomm Incorp (USA)	1,677
4th Huawei Technologies (China)	1,528
5th Philips Electronics (Netherland)	1,435
6th Robert Bosch (Germany)	1,301
7th LG Electronics (S Korea)	1,298
8th Sharp (Japan)	1,286
9th Tele LM Ericsson (Sweden)	1,149
10th NEC Corp (Japan)	1,106

Source: WIPO 2011

Importance of Innovation

"Japan and the UK recognize the importance of science, technology and innovation to economic competitiveness." - Joint Statement, January 2007

- **HE Shinzo Abe, PM Japan**
- **HE Tony Blair, PM UK**

"Scientific progress, innovation play big role in China modernization"

- **Hu Jintao, PRC President**

Importance of Innovation *(cont'd)*

- *"It is recognized that building technology and innovation capacity is necessary for the promotion of dynamic local SMEs, which are driven by innovation-led secure and sustainable growth in the knowledge-based economy"*

…… UNESCAP

Basics for Economic Development

- *Technology*
- *Innovation*
- *Enterprises*

National Perspective – A National Innovation Agenda

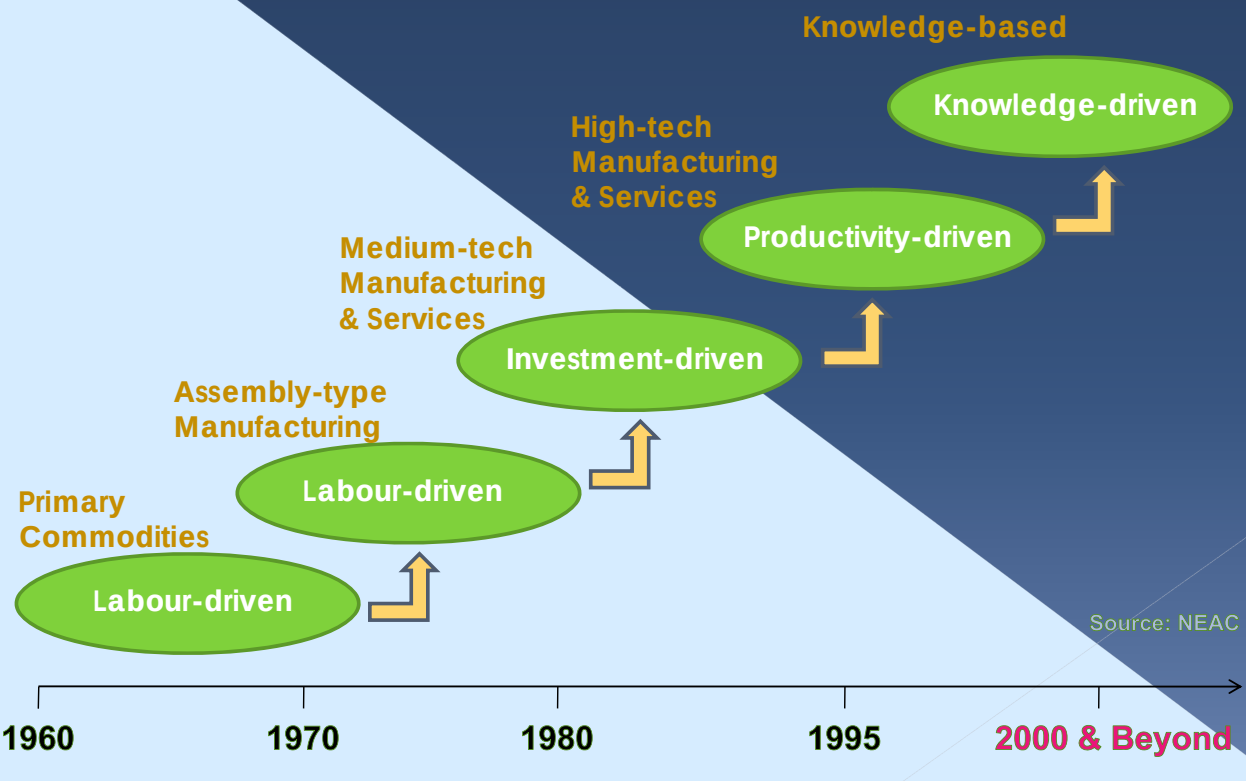
- Requires ***Creativity*** & ***Entrepreneurship***
- Requires ***National Innovation Strategies***

Sharing Malaysia Experience ….

About the country:

- Located in South East Asia
- About 27 million people
- A newly industrialized country
- Top 30 largest economy
- GDP between 5-7% average
- Export Oriented Economy
- More than 95% businesses are SMEs

Target to be a Developed Nation by 2020

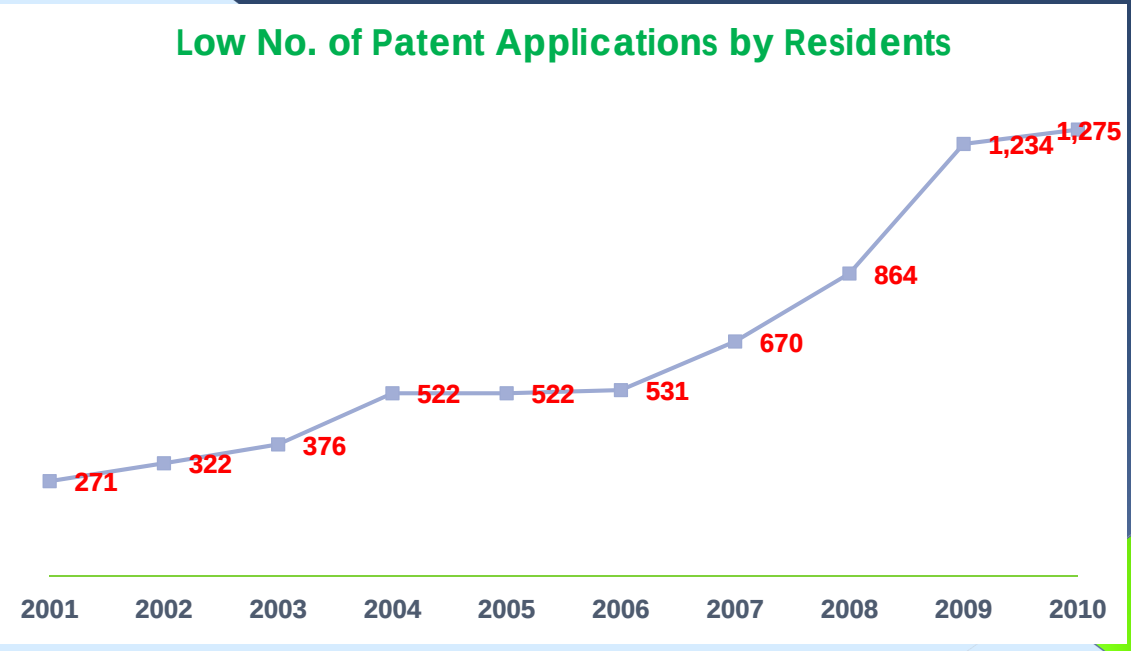


But, Areas of Concern ……

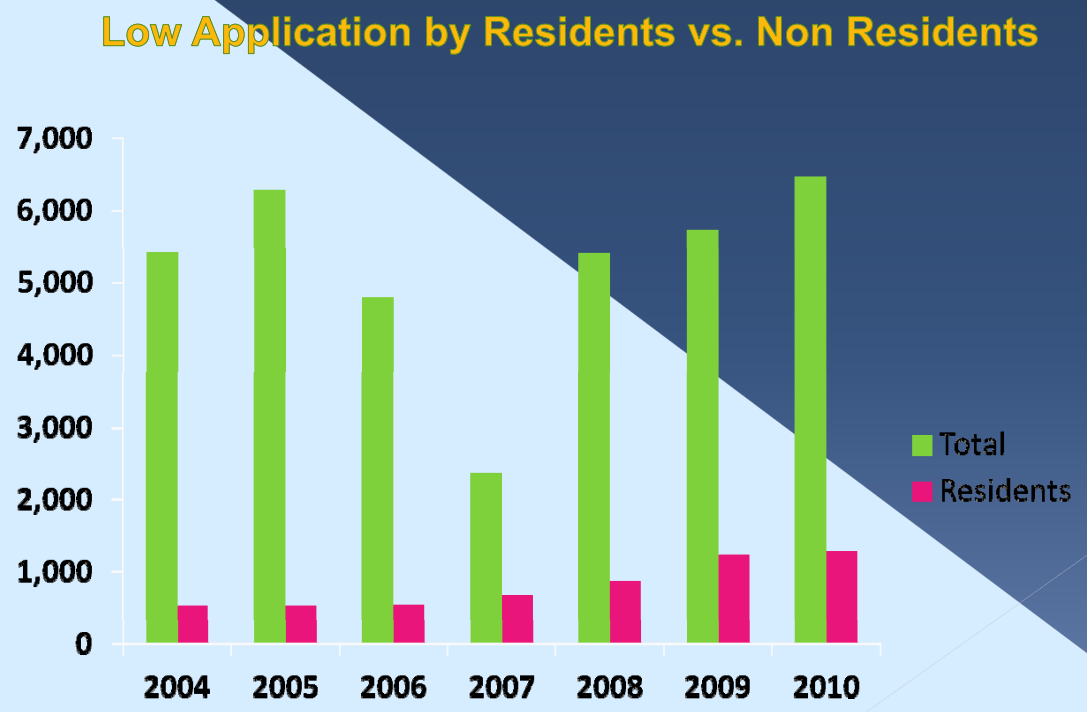
"We have 7 patents granted for every 1,000 R&D personnel, as compared to Korea and Japan who each have over 220 patents"

- Abdullah Badawi, Prime Minister

But, Areas of Concern *(cont'd)*



But, Areas of Concern *(cont'd)*



Low Patent Statistics - What Implications !

- *Lack of knowledge to operate industry*
- *Stagnation in economic growth in years to come*

OUR CHALLENGE : Establish A Scientific Progressive Society

- Innovative and forward-looking society
- Not only a consumer of technology, but also a contributor to S & T civilization

To Launch a National Innovation Agenda

Launched November, 2007

Promotes 6 key strategic thrusts

Establishment of the National Innovation Implementation Task Forces

Introduction of a new Innovation Model

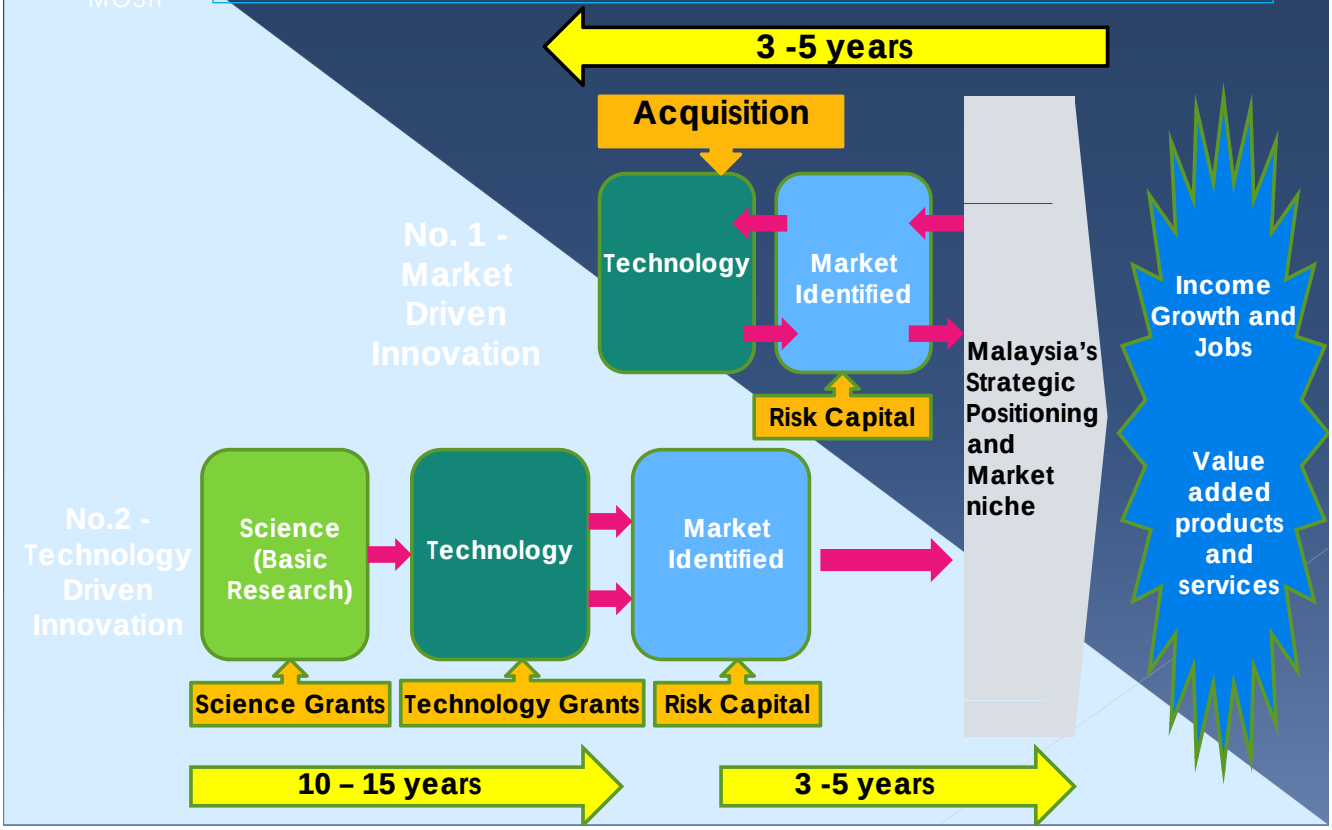
CONFIDENTIAL

MALAYSIA: MARKET AND TECHNOLOGY-DRIVEN INNOVATION FOR WEALTH CREATION AND SOCIETAL WELL BEING

Main document7th December, 2007

MOSTI

Innovation Model for Wealth Creation & Social Well Being



Action Plans

Shift to an innovation-led economic strategy

Pursue aggressively market-driven innovation (MDI), continue to support actively technology-driven innovation (TDI)

Focus government's role on risk mitigation to assist private sector drive for market driven innovation

Expand incentives / grants for entrepreneurs to acquire technology

Conduct programs in Malaysia on entrepreneurship, innovation risk management, & mindset change Action Plans

Adopt new venture capital (VC) model

Implementation by 2010

2010 - First Phase

Major recommendations:

- Incentives & Services to support MDI and TDI
- Transition to the new VC model
- Programs on entrepreneurship, innovation management, mindset change etc.

2015 - Expand

All recommendations fully implemented

Vision 2020 -

New Innovation Model fully embedded in the national economy

The Institutional Set-up

National Innovation Council

National Innovation Implementation Task Force

6 Sub-Committees

Direction Setting

Coordination & Monitoring

Execution & Deliverables

Industry-led but in Partnership

Strategic Thrusts on S&T

1. Strengthening research and technological capacity and capability

2. Promoting commercialization of research outputs

3. Developing human resource capacity and capability

4. Promoting a culture of science, innovation and techno-entrepreneurship

Strategic Thrusts on S&T *(cont'd)*

5. Strengthening institutional framework and management for science and technology, and monitoring of S&T policy implementation

6. Ensure widespread diffusion and application of technology, leading to enhanced market driven R&D to adapt and improve technologies

7. Build competence for specialization in key emerging technologies

MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION MALAYSIA
CERTIFIED MS ISO 9001 : 2000 MANAGEMENT OF S&T DEVELOPMENT FUND

Related IP Programs

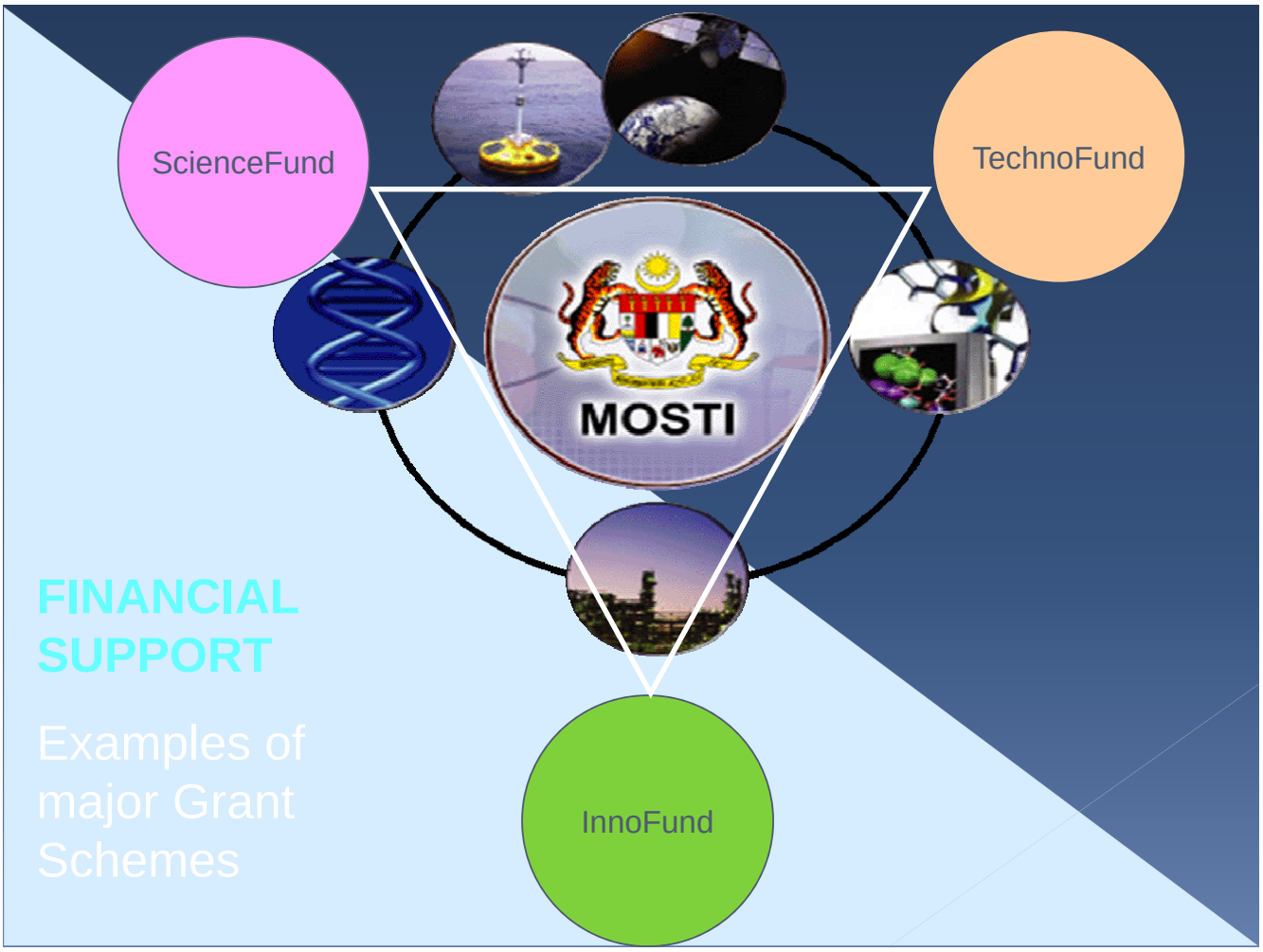
Encourage inventions and IPRs -

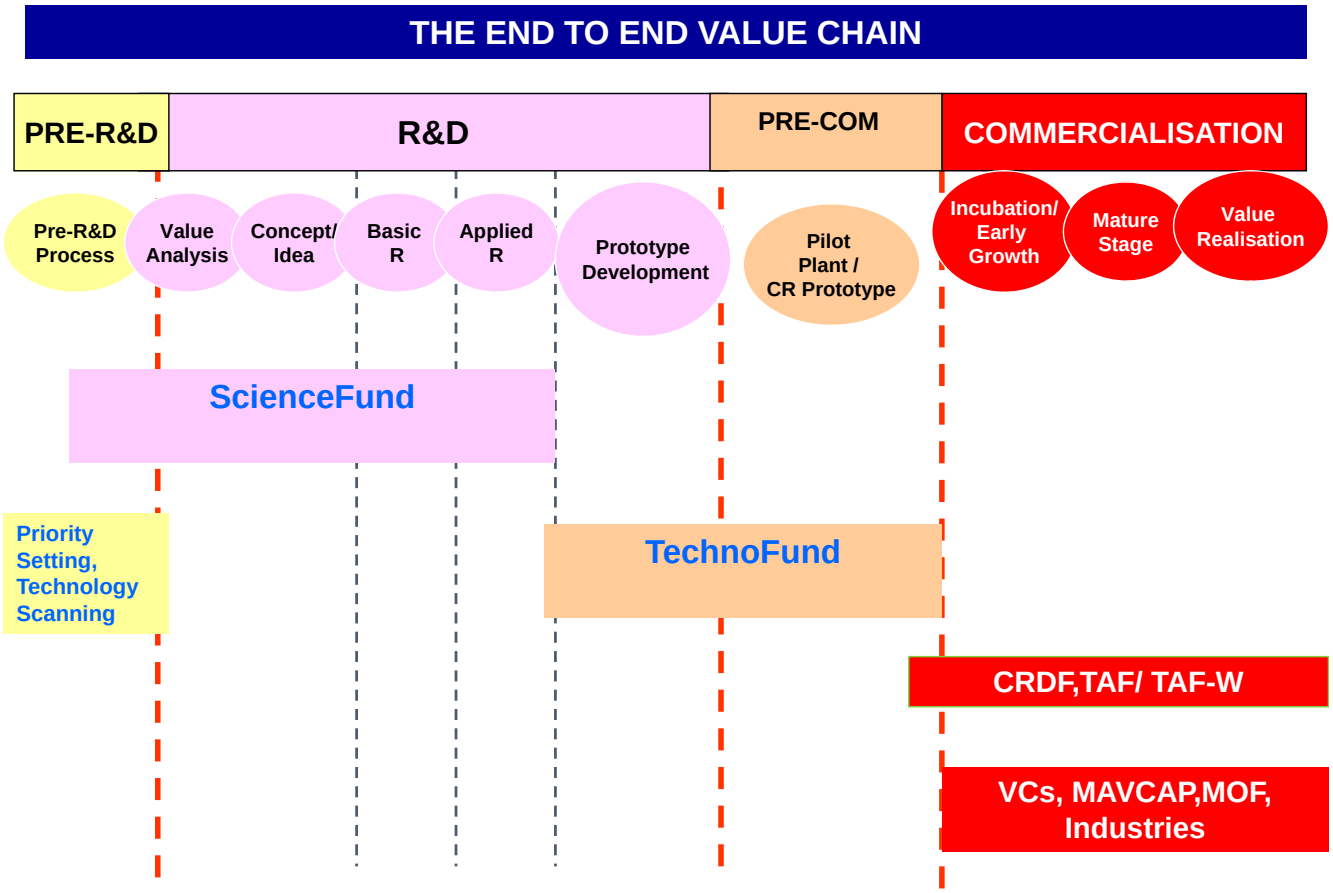
- Stronger link between Patent & R&D agencies
- IP Policies to encourage University-Industry cooperation
- Technology Licensing by Universities / R&D agencies
- Commercialization Policy to reward inventors

Related IP Programs *(cont'd)*

Encourage inventions and IPRs -

- Tax deductions for Patent & Trademark Registration
- Establishment of more Venture Capital firms
- More Financial Grant Schemes to support and commercialize inventions; Examples ...


ScienceFund
TechnoFund
MOSTI
InnoFund
FINANCIAL SUPPORT
Examples of major Grant Schemes

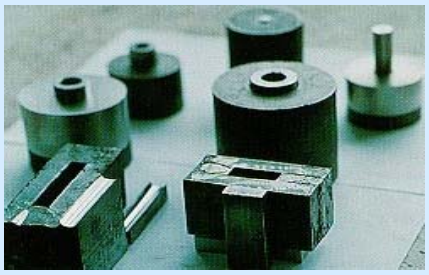

THE END TO END VALUE CHAIN
PRE-R&D
R&D
PRE-COM
COMMERCIALISATION
Pre-R&D Process
Value Analysis
Concept/ Idea
Basic R
Applied R
Prototype Development
Pilot Plant / CR Prototype
Incubation/ Early Growth
Mature Stage
Value Realisation
ScienceFund
Priority Setting, Technology Scanning
TechnoFund
CRDF,TAF/ TAF-W
VCs, MAVCAP,MOF, Industries

SCIENCE FUND

- To generate new knowledge through basic and applied sciences;
- To develop laboratory proof of concept; and
- To enhance research capability and increase number of researchers.

TECHNOFUND

- Stimulate the growth and successful innovation of medium and large enterprises by increasing the level of R&D to market or commercialisation.
- Increase capability and capacity of IHL and RI to commercialise the R&D findings through spin-offs / licensing.



ScienceFund TechnoFund MOSTI InnoFund

INNOFUND

Individual, Micro and Small Enterprises

Development of new or improvement of existing products, process or services with elements of innovation

Community Groups

Conversion of knowledge / idea into products / process / services that improve the quality of life of communities

Vision 2020

"Whether we will be there - A Developed Nation ? "

Thank you

Ref: MIGHT/MOSTI

[End of Presentation]