



MALAYSIAN INVESTMENT DEVELOPMENT AUTHORITY

# Government Facilitation Related to Industry 4.0 in Malaysia

## MIDA – IME INDUSTRY 4.0 SHOWCASE

*Jeyasigan Nair*  
*Advanced Technology and R&D Division*



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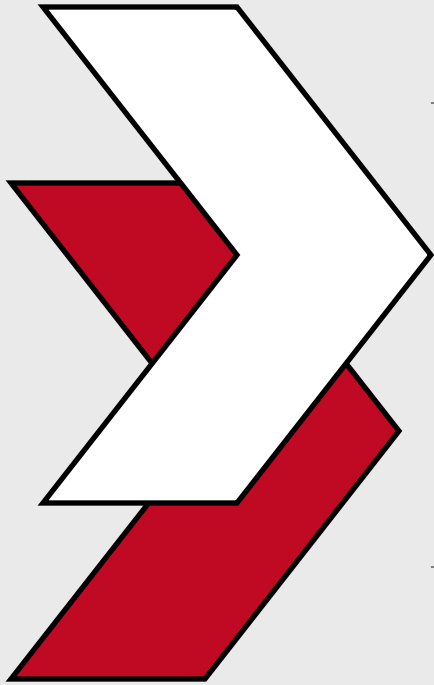
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# Introduction of MIDA

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# Who Are We?



MALAYSIAN INVESTMENT DEVELOPMENT AUTHORITY

The principal Malaysian Government agency responsible for the promotion of investments and coordination of industrial development and selected services sectors in the country. Established in 1967 under Act of Parliament, 1965.

**1st** point of contact for investors who intend to set up projects in the manufacturing and services sectors in Malaysia

- Foreign Direct Investment
- Domestic Investment
- Manufacturing & Selected Services

## PROMOTION

## EVALUATION

- Manufacturing Licenses
- Tax Incentives
- Expatriate Posts
- Duty Exemption
- Principal Hub & selected services

## MONITORING

- Assist companies in the implementation & operation of their projects
- Facilitate exchange & coordination among institutions engaged in or connected with industrial development
- Advisory Services

## PLANNING

- Planning for industrial development
- Recommend policies & strategies on industrial promotion and development
- Formulation of strategies, programmes and initiatives for international economic cooperation



## 23 Overseas Centres around the world



- Los Angeles
- Houston
- New York
- Boston
- San Jose
- Chicago
- London
- Stockholm
- Munich
- Frankfurt
- Milan
- Paris
- Dubai
- Tokyo
- Osaka
- Beijing
- Guangzhou
- Shanghai
- Seoul
- Mumbai
- Singapore
- Taiwan
- Sydney



### KL Sentral

- 28 minutes (KLIA – KL Sentral) via KLIA Express Train
- Malaysia's largest transit hub, is Kuala Lumpur's integrated rail transportation centre.

## 12 State offices



### Headquarter KL Sentral, Kuala Lumpur

#### Address:

MIDA Sentral  
No. 5 Jalan Stesen Sentral 5  
KL Sentral  
50470 Kuala Lumpur  
Tel: 03 – 2267 3633  
Fax: 03 – 2274 7970  
[www.mida.gov.my](http://www.mida.gov.my)



# MITI & Agencies



## Based in MIDA



Immigration  
Department



Royal Malaysian  
Customs



TENAGA NASIONAL



Labour  
Department



Telekom Malaysia  
Berhad



MIDA as a  
One Stop  
Centre

## Based outside MIDA



Department of Occupational  
Safety & Health

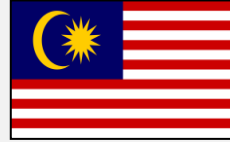




# Partners In Investment Promotion

## Northern Corridor Investment Authority (NCIA)

- Tourism
- Manufacturing & Design
- Modern Agriculture
- Logistics
- Education & Health



- Agro-based Industry
- Tourism
- Logistics
- Manufacturing

## Sabah Economic Development Investment Authority (SEDIA)



## East Coast Economic Region Development Council (ECERDC)



- Tourism
- Oil & Gas
- Manufacturing
- Agriculture
- Education

## Regional Corridor Development Authority (RECODA)



- Resource Based Industry - Aluminum, Glass, Steel, Oil-based Industry, Palm Oil,
- Fishing & Aquaculture, Livestock, Timber-based, & Marine
- Energy
- Tourism

- Financial Services
- Petrochemical and Maritime
- Healthcare
- Tourism and Logistic Industry
- Manufacturing & Services



## Iskandar Region Development Authority (IRDA)

Now, Malaysia's investment environment consists of multiple national, regional and state investment promotion agencies



Previously known  
as Biotechnology  
Corporation



Pahang State Development  
Corporation



Negeri Sembilan  
Investment Centre



InvestPenang



Sarawak Economic  
Development Corp

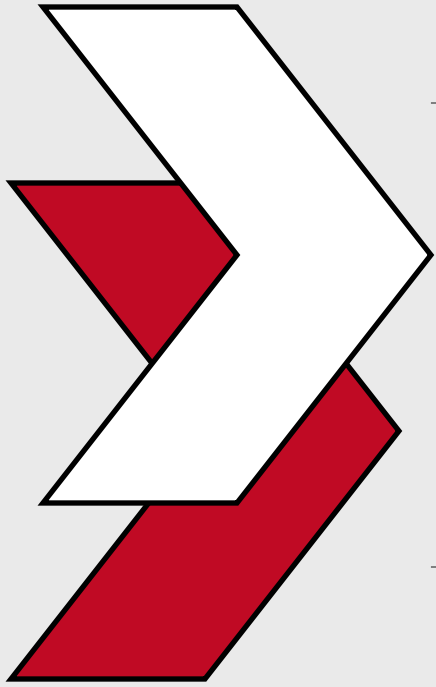


Invest Kedah



Invest Selangor





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# Malaysia's Economic Development Journey

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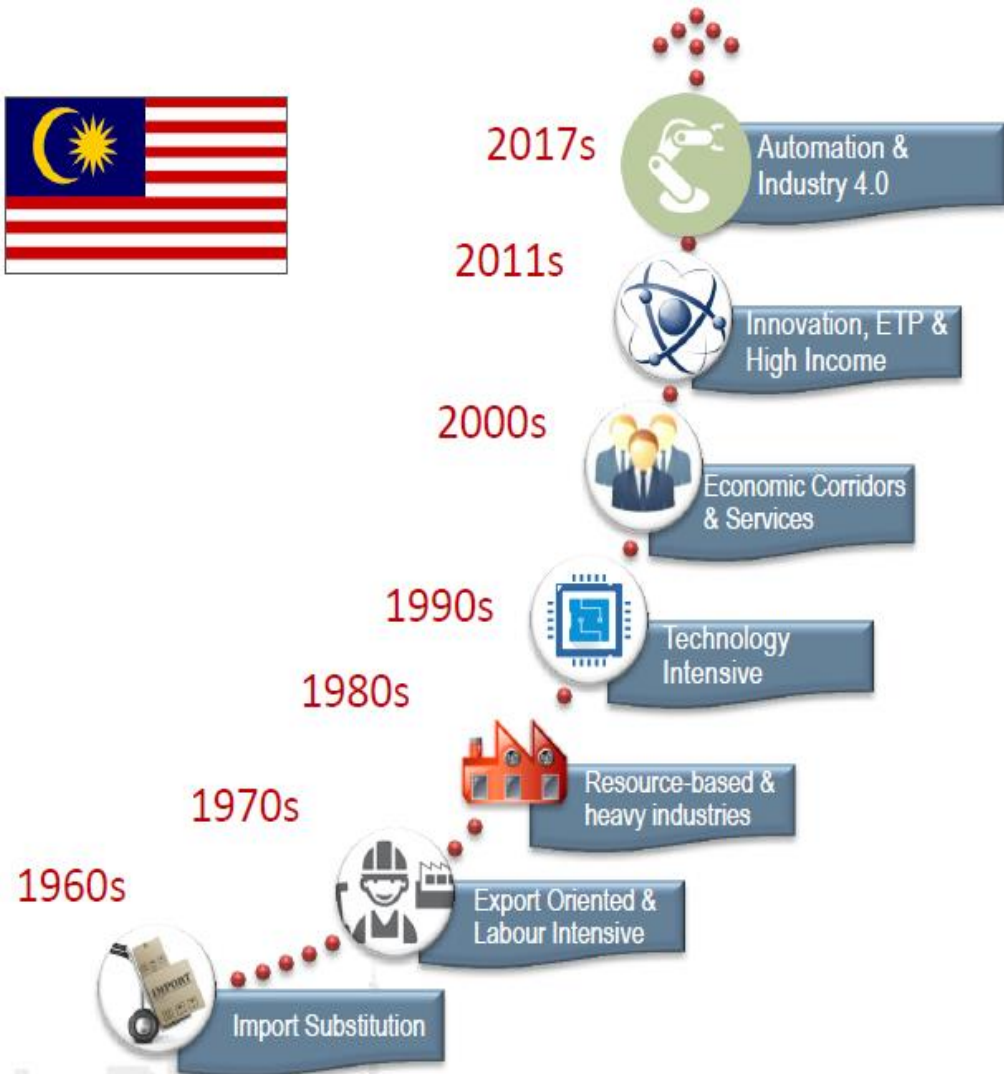
# Malaysia's Economic Development

SECTOR	GDP CONTRIBUTION (%)	
	1970	2017 (p)
Agriculture	33.6	8.2
Mining	7.2	8.4
Construction	3.8	4.6
Manufacturing	12.8	23.0
Services	42.6	54.4



*Malaysia has successfully transformed from a predominantly agriculture-based economy in the 1970s, to a more diversified economic structure.*

(p) preliminary



# Prominent Foreign Companies in Malaysia

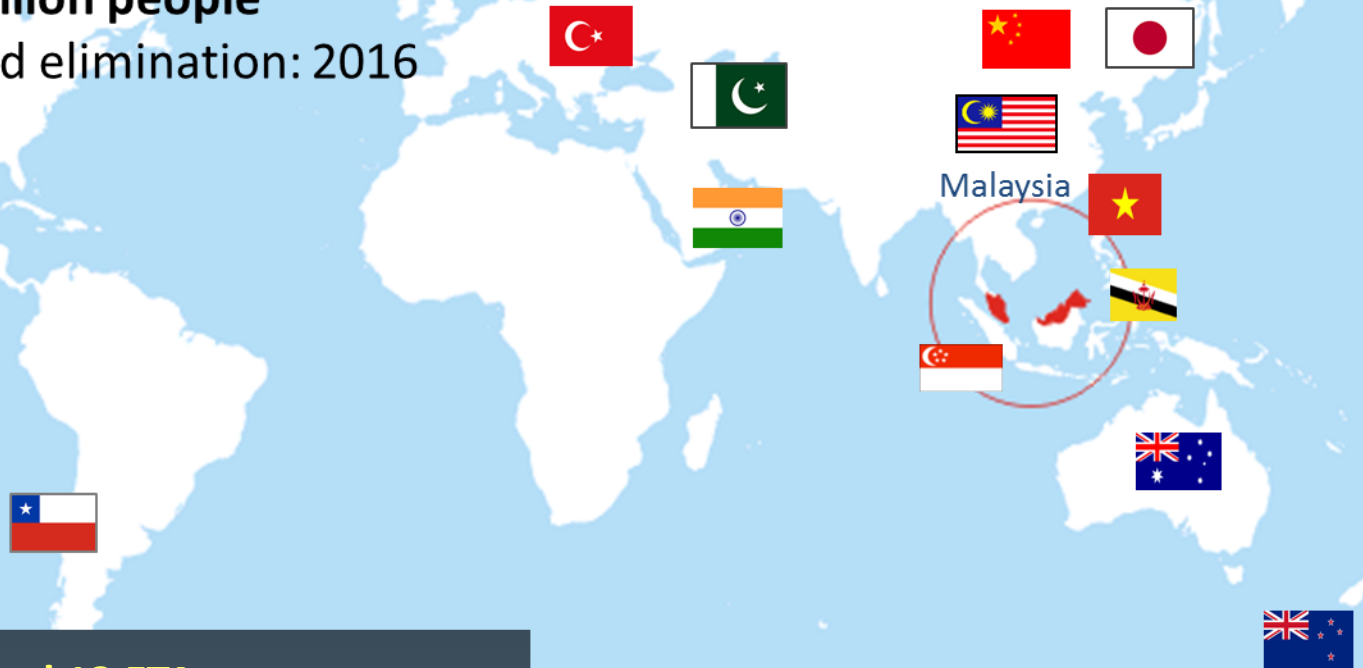


Over **5,000** companies from more than **50** countries

# MALAYSIA IS CONNECTED TO THE WORLD THROUGH FTA's

**MALAYSIA IS THE STRATEGIC GATEWAY TO KEY MARKETS LEVERAGING ON FTAs**

- Market size: **2.7 billion people**
- Tariff reduction and elimination: 2016



## Malaysia has implemented 13 FTAs:

### ASEAN

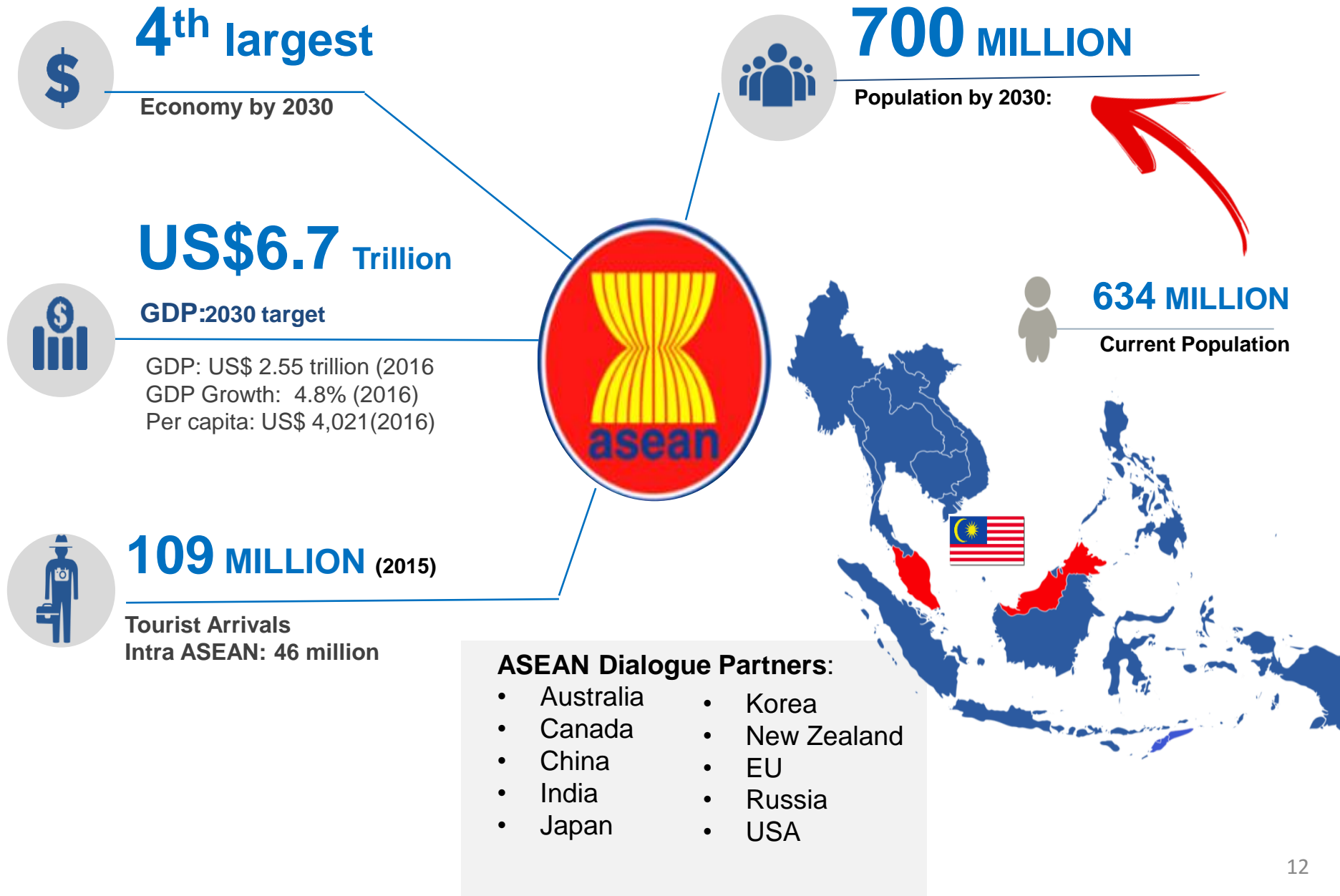
1. ASEAN Free Trade Area (1992)
2. ASEAN-China (2004)
3. ASEAN-Korea (2006)
4. ASEAN-Japan (2008)
5. ASEAN-India (2009)
6. ASEAN-Australia-New Zealand (2009)

### BILATERAL

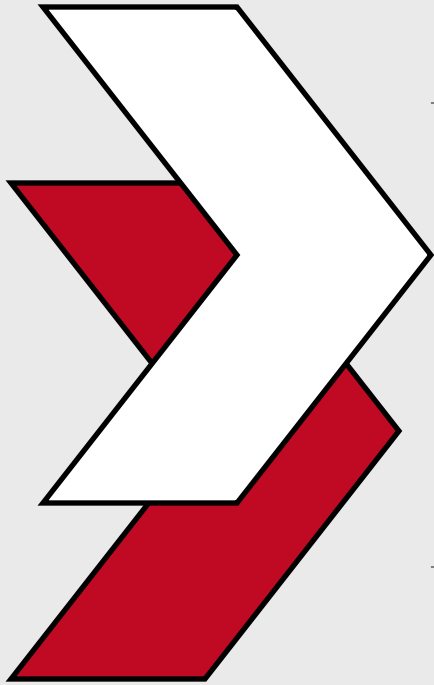
1. Japan (2005)
2. Pakistan (2007)
3. New Zealand (2009)
4. Chile (2010)
5. India (2011)
6. Australia (2012)
7. Turkey (1.8.2015)

Malaysia is still negotiating Regional Comprehensive Economic Partnership (RCEP), Malaysia-EU, Malaysia-EFTA and ASEAN-Hong Kong.

# Malaysia As A Hub For ASEAN





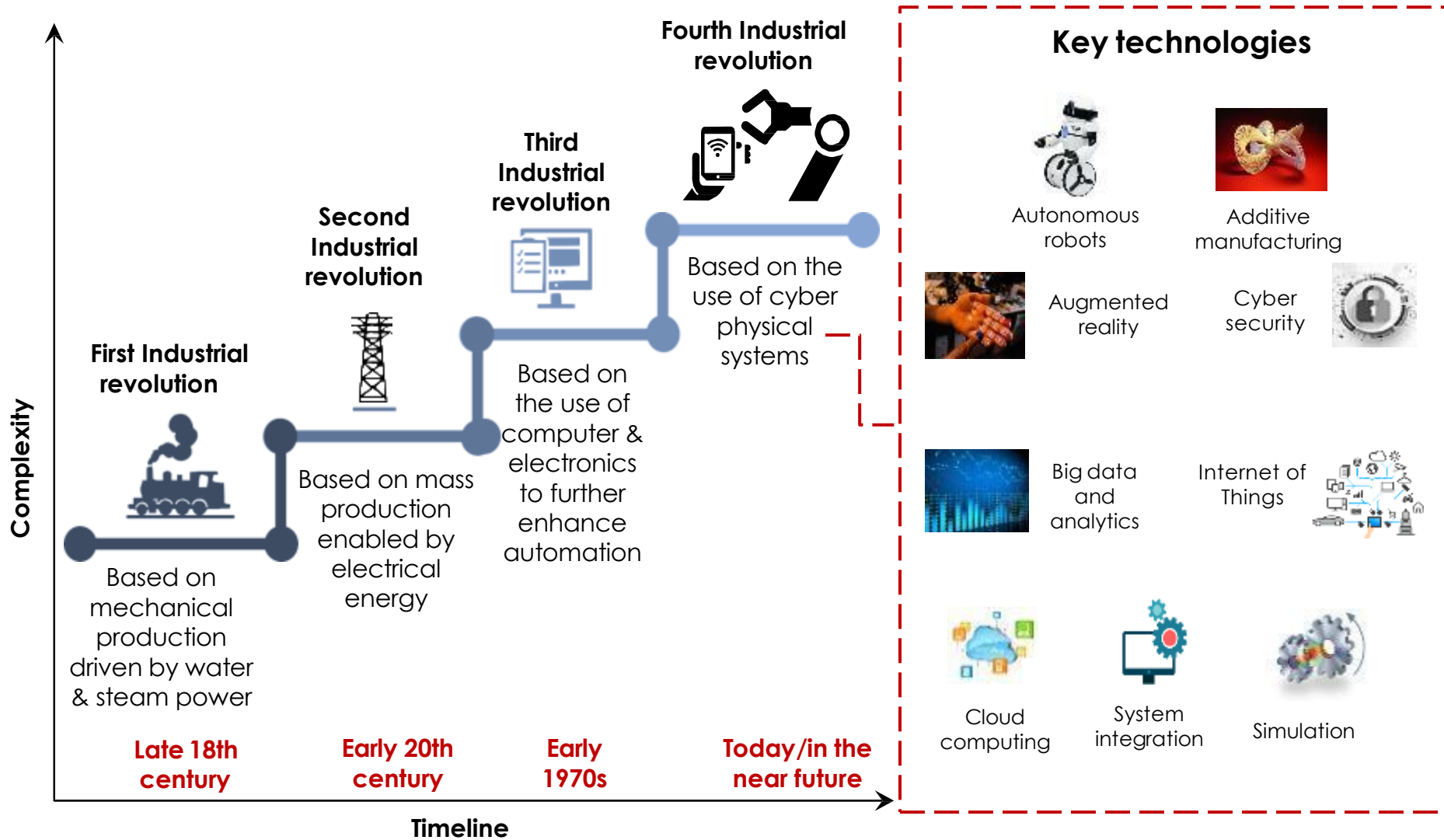


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# Global Scenario on Industry 4.0

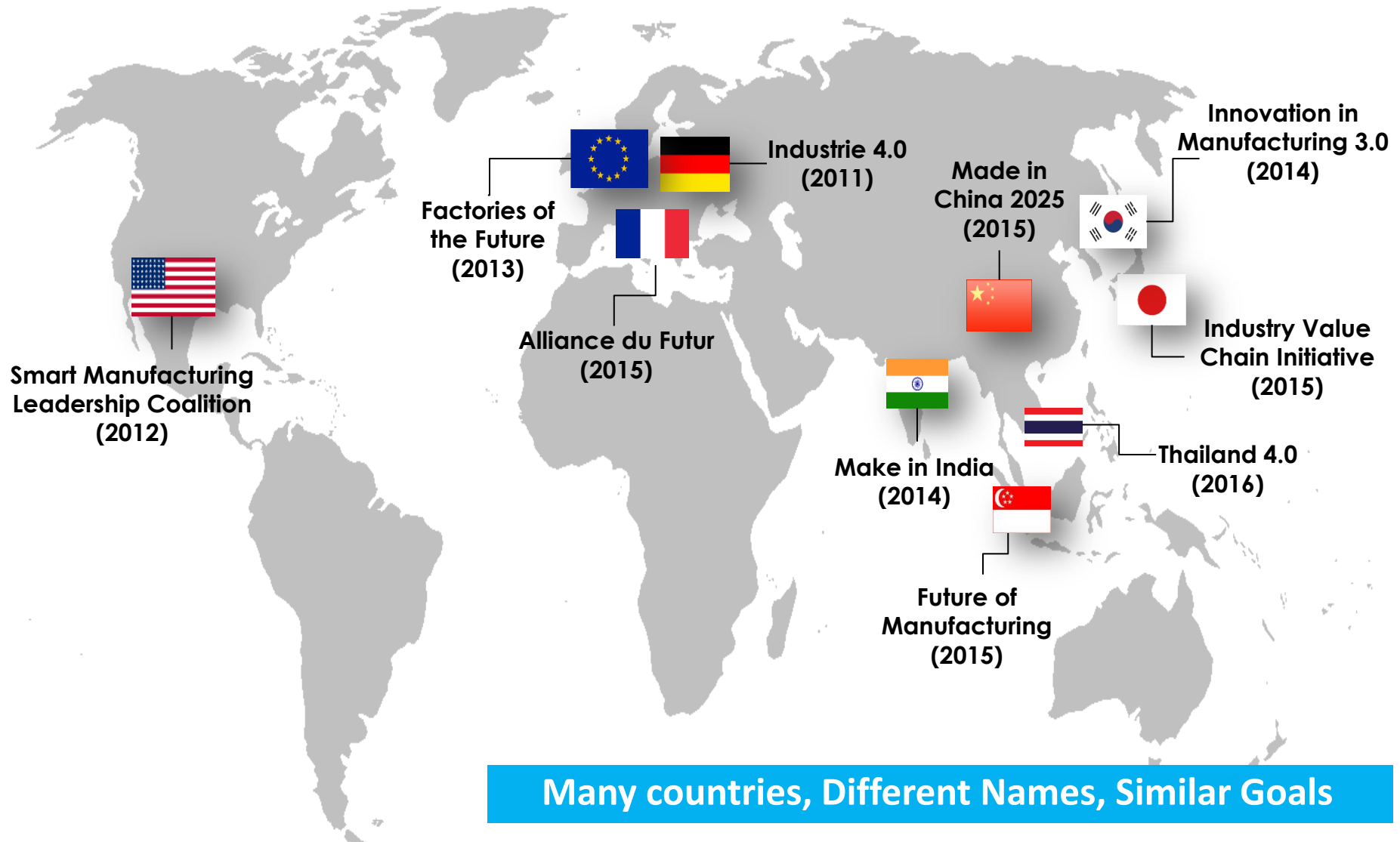
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# Industrial Revolution - Industry 4.0

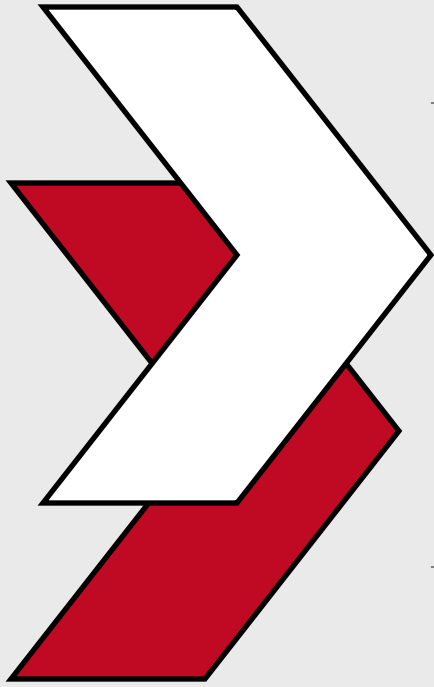


Source: BCG

# Global Industry 4.0 Initiatives



Source : IDC, Frost & Sullivan



# Vision of Industry 4.0 in Malaysia



# Eleventh Malaysia Plan (2016-2020)



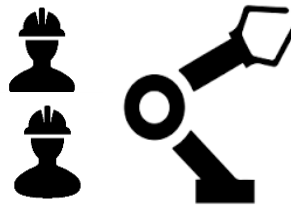
**RMK11: (Thrust 6) - Strategy B2:**  
Enhancing productivity through automation

**RMK11 - Driving ICT in the Knowledge Economy**

## Smart Manufacturing

One of the focus areas for RMK-11 under the manufacturing thrusts. This thrust is further supported by additive manufacturing, robotics and also agile business models. **Big Data Analysis (BDA) and Internet of Things (IOT)** are the critical backbone that enables the vision of smart manufacturing.

### Traditional Approach



Moving to  
the future

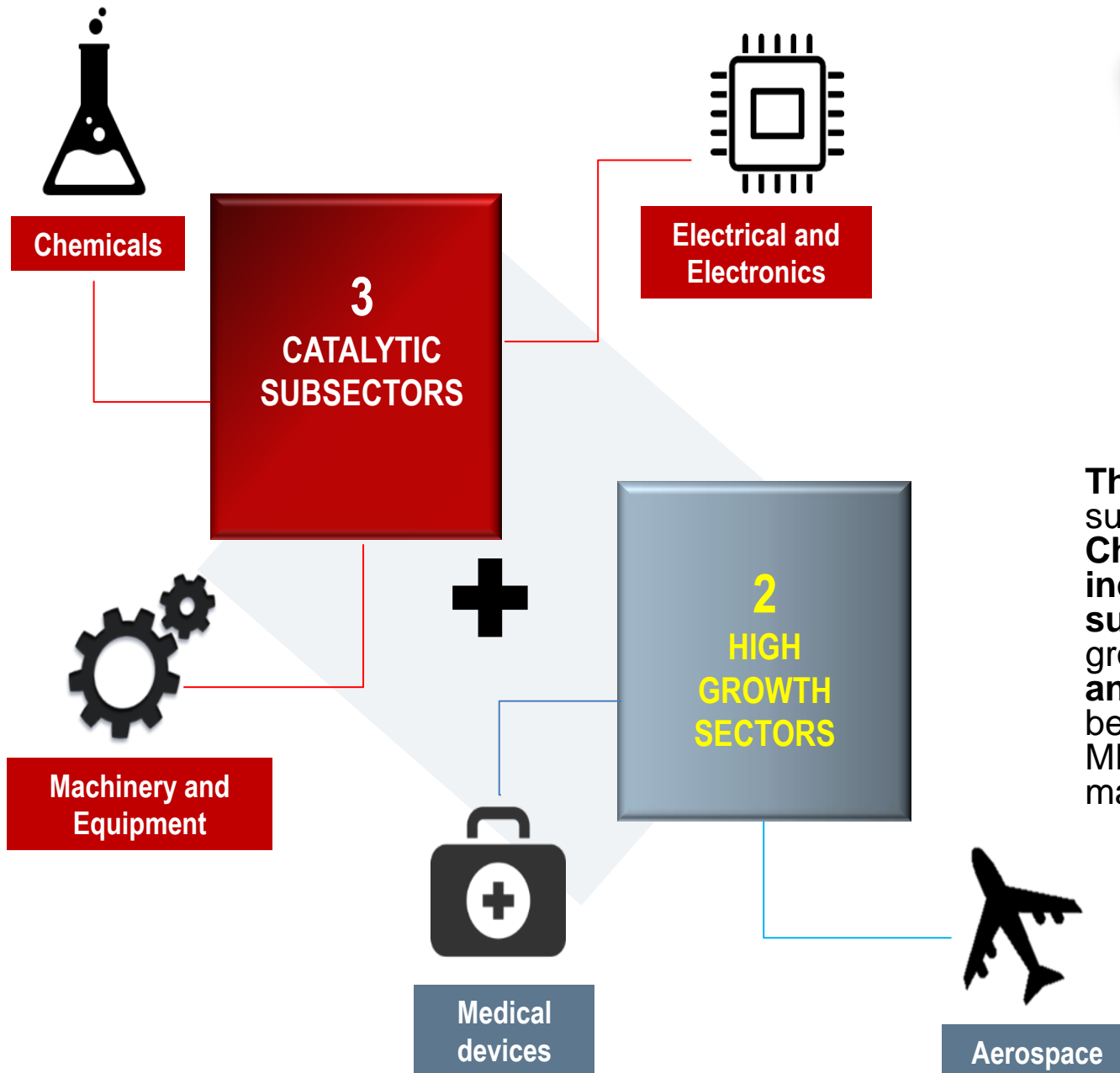
### Future of Manufacturing



### RMK11: (Thrust 6) -Strategy B2:

Enhancing productivity through automation supported by developmental and performance-based financial assistance and collaboration with industry;

# Eleventh Malaysia Plan (2016-2020)



Three (3) catalytic subsectors namely **Chemical, E&E and M&E industries**; and two (2) subsectors of high potential growth namely **Aerospace and Medical Devices** have been identified in the 11th MP to drive the growth of the manufacturing sector.



# Malaysia's Industry 4.0 Ecosystem

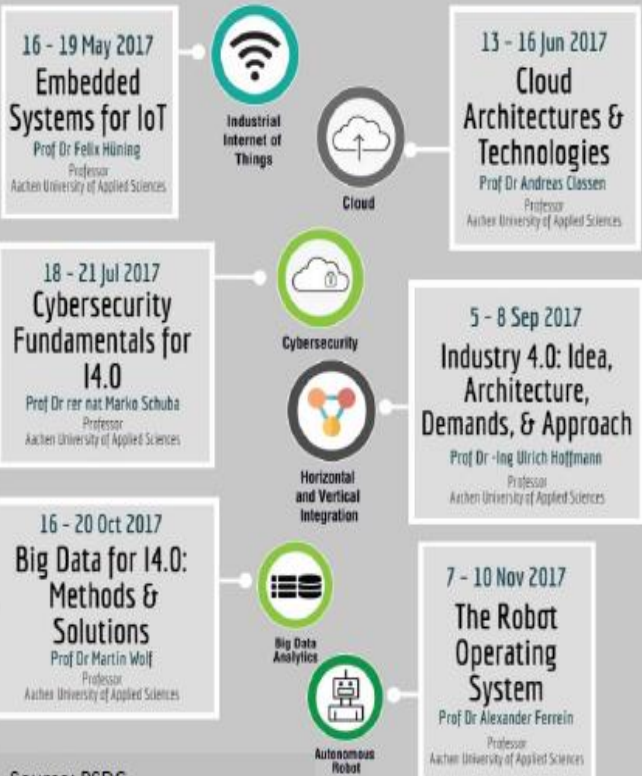


# Malaysia's Ecosystem – Training Institutes



**INDUSTRY 4.0**  
CENTRE OF EXCELLENCE

## i4.0 GLOBAL GURUS SERIES



Source: PSDC

**GMI**  
GERMAN-MALAYSIAN INSTITUTE  
*Training for Advanced Technology*

**digitalisation and industry 4.0**  
driver licence®

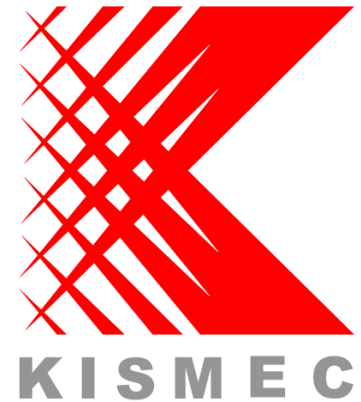


**iFactory Innovation Center**

**Smart Manufacturing**



Source: GMI



**Industry 4.0**  
**Programmes to start in 3Q 2018**

**MALAYSIAN INSTITUTE OF TECHNOLOGY ACADEMY®**



# Malaysia's Ecosystem – Universities



Asean Competency Centre at the  
Pahang Technology Park



UNIVERSITI  
MALAYSIA  
PERLIS



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Samsung IoT Academy



UTM4.0 4<sup>th</sup> INDUSTRIAL  
REVOLUTION

D I G I T A L   N E R V O U S   S Y S T E M



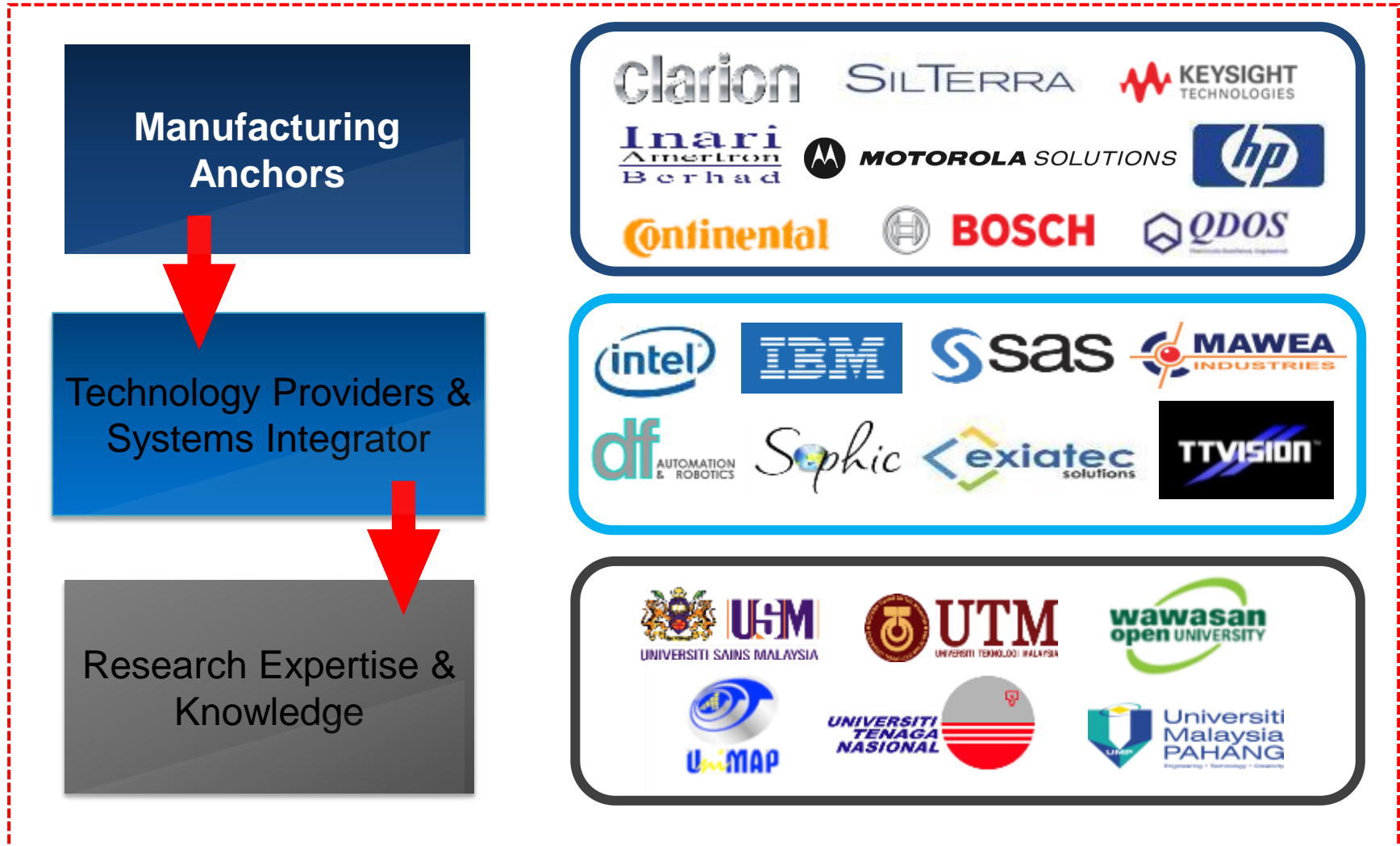
UNIVERSITY  
OF MALAYA

Centre for Research in Industry 4.0  
(CRI4.0)

# Electronic Smart Manufacturing Ecosystem

## –MIDA and CREST collaboration

Collaborators in Industry Proof-of-Concept projects, R&D Grant projects, talent programs:



# Digital Transformation Acceleration Program (DTAP)



## Objectives

- To future proof Malaysian companies to ensure their competitiveness
- Providing a structured approach for participating companies in embarking on their digital transformation journey

## Intended Outcome

- Increased productivity
- Reduce dependency on foreign labour
- New source of growth/ business models

## Partners

- Deloitte
- McKinsey
- Rainmaking
- Roland Berger
- BOSCH

# The Role of Government



National Industry 4.0  
Policy Framework



Study on Future of  
Manufacturing: Industry 3+2



Industry 4.0 Taskforce

- \* Infrastructure and Ecosystem
- \* Funding and Incentives
- \* Talent and Human Capital
- \* Technology and Standards
- \* SMEs



Launching of National IoT  
Strategic Road Map



Malaysia Digital Economy for year 2017:  
To implement programme including e-commerce  
systems, digital maker movement including new  
location for Malaysia Digital Hubs.



## Embracing Industry 4.0 in Malaysia



A blueprint created to  
address productivity  
challenges holistically in  
order to boost economic  
growth

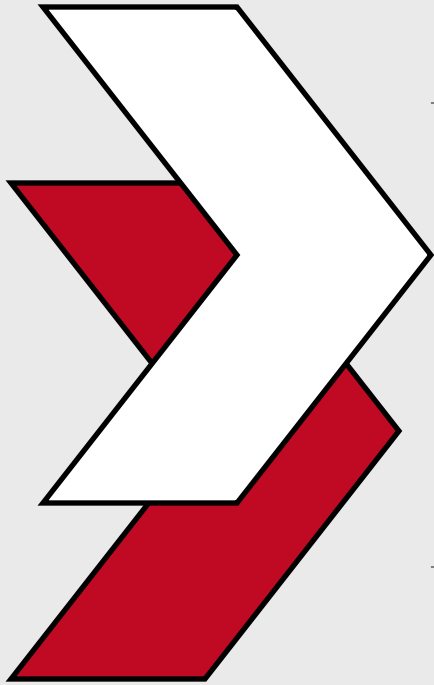


Building Analytics Capabilities:  
20,000 data professionals and  
2,000 data scientists by 2020



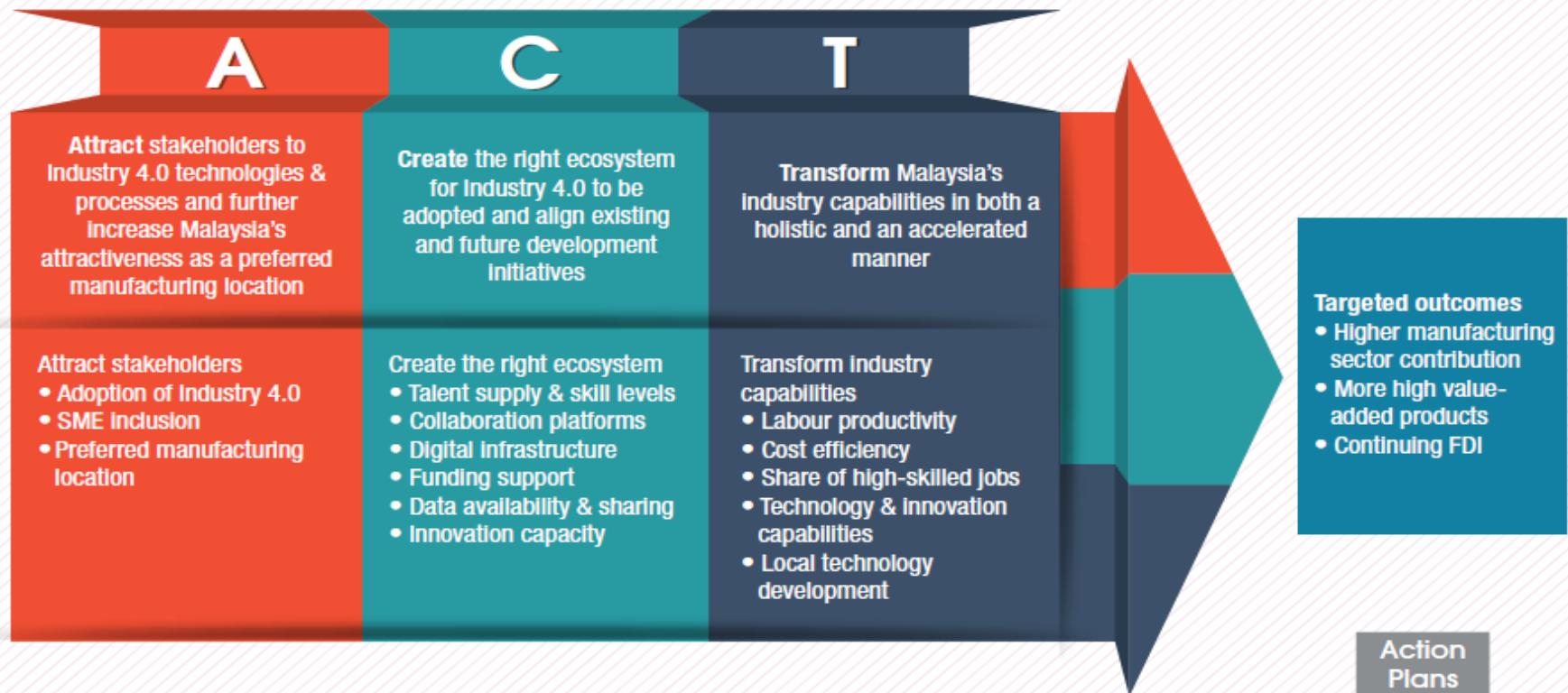
Establishment of Digital Free Zone to  
stimulate internet based innovation





# Draft National Industry 4.0 Policy Framework

# THE OBJECTIVES OF THE INDUSTRY 4.0 POLICY ARE THREEFOLD – ACT:



## NATIONAL FRAMEWORK BY THE NUMBERS



# National Goals & Targets

**1.** Productivity of the manufacturing industry per person (from RM106,647 in 2016 to increase by 30% by 2025)

- To increase the level of **productivity** in the manufacturing sector

**2.** Contribution of manufacturing sector to national economy (from RM254 bill in 2016 to RM392 bill by 2025)

- To elevate the **contribution of the manufacturing sector** to the economy

**3.** Global innovation index (from #35 in 2016 to top 30 nations by 2025)

- To **strengthen our innovation capacity and capability**, reflected in the global innovation ranking

**4.** Number of skilled workers employed in the manufacturing sector (from 18% in 2016 to 30% by 2025)

- To increase the number of **high-skilled workers** employed in the manufacturing industry

# Malaysia Industry 4.0 Policy Framework



## Funding & Outcome-based Incentives

### Strategy F1:

Provide outcome-based incentives, including tax incentives to encourage investments in, and adoption of industry 4.0 technologies & processes.

### Strategy F2:

Introduce dynamic and innovative financial products to encourage adoption of industry 4.0 technologies & processes.



## Enabling Ecosystem & Efficient Digital Infrastructure

### Strategy I1:

Strengthen the digital connectivity in and between industrial, education and training hubs to remove connectivity bottlenecks in adopting Industry 4.0 technologies.

### Strategy I2:

Enhance the digitalisation and integration of government processes and infrastructure along supply and manufacturing value chains.

### Strategy I3:

Involve services providers for Industry 4.0 and link them to manufacturing firms to help implement technologies, processes and skill development



## Regulatory Framework & Industry Adoption

### Strategy R1:

Increase awareness of the need, benefits and opportunities of Industry 4.0 technologies and business processes among manufacturing firms

### Strategy R2:

Create a platform and mechanism to help manufacturing firms, especially SMEs, assess and develop their Industry 4.0 capabilities

### Strategy R3:

Improve data integrity, standards, sharing security to facilitate seamless integration of value chains and support intra-ministerial analysis to chart effective Industry 4.0 programs



## Upskilling Existing & Producing Future Talents

### Strategy S1:

Enhance the capabilities of the existing workforce through national development programmes specially designed for specific manufacturing sectors and support re-skilling and re-deployment.

### Strategy S2:

Ensure the availability of future talent by equipping students with the necessary skillsets to work in the Industry 4.0 environment



## Access to Smart Technologies & Standards

### Strategy T1:

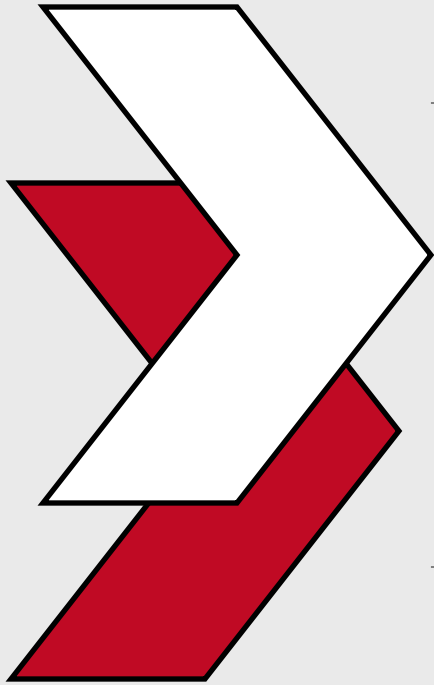
Establish digital/technology labs and collaborative platforms, especially public-private partnerships (PPP), to create awareness and understanding, foster the adoption of new technologies, and facilitate the transfer of knowledge

### Strategy T2:

Establish and implement standards for systems interoperability for smart manufacturing and Industry 4.0 technologies.

### Strategy T3:

Intensify Research, Innovation, Commercialisation and Entrepreneurship (RICE) programmes and activities in specific Industry 4.0 technologies and processes that support and advance priority sectors.



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## Government Facilitations

- Domestic Investment Strategic Fund (DISF)
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# Domestic Investment Strategic Fund (DISF)

## Objective of Fund

- To accelerate the shift of Malaysian-owned companies in targeted industries to high value-added, high technology, knowledge-intensive and innovation-based industries
- To enable domestic investors to develop new sources of competitive advantage and to become active participants in the global ecosystems of industries
- The fund is not a business start-up fund but it is applicable to local companies which have new/additional investments

# Domestic Investment Strategic Fund (DISF)

## Scope of Fund

- The fund will provide matching grants (1:1) on reimbursable basis to cater for expenditures incurred for the following activities:
  - i. Training of Malaysians
  - ii. R&D activities carried out in Malaysia
  - iii. Licensing or purchase of new technology
  - iv. Obtaining International Standards/Certification
  - v. Modernization and upgrading of facilities and tools to undertake manufacturing or services activities for Multinational Corporations (MNCs) and Malaysian conglomerates (Outsourcing activities)

# Domestic Investment Strategic Fund (DISF)

## Eligibility

- Incorporated under the Companies Act, 1965 / Companies Act, 2016
- New companies in the manufacturing & services sectors with Malaysian equity ownership of at least 60%
- Existing companies in the manufacturing & services sectors with Malaysian equity ownership of at least 60% undertaking reinvestments (expansion / modernization / diversification)

# Domestic Investment Strategic Fund (DISF)

## Priority Sectors - Manufacturing

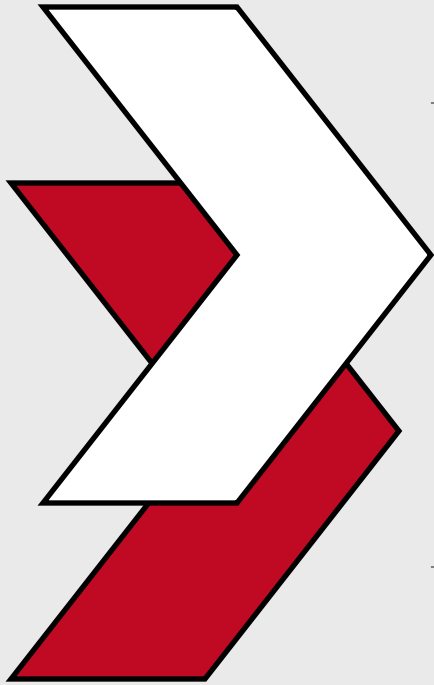
- **Aerospace**
- **Medical Devices**
- **Pharmaceuticals**
- **Advanced Electronics**
- **Machinery & Equipment**
- **Other industries, on a case by case basis**

# Domestic Investment Strategic Fund (DISF)

## Priority Sectors - Services

- Design and Development
- Research and Development
- Testing / Calibration
- Quality and Standard Certification
- Architectural / Engineering Services
- Technical and/or Skills Training
- Logistics Service Providers (3PL)
- ICT Solutions Providers related to Automation and Industry 4.0
- Integrated Green Technology Project





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## Government Facilitations

### ➤ Automation Capital Allowance

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## Objectives of Incentive

**The Automation Capital Allowance** was introduced in 2015 Budget. The main objectives are:

- To encourage manufacturing companies to **engage in innovative and productive activities**
- To encourage **quick adoption of automation** especially for **industries heavily reliant on foreign labour**
- To **spur automation initiatives**

## Categories

- For **high labour-intensive industries** (rubber products, plastics, wood, furniture and textiles), an **Automation CA of 200%** will be provided on the first **RM4 million expenditure**
- For **other industries**, an **Automation CA of 200%** will be provided on the first **RM2 million expenditure**

## Eligibility

- Incorporated under the Companies Act, 1965 / Companies Act, 2016 and resident in Malaysia
- Possesses a valid business license from local authority and manufacturing license from MITI (if applicable)
- Company has been in operation for at least 36 months
- The automation equipment is used directly in the manufacturing activities

*Continued.....*

# Automation Capital Allowance

## Eligibility

*Continued.....*

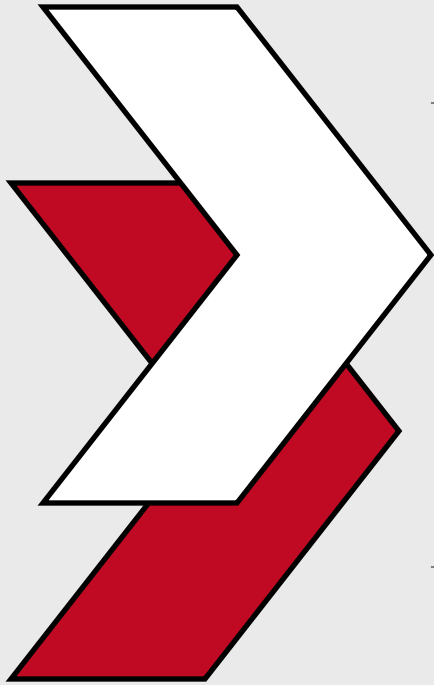
- The automation equipment should enhance the productivity such as reducing man hours, reducing workers and increasing volume of output and to be verified by SIRIM
- The automation equipment adopts technology that is more advanced than the technology currently used by the company and to be verified by SIRIM



# Automation Capital Allowance

## Required Documents

- **ML – Automation CA Form**
- **SIRIM report for productivity level**
- **Valid business licence**
- **Certification by the company's external auditors confirming the following:**
  - **List of purchased and installed equipment/machines with purchase order/invoice and other documents of purchase as proof and functions of the equipment/machines**
  - **Proof of documents, that the company has already paid the entire cost of the equipment/machinery**



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## Government Facilitations

### ➤ Others

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# Incentives related to Smart Manufacturing Products

- i. Production of Robotics & Factory Automation Equipment**
- ii. Specialised Production M&E for Specific Industry**

- **Pioneer Status with tax exemption of up to 100% of statutory income for a period of up to 10 years; OR**
- **Investment Tax Allowance of up to 100% on qualifying capital expenditure incurred within a period of 5 years. This allowance can be offset against up to 100% of the statutory income for each year of assessment.**

# Budget 2018 Highlights (as announced on 27 Oct 2017)

## 1. Tax Incentive for Transformation to Industry 4.0

- i) Matching grant of RM245 million under the Domestic Investment Strategic Fund (DISF) to upscale Smart Manufacturing facilities.\***
- ii) Accelerated Capital Allowance (ACA) of 200% on the first RM10 million qualifying capital expenditure incurred in the year of assessments (YA) 2018 to 2020 for manufacturing and manufacturing related services sectors. \***

\* The mechanism/procedures/guidelines/criteria for each incentive/grant mentioned above to be issued later.

# Budget 2018 Highlights (as announced on 27 Oct 2017)

## 2. Capital Allowance for ICT Equipment and Software

- i) Expenditure incurred on the purchase of ICT equipment and computer software packages.\*\***
- ii) Expenditure incurred on the development of customized software comprising of consultation fee, licensing fee and incidental fee related to software development.\*\***

**\*\* Claims should be submitted to IRB.**





**THANK YOU**

MALAYSIAN  
INVESTMENT  
DEVELOPMENT  
AUTHORITY

**MIDA**

[www.mida.gov.my](http://www.mida.gov.my)