

EMPOWERING MALAYSIA'S DIGITAL TRANSFORMATION



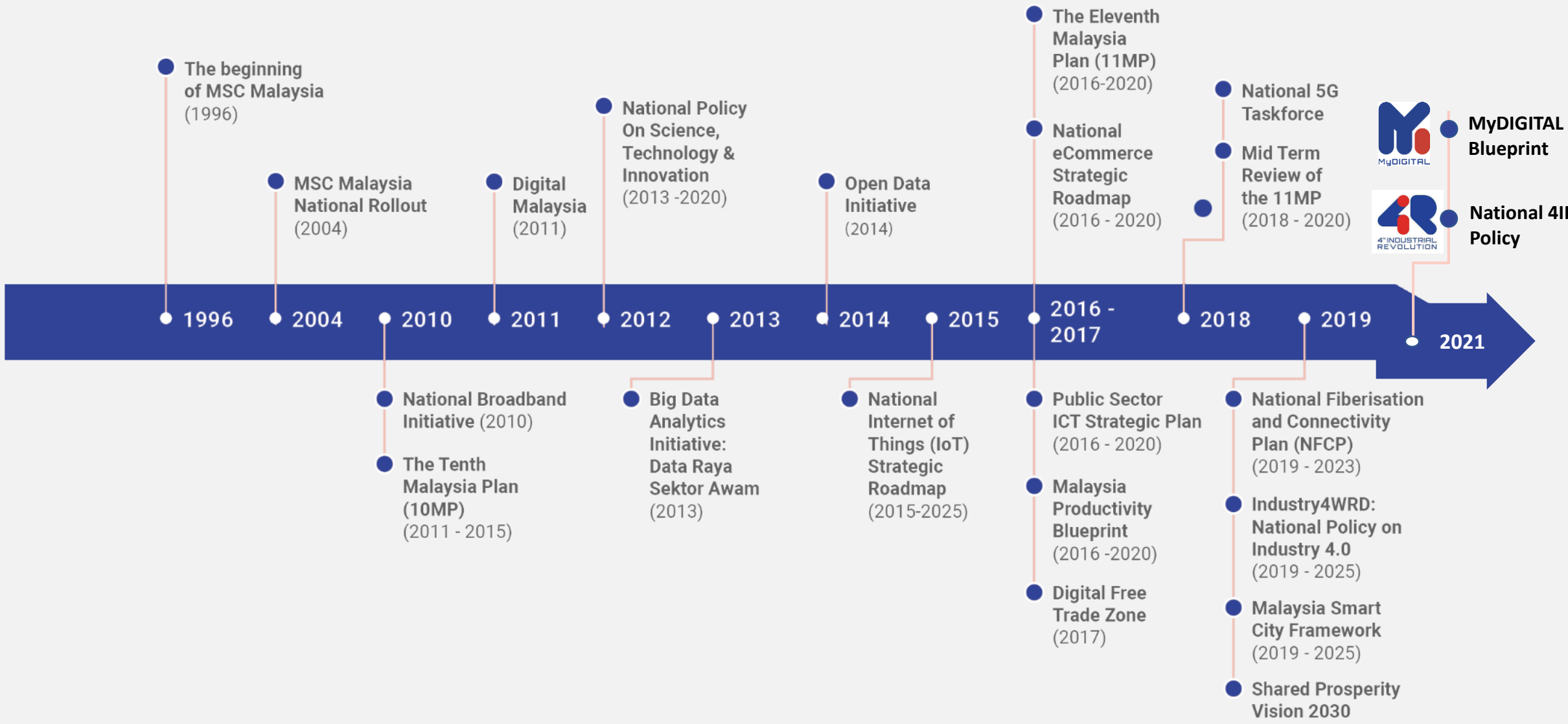
MyDIGITAL

15 May 2023



MyDIGITAL Corporation | Strategic Change Management Office (SCMO)
Ministry of Economy

Our transformation journey



Malaysia has made strides in the digital economy landscape



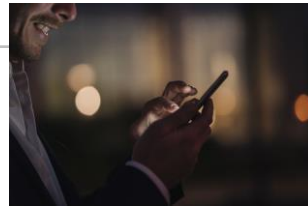
Malaysia on the world stage

27th IMD World Digital Competitiveness Ranking (Future Readiness) 2021¹

33rd WEF Global Competitiveness Index (ICT Adoption) 2019²

34th The Inclusive Internet Index 2022³

47th Malaysia's ranking in the UN E-Government Development Index (2020)



Our digital behavior

92% Malaysians are active on social media (2022)⁴

221 e-payment transactions per capita (2021)⁵

88% of the population are digital consumers

1.1b e-wallet transactions (2021)⁵



Digitalization in business

RM69.3b eCommerce market value by 2026⁶

3rd in Southeast Asia in eCommerce penetration among individuals; 4 in 10 transactions involve cross-border spending⁸

61% of small businesses and 62% of medium businesses had increased their **use of digital platforms** in 2021⁹

The Case for Change

1



The need to have **digital-first mindset** and higher digital technology adoption across the **public sector**

2



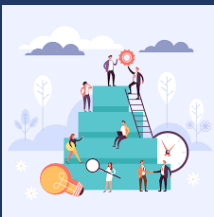
The need to build a more **supportive ecosystem** for local enterprises to digitalize

3



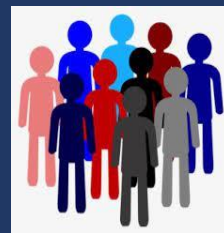
The need for better deployment of **quality broadband** and digital technologies **infrastructure**

4



The need to nurture a **future-ready workforce**

5



The **digital divide** among income and age groups, and between gender need to be narrowed

6

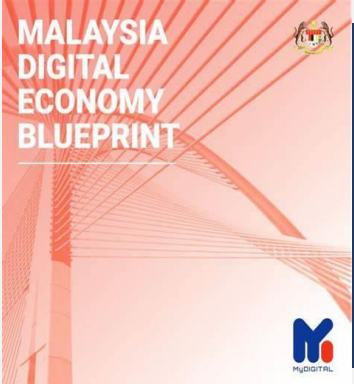


The need to **build trust and ethics** in using data and technology & increasing awareness on cyber security

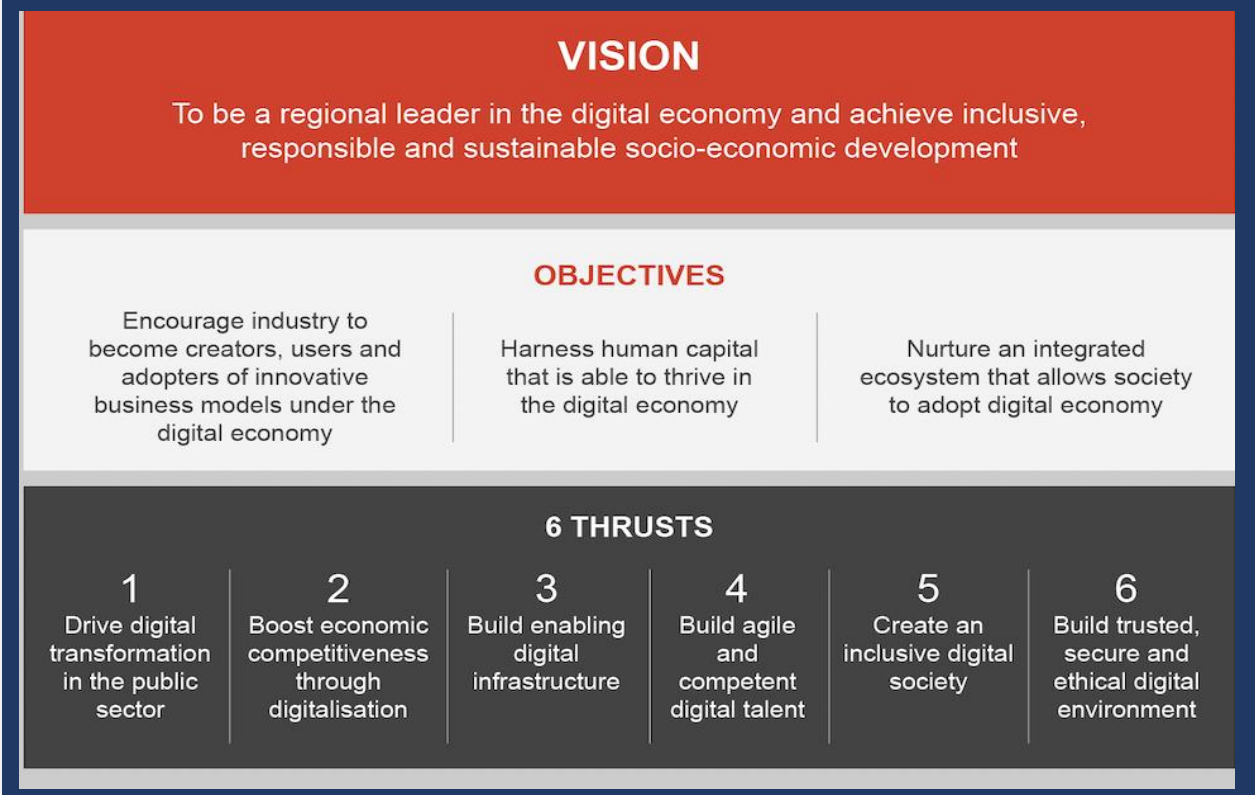
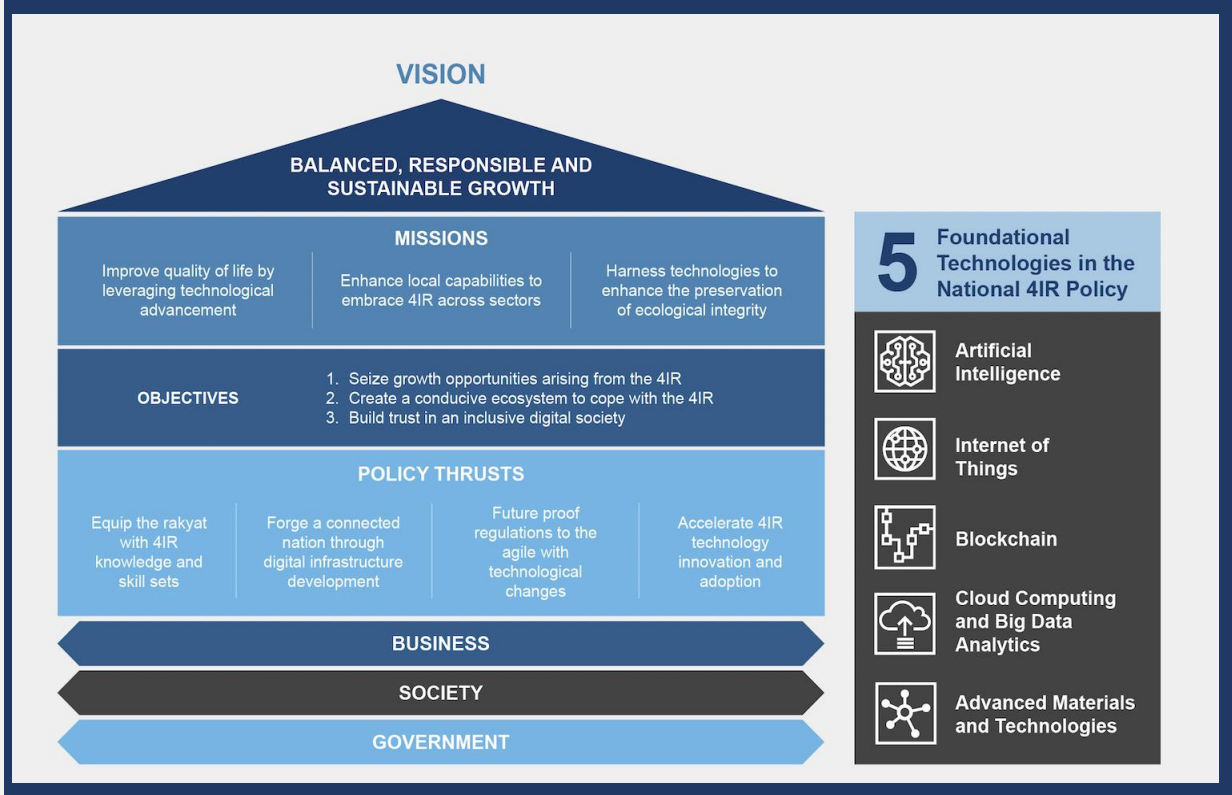
Visions of the National 4IR Policy and Malaysia Digital Economy Blueprint



Outlines the key focus areas which impact the rakyat, businesses and government, in order to seize growth opportunities and to address potential risks arising from 4IR



Charts the trajectory of the digital economy contribution to the Malaysian economy and builds the foundation to drive digitalization across the nation, including the digital gap



Malaysia Digital Blueprint has set specific targets to be achieved by 2025

Citizens

- Creation of **500,000** new jobs (end 2022: 186,200)
- **100% household** with access to internet (end 2022: 96% populated areas)
- **All students** to have access to online learning (end 2022: 84%)

Businesses

- **25.5%** of digital economy to Malaysia's GDP (end 2022: 23.2%)
- **875,000** MSMEs adopt eCommerce (end 2022: 1.09 Mil)
- Attract **2 unicorns** (1- Carsome)
- **RM70 billion** investment in digitalization (end 2022 : RM 84.2)
- Increase the number of start-ups to **5,000** (May 2023: 3423)

Government

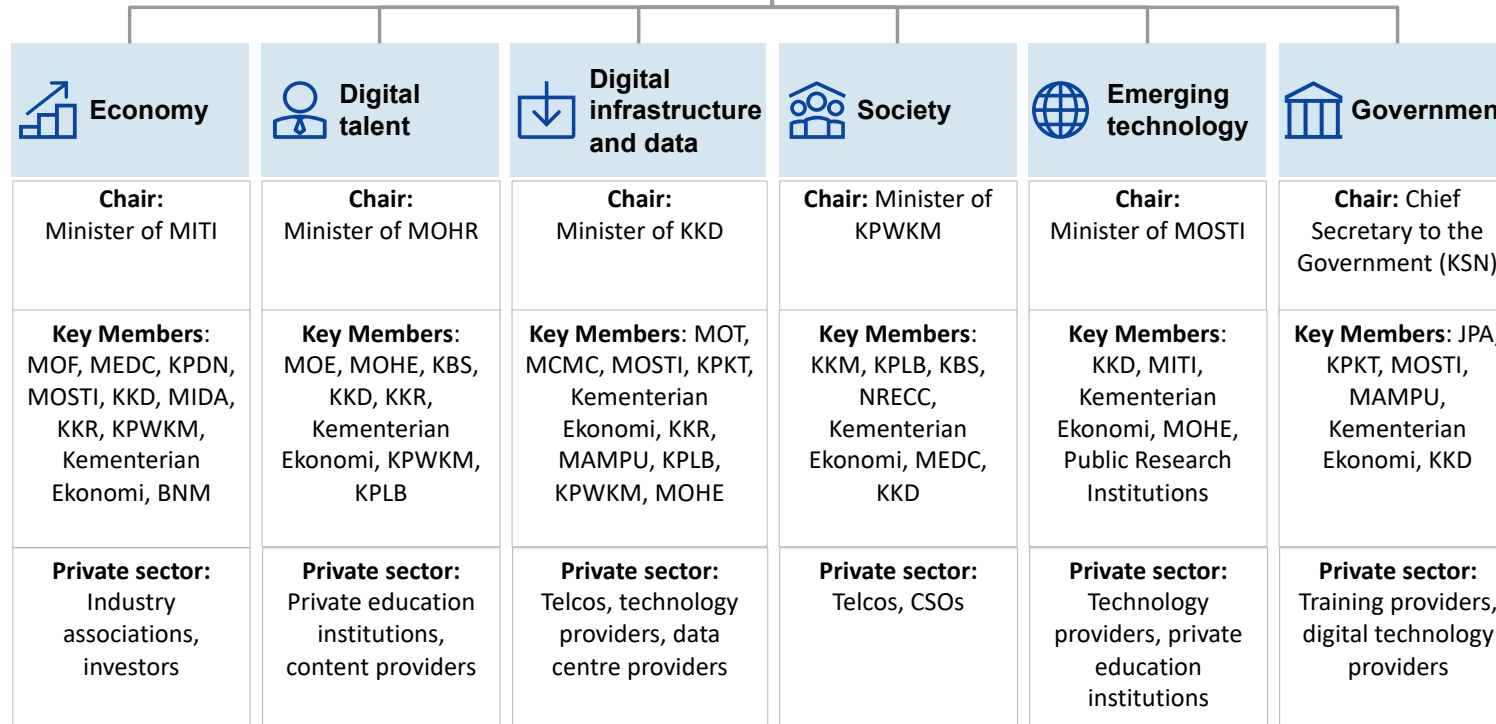
- **100%** civil servants to possess digital literacy (assessment on-going started March 2023)
- **80% end-to-end** online government services (end 2022: 66.24%)
- **80% usage of cloud storage** across the government (end 2022:84.55%)

Governance Structure

**Majlis Ekonomi Digital dan 4IR
Negara (MED4IRN)**
chaired by YAB Prime Minister

Steering Committee
chaired by Minister of
Economy

**State National 4IR
Policy and Digital
Economy Council**
chaired by Minister of
Economy



Agile regulation (including GRP, sandbox): MPC

Cybersecurity: NACSA

Inclusivity and sustainability: Kementerian Ekonomi

Secretariat:
MITI

Secretariat:
MOHR

Secretariat:
KKD

Secretariat:
KPWKM

Secretariat:
MOSTI

Secretariat:
MAMPU

Multiple Working Groups (WGs)

Federal and State Government-led initiatives

Private sector, CSO, academia-driven initiatives

Our Role

Strategic Change Management Office (also known as MyDIGITAL Corporation)



Secretariat to MED4IRN Council

To facilitate and align Digital Economy and 4IR initiatives at Federal, State and agencies level



Increase in Public Private Partnerships

To develop and promote partnership and collaborative initiatives between public and private sector in achieving common goals and aspirations



Program Management

To monitor, report and evaluate the progress of each initiatives within the Digital Economy Blueprint and 4IR Policy Framework



MyDIGITAL Thought Leadership

To drive the awareness towards MyDIGITAL by :

- Producing thought leadership programs, articles and knowledge sharing forums
- Elevate the MyDIGITAL branding within country and in international circuit
- Host roundtable sessions with key stakeholders from government and private sector



Change Management

To problem solve issues, risks and challenges together with stakeholders at Federal and State agencies

MyDIGITAL is the nation's agenda

A key feature of the MyDIGITAL initiative that is crucial to its success is the

Whole-of-Nation approach

Participation of all stakeholders

is highly welcomed to enable the nation to realise the benefits and overcome the challenges of digitalisation

Working together

to achieve the vision and objectives set in the Blueprint and 4IR Policy – ensuring no one is left behind and that key economic, social and environmental challenges are recognised and addressed

Thank You

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**MyDIGITAL Corporation | Strategic Change Management Office (SCMO)
Ministry of Economy**



Coming Up!

MyC4IR is in the position to leverage on global learnings & capacity to drive change in the region

Malaysian Government Sets Up First 4IR Centre In Southeast Asia

By Editor - May 25, 2022



01

Connect Malaysia to leading global 4IR practices to accelerate the adoption of emerging technologies

Serve as 4IR International Co-operation & Partnership Development

02

Position Malaysia as a 4IR Innovation Hub

Access to top experts, innovators, policy leaders

Exposure & access to cutting edge approaches to technology governance & adoption

03

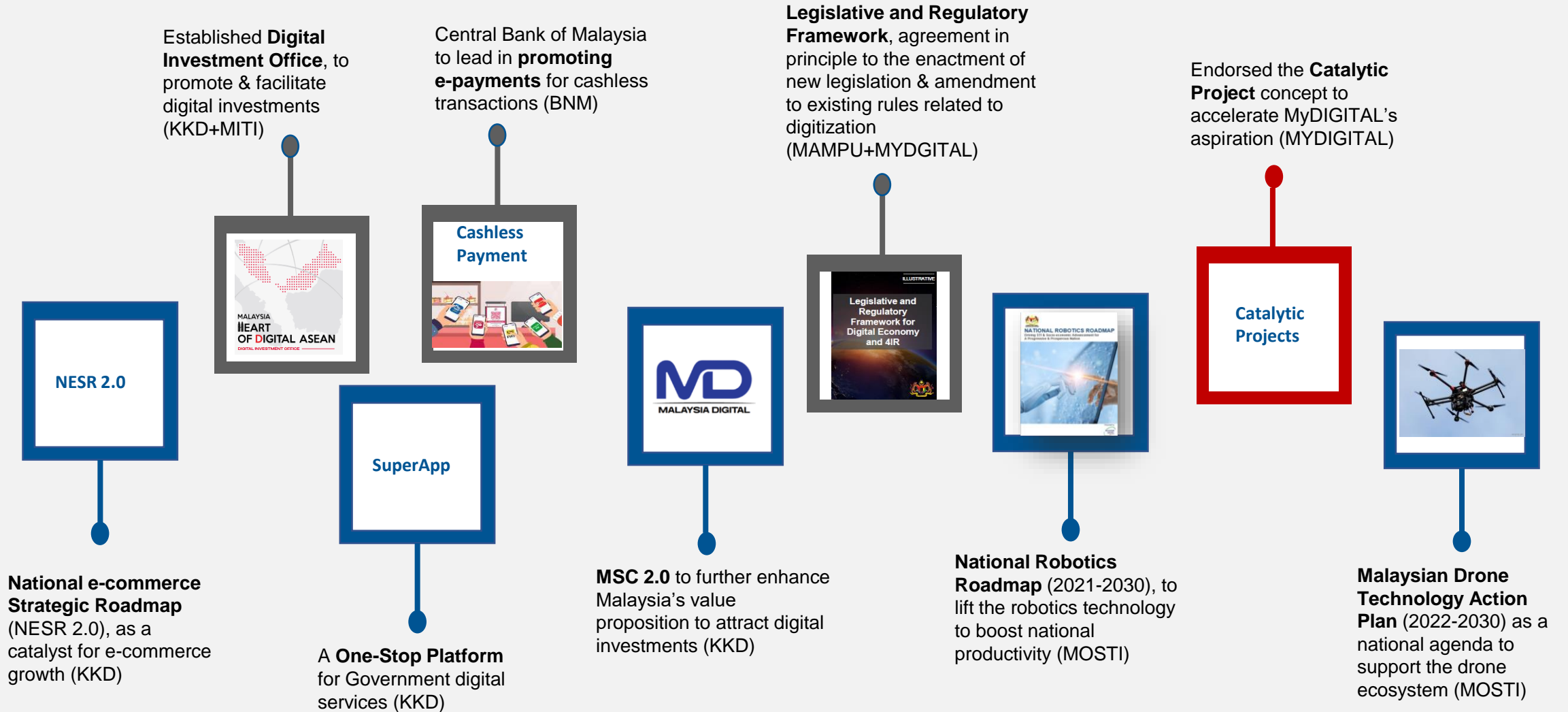
Act as a global platform that drive multi-stakeholder ecosystem to facilitate the development of policy frameworks across Centers around the world

04

Act as a focal point between govt agencies & private sector to problem-solve issues

Provide support for pilot projects, knowledge transfer & talent development

Key Decisions of the MED4IRN



Our digital maturity need to be further improved to better respond to the developments and shifting trends in society, businesses and governments

Malaysia at world stage

31st IMD World Digital Competitiveness (2022)

Country	Rank						Changes compared to 2017
	2017	2018	2019	2020	2021	2022	
Singapore	1	2	2	2	5	4	-3
Malaysia	24	27	26	26	27	31	-7
Thailand	41	39	40	39	38	40	+1
Indonesia	59	62	56	56	53	51	+8

34th Inclusive Internet Index (2022)

Country	Rank						Changes compared to 2017
	2017	2018	2019	2020	2021	2022	
Singapore	1	2	2	1	1	1	-
Malaysia	21	28	34	41	38	34	-13
Thailand	23	31	36	46	44	41	-18
Indonesia	35	49	63	55	52	47	-12
Vietnam	32	43	44	48	50	46	-14

36th Global Innovation Index (2021)
(Malaysia is 3rd in upper-middle income group)

Country	Rank						Changes compared to 2017
	2017	2018	2019	2020	2021	2022	
Singapore	7	5	8	8	8	7	-
Malaysia	37	35	35	33	36	36	+1
Thailand	51	44	43	44	43	43	+8
Indonesia	87	85	85	85	87	75	+12
Vietnam	47	45	42	42	44	48	+1

Where are we today?



Government



UN E-Government Development Index (2022)

Country	2022 Rank
Singapore	12th
Malaysia	53rd
Thailand	55th
Indonesia	77th
Vietnam	86th
Philippines	89th



90% of government services are available online, but systems are not all linked¹



78.8% of government agencies provide e-payment facilities to customers²



87th of 94 - Malaysia in Global Open Data Index 2017, indicating limited datasets, not easily found and publicly available



Businesses



Malaysia's score in Trade Facilitation and Paperless Trade (2021)³:

Paperless Trade	85.19%
Cross-Border Paperless Trade	61.11%



17 Data Centers in Malaysia (2022)⁴



RM163 billion e-Commerce gross value added to the economy in 2020⁵



46.8% of businesses in Malaysia has adopted cloud computing in 2019⁶



26%* of micro, small and medium enterprises (MSMEs) picked digital adoption as the preferred strategy for post-pandemic survival⁵

**1,713 participants were surveyed in the Study*



Society



92% Malaysians are active on social media (2022)⁷



Household access to broadband (2021)⁸:

Type	Mobile	Fixed
Urban	95.3%	46.5%
Rural	88.1%	18.1%



873 Pusat Internet Komuniti across Malaysia, targeting underserved areas and groups (2020)⁹



3.5 billion online banking **1.1 billion** e-wallet transactions (2021)²



71% of employees fear that their jobs may be at risk due to automation (2021)¹⁰



57% of workers say they improved their digital skills since the pandemic began¹⁰



10,016 cyber incidents reported in Malaysia (2021)¹¹

5 “Needle-Movers”, each key to MyDIGITAL aspirations

Report by WG on Legislative and Regulatory Framework under MED4IRN

1 Public Sector Data Sharing & Services

Digital transformation of the Public Sector will enable data-driven decision making and modernize service delivery

2 Private Sector Data Flows

Cross-border data flows generate more economic value than traditional trade

3 Connectivity & Infrastructure

Building enabling digital infrastructure is fundamental in advancing the digital economy

4 E-Payments

Increasing adoption of e-payments to move towards a cashless society – a catalyst for digital society & e-commerce

5 Digital ID & Digital Signatures

Electronic and digital signatures will facilitate efficient and secure digital transactions

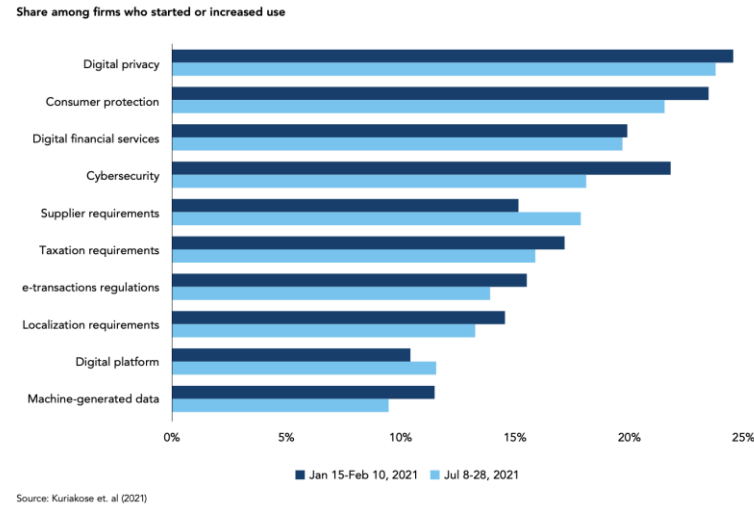
A study by The World Bank Group to assess the digital business landscape, digital economy policy & digital market regulations in support of SMEs growth (2/2)

Legal & Regulatory Framework

Identifying key regulatory constraints

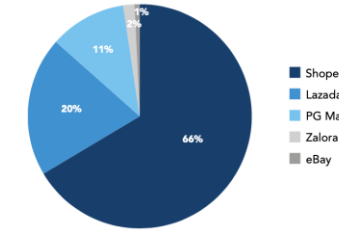
Regulatory assessment primarily focused on these main areas:

- Enabling e-transactions
- Personal data protection, digital privacy and cross-border data transfers
- Cybersecurity and cybercrime
- Online consumer protection
- Online supplier requirements and protection
- Competition policy and contestable markets
- Intellectual property protection
- Open data policy
- Gig economy platforms – ride sharing and accommodation sharing
- Taxation of digital activities



Dominant digital platforms present new challenges to Competition authorities

Share of the top 5 e-commerce platforms by monthly visits



Regulatory constraints in using platforms for marketing and sales



- The digital economy poses **new and unique challenges for competition authorities**.
- **Competition Act 2010 is not specific to the digital economy but are still applicable as a basis** to investigate potential abuses of dominance in the market.
- **Regulating mergers and acquisitions is an important part of ensuring contestable markets.**
- **In Malaysia, there are no specific (ex-ante) measures to protect suppliers on digital platforms from potentially abusive practices.**
- **To enhance the enforcement of IPR on digital platforms.**

Recommendations:

1

Enhance **user trust** in the DE:

- Facilitate ease and security of cross-border data transfers
- Finalize amendment to the CPA 1999 to increase clarity with respect to digital products
- Finalize the overarching Cyber Security Law, facilitate compliance

2

Update the competition framework to reflect new dynamics in DE:

- Proposed amendments to the Competition Act 2010 to cover M&A legislation, monitoring & enforcement of competition in digital markets



Transformative reskilling programs to cultivate digital mindset in the public sector



GovTech Innovation Reskilling Program



In partnership with Microsoft
80 registered participants across 10 Ministries
Kick-off : 20 March 2023

*Pre-assessment results	Beginner [0-70]	21%
	Intermediate [71-90]	68%
	Advanced [81-100]	11%

4-Week Learning Path

	Week 1: Productivity tools and skills	Week 2: Cloud & IOT	Week 3: Data & AI	Week 4: Security
	20-24 March	27-31 March	3-7 April	10-14 April
Workshop (in person)	Workshop on <i>Unleash Your Potential with Data Driven Platforms and Tools</i>		Build a Learning Culture to Spur Innovation by LinkedIn	
E-Learning (online self learn)	Courses Introduction to Microsoft Power Platform (36 mins) (80% business; 20% technical) Introduction to Power BI (46 mins) (20% business; 80% technical) Get started with Power Automate - Training (51 min) (80% business; 20% technical)	Courses Cloud Adoption Framework (50 mins) (80% business; 20% technical) Introduction to Azure Solution (26 mins) (80% business; 20% technical) IoT Foundations (31 mins) (20% business; 80% technical) Prepare for cloud security by using the Microsoft Cloud Adoption Framework (39 mins) (80% business; 20% technical)	Courses Data Science Fundamentals (52 mins) (50% business; 50% technical) AI for Business Leader (1 hr 31 mins) (100% business) Enabling Digital Transformation (32 mins) (20% business; 80% technical)	Courses (80% business; 20% technical) Describe security and compliance concepts (23 mins) Describe identity concepts (20min) Describe basic cybersecurity threats, attacks, and mitigations (21 min) Describe authentication and authorization in cybersecurity (18 min) Describe network-based threats and mitigations (28 min) Describe device-based threats and security controls (17 min) Describe application-based threats and how to protect against them (20 min)

ONGOING COACHING BY MICROSOFT VIA TEAMS COMMUNICATIONS CHANNEL

- Enhance competency for technology adoption
- Experience collaborative, agile, secure learning platforms
- Insights and benchmark analysis : pre and post assessment tool and data intelligence to understand own level of digital/technical literacy based on global benchmark

Data-Driven Organization



- Exploratory discussion with CADS for :
- data-driven maturity assessment and alignment
 - skills discovery

To enable digital transformation & improve workforce digital competency

Roadmap Towards Digitalization

The Goal at The End Of The 3rd Year Is To Drive Data Driven Maturity To Level 5 at 70% workforce Digital Literacy competency for the Economic Planning Unit (EPU)

Goals	Phase 1	Phase 2	Phase 3	Phase 4
Goals	<ul style="list-style-type: none"> Assess Data-Driven Organization (DDO) maturity gap Seamless integration of DDO maturity and digital literacy requirements with OEM platform Understand workforce trends on digital skills Identify digital literacy skills gap 	<ul style="list-style-type: none"> Identify talents to be upskilled Begin talent scenario, succession, and project-based planning Visibility of talent growth on digital programs and initiative Seamless integration of DDO maturity and digital literacy requirements with OEM platform (Execute plans identified) 	<ul style="list-style-type: none"> Democratize 'digital' to the group Visibility of talent growth on digital programs and initiative Expansive directed/ self-learning More integrated talent scenario, succession, and project-based planning 	<ul style="list-style-type: none"> DDO maturity vs Digital Literacy workforce Democratize 'digital' To the group Visibility of talent growth on digital programs and initiative Expansive directed/ self-learning More integrated talent scenario, succession, and project-based planning
Desired Outcome	<ul style="list-style-type: none"> 50% of talents onboarded and completing assessments through the platform 30% growth in digital literate talents 	<ul style="list-style-type: none"> 40% growth in digital literate talents Boost talent productivity and retention 	<ul style="list-style-type: none"> 50% growth in digital literate talents Return of investment on applied skills 	<ul style="list-style-type: none"> Data-driven maturity at level 5 (highly matured data-driven organization) 70% growth in digital literate talents

Cloud-First Strategy



- Joint assessment with SAP to conduct an assessment and views for cloud adoption in the public sector
- Target to launch: May 2023

GovTech Roundtable



- GovTech Roundtable Discussion in effort to gain a better understanding of global trends and development & the issues and challenges
- Date: 13 April at Menara Prisma

Accelerating Growth of Malaysia's Digital Economy with MyC4IR



MyDIGITAL Corporation | Strategic Change Management Office (SCMO)

- On 21 September 2022, the Cabinet has approved the proposal on the establishment of World Economic Forum Center for 4IR (“MyC4IR”) in Malaysia, to be under the purview of MyDIGITAL Corporation
- The primary role and function of MyC4IR is to be the focal point to the public and private sector in the development of an ecosystem that will support the co-design of policies and regulatory framework needed in maximizing the social benefits and minimized the risks that these advanced technologies may entail
- MyDIGITAL Corporation will be the responsible agency to manage, operate and drive the following:
 - The set-up of MyC4IR
 - To establish the public-private partnership model and;
 - To optimize and leverage on the resources that are available across other WEF C4IR centers located globally

Impact of technology today requires a holistic approach to support the changes & mitigate potential risks



Policy & Governance

- New policy frameworks, agile governance models & flexible regulation are needed to realize the benefits of technology.
- C4IR Malaysia will **have exposure to new policy frameworks developed and tested by the global network of Centers.**



Technology for All

- Technology growth and adoption often exacerbates the divide between wealthy and impoverished communities
- C4IR Malaysia will consider new strategies for digital access in developing policy frameworks that spur innovation while providing **adequate social security and protection.**



Sectoral Transformation

- Emerging technology and intelligence lead to a rapidly changing ecosystem. Industries, businesses and governments must be robust and resilient to enable growth.
- C4IR Malaysia will leverage on MyDIGITAL Catalytic Projects **to drive sectoral transformation in key economic areas and government institutions.**



Sustainability

- Technology transformation can bring new **environmental challenges.** Cross-sectoral application of technologies will help increase efficiency, reduce waste and preserve the planet.
- C4IR Malaysia will also partner with the National Sustainable Development Goals (SDG) Center to ensure **long-term sustainability.**




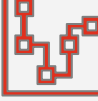


Key Technology Domains of WEF C4IR

Next Step: To further assess, evaluate, and identify MyC4IR focus areas

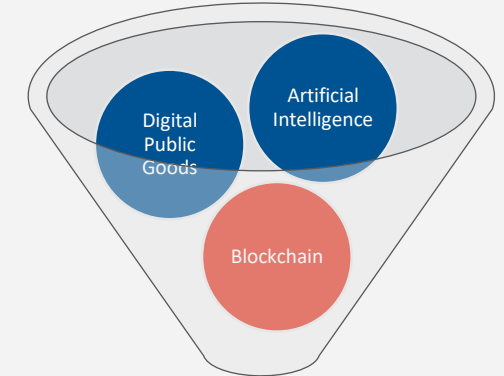
1 The global C4IR Network focuses on seven key technology domains:

-  Artificial Intelligence & Data
-  Fintech, Crypto & Digital Assets
-  Bioeconomy & Synthetic Biology
-  Sensors, Wearables & Hardware
-  Space, Communications & Aerial Technologies
-  Digital Public Goods
-  Frontier Technologies

2 Additional thematic focus areas by C4IR in other countries:

-  Smart Cities (C4IR Global)
-  Drones (Rwanda, Israel)
-  Ocean Data (C4IR Ocean)
-  Blockchain (UAE)
-  Autonomous Vehicles (Israel)
-  Cross Border Data Flow (Japan, Rwanda)

3 Malaysia's thematic focus to be jointly determined by relevant stakeholders:

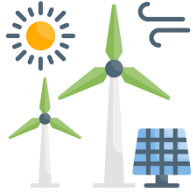


Consultation with public & private sectors, taking into account:

- Contribution to GDP
- Trends & potential growth
- National policy focus areas
- Other relevant factors

Malaysia's 5 thematic focus

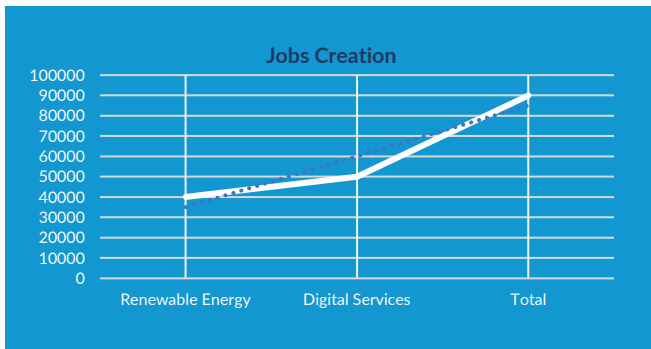
MyC4IR potential to enable these quantitative benefits



Renewable Energy

A New Renewable Energy Investment of RM 33 Million & Addressable spend in IR 4.0 (RM 33B) and Digital-related services (RM 15.9B)

B **90,000 new jobs creation** from the new talent resulting from new industries like Renewable Energies & Digital Services



Circular Economy

C New Circular Economy investment of RM 5.5 Million & unlock RM 30 Million - RM 60 Million of unrealized potential value in Circular Economy

D Rate of Recycling Rate to increase by 0.5 to 1.0% while reducing the amount of Greenhouse Emissions by 5,000 to 20,000 tonnes of CO2 from new investment in Circular Economy



4IR Technology - Mid Tier Companies

E Increased GDP from Mid Tier Companies, of RM 770 Million over 5 years, resulting from increased revenue from targeted MTCs implementing IR4.0 technologies

H Increase MTCs Profit After Tax (PAT) by RM 13 Million / Company / Year, from increased in Revenue (New Production Creation, New Business Models, Faster Route to Market) & increased productivity (efficiencies via Digitalization & Automation)

F Increase Government Income from MTCs Tax by RM 1.4 Million/Company/Year, with total projection incremental tax income of RM 3B over 5 years (for the selected MTCs)

Notes: Assumptions

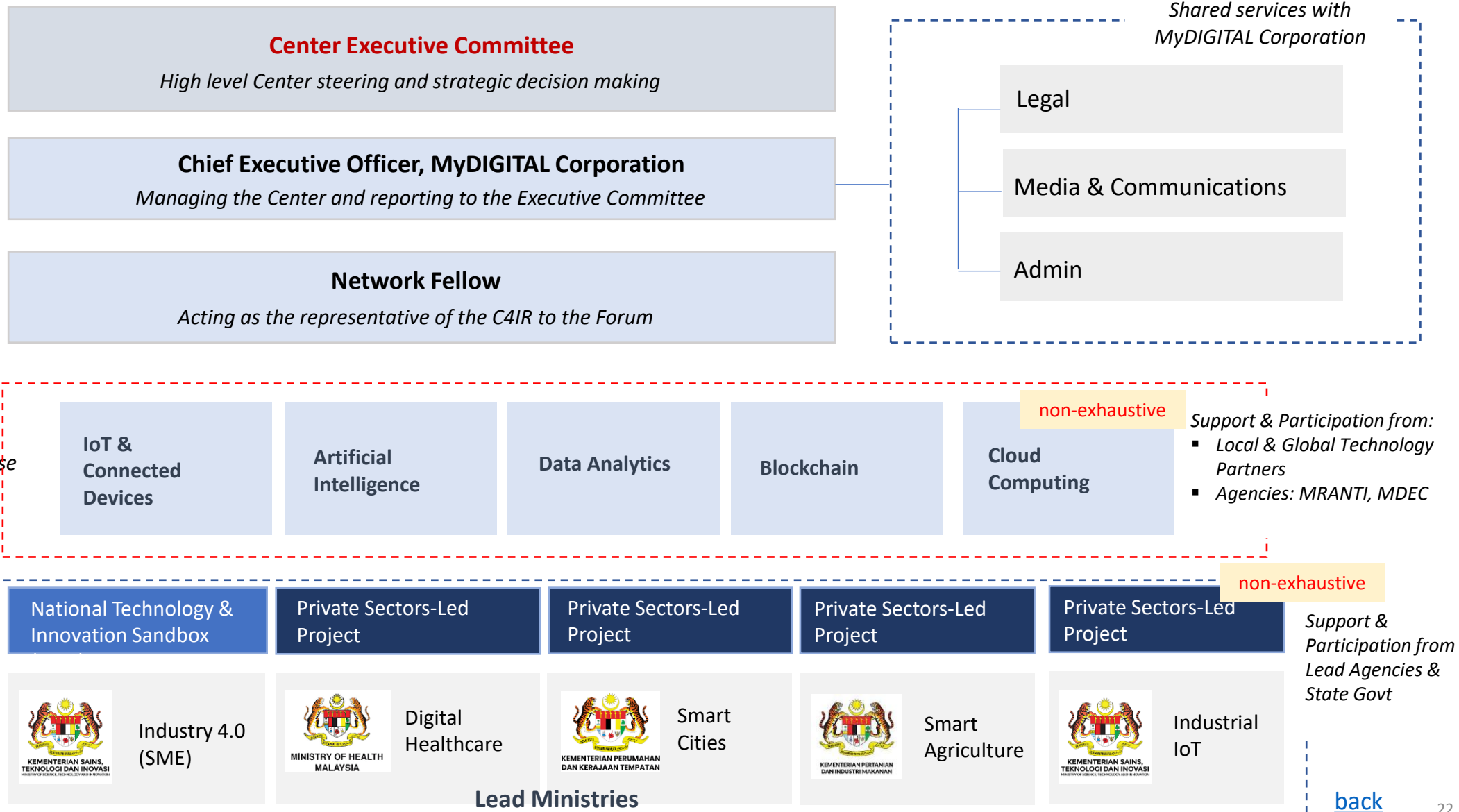
Sources :

- Item A, B & C is based on Deloitte's Analysis on secondary sources from Suitable Energy Development (SEDA), ASEAN, Economic Reports & Verdanti
- Item D & E is based on Deloitte's Analysis on secondary sources from Worldbank, Ministry of Environment and Water Malaysia, Malaysian Plastic Manufacturers Association (MPMA) & Investment Development Authority (MIDA)
- Item E, F, G & H is based on Deloitte's Analysis based on MTCs Data from Deloitte MTCDP Program and Data from SSM & MATRADE (From Mid Tier Companies Development Programme)

Proposed Public-Private Partnership model



The C4IR organization structure will leverage on existing set-up, resources & initiatives, with active participation from the private sectors and key stakeholders, collaborating openly across technology domains & industries


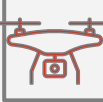

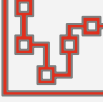




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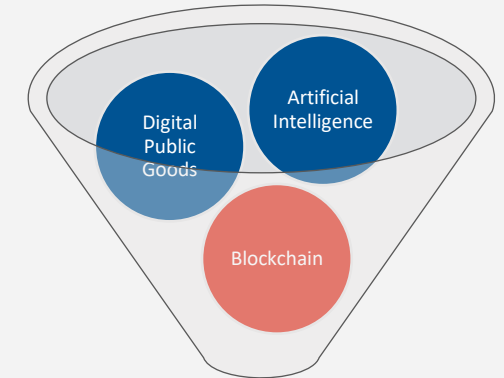
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- Contribution to GDP
- Trends & potential growth
- National policy focus areas
- Other relevant factors



Malaysia's 5 thematic focus

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