AI & CLIMATE CHANGE

MALAYSIA: BUILDING THE SKILLS THAT DRIVE SUSTAINABLE SOLUTIONS

Technology and Innovation Conclave 2.0

https://www.mosti.gov.my

PRESENTED BY
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28/01/26 - 29/01/26

Agenda

1. Background
2. Current Trends
3. Ecosystem - Talent

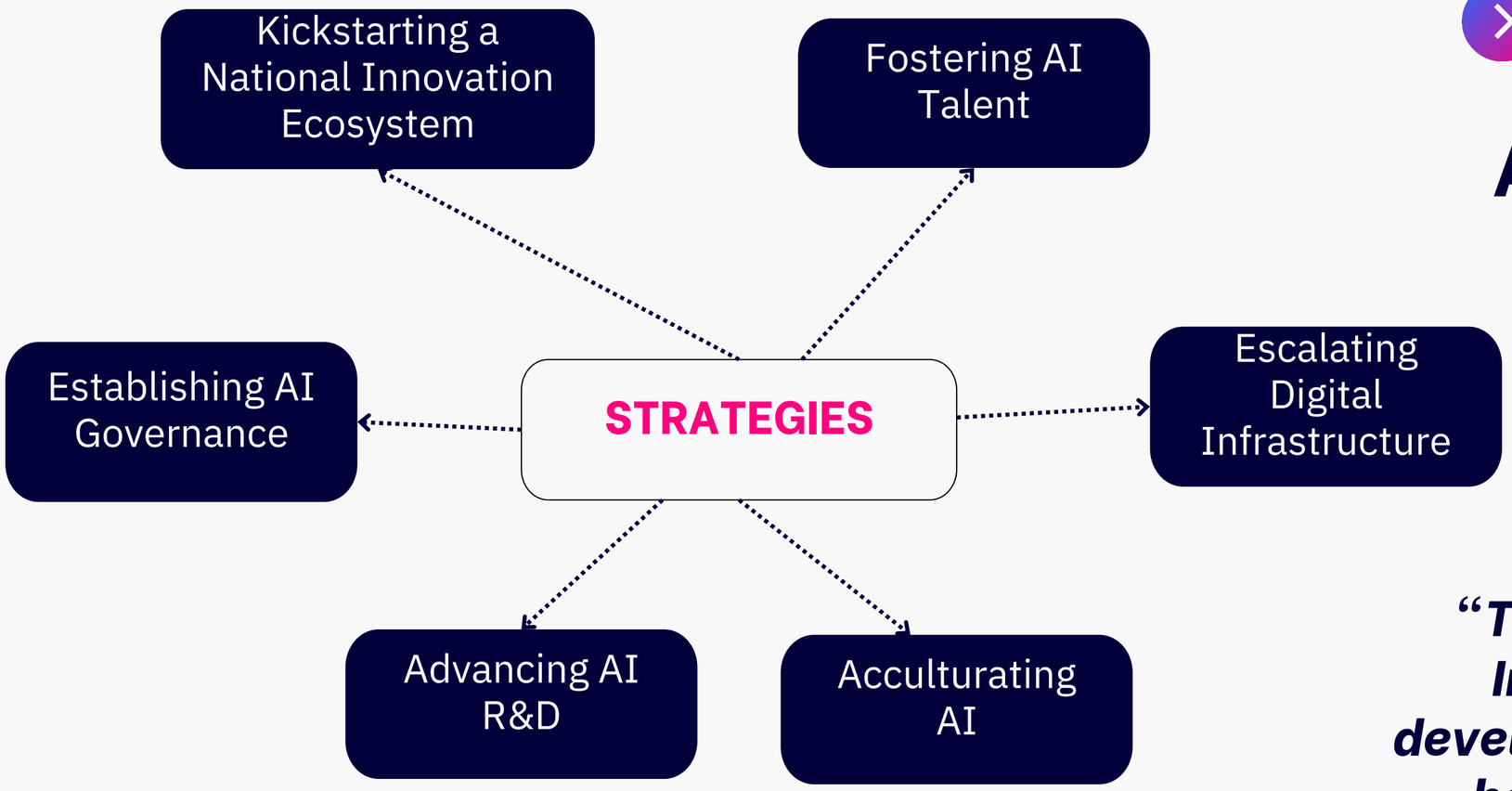
BACKGROUND

STI Focuses

- Strengthening governance of the nation’s Science, Technology & Innovation
- Leveraging STI as catalyst to address national issues and challenges
- To spur the development and application of local technology

BACKGROUND

AI-Roadmap Goal & Strategies



"To create a self-sustaining AI Innovation Ecosystem for AI development, leveraging quadruple helix collaboration guided by Responsible AI Principles."

National Priority Areas:

- ***Agriculture & Forestry***
- ***Medical & Healthcare***
- ***Public Service***
- ***Smart Cities & Transportation***
- ***Education***

Current Trends

Challenge	Opportunity	Relevance
Haze & Air Pollution	AI-powered satellite monitoring and predictive analytics	Early warnings
Flooding & Extreme Weather	Machine learning models for rainfall/flood prediction	Improved disaster preparedness
Energy Sustainability	AI-optimized renewable energy grids, smart demand forecasting	Lower carbon emissions, efficient energy use
Agriculture & Food Security	AI for crop monitoring, soil analysis, and water management	Climate-resilient farming, reduced resource waste
Urban Heat & Rising Temperatures	AI-driven smart city planning (green spaces, cooling strategies)	Better urban resilience, reduced heat stress
Carbon-Intensive Data Centres	AI + renewable energy integration for data centres	Sustainable digital infrastructure, reduced emissions

NATIONAL AI USE CASES WITHIN NATIONAL PRIORITY AREAS

NATIONAL PRIORITY AREA	NATIONAL AI USE CASES	Technology Drivers
Agriculture & Forestry	• ***AI-Driven Supply Chain Management System for Palm Oil*** • ***Autonomous Robotics Oil Palm Harvesting System***	SENSOR TECHNOLOGY
Medical & Healthcare	• ***Autonomous Vaccine Distribution & Management System*** • *Personalized Proactive Healthcare* • *Autonomous A-eye System* • *AI-Nasoalveolar (AI-Na) System*	ADVANCED INTELLIGENT SYSTEMS
Smart Cities & Transportation	• ***AI-Driven Mass Public Transport***	AUG. ANALYTICS & DATA DISC
Education	• *Quality and Inclusive Data Systems for Students Profiling* • *Personalised Learning System* • *Intelligent Automated Marking System*	
Public Service	• *Intelligent Automation in Public Services*	

AI Innovation Ecosystem

AI Governance

AI Industry

AI Consortia / AI Catalyst

AI Talent

AI Socio Economic Drivers

- Energy
- Business & Financial Services
- Culture, Arts & Tourism
- Medical & Healthcare
- Smart Cities & Transformation
- Smart Technolog & System
- Water & Food
- Agriculture & Forestry
- Education
- Environmental & Biodiversity
- Government
- IOT

6 main actors:

R&D&I

1. AI Catalyst

Governance

2. National Blockchain & AI Committee (NBAIC)

Industry & Society

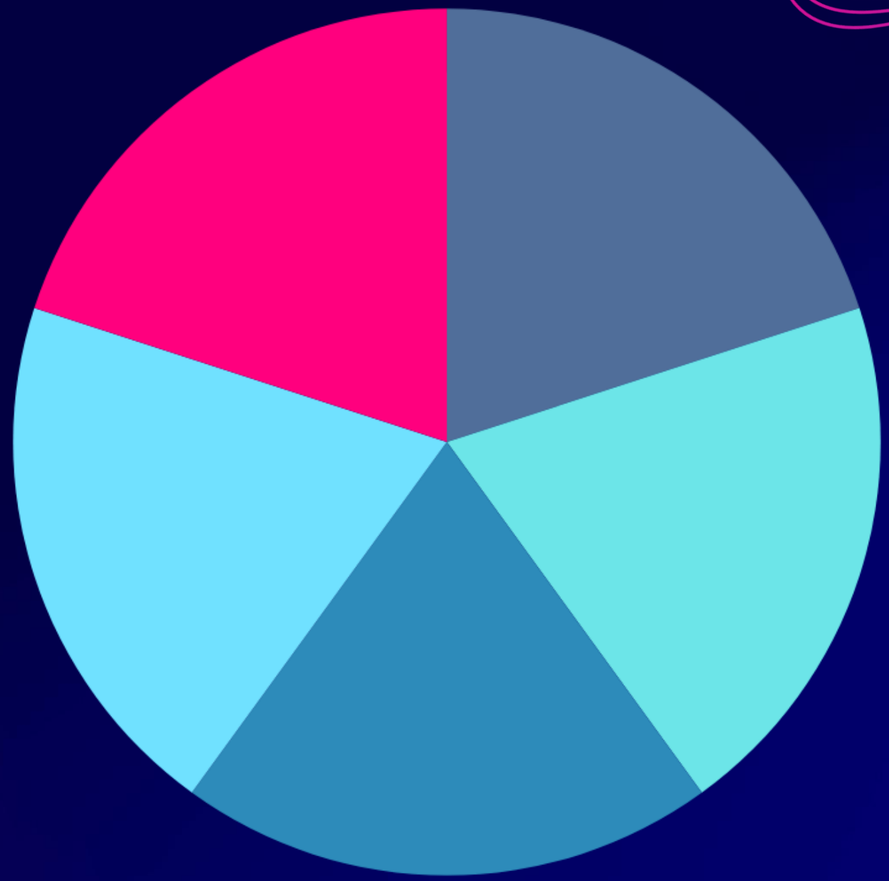
3. AI Industry
4. AI Socio-Economic Sectors

Talents

5. AI dan Data Science Professionals
6. Education and Skilling

TALENT

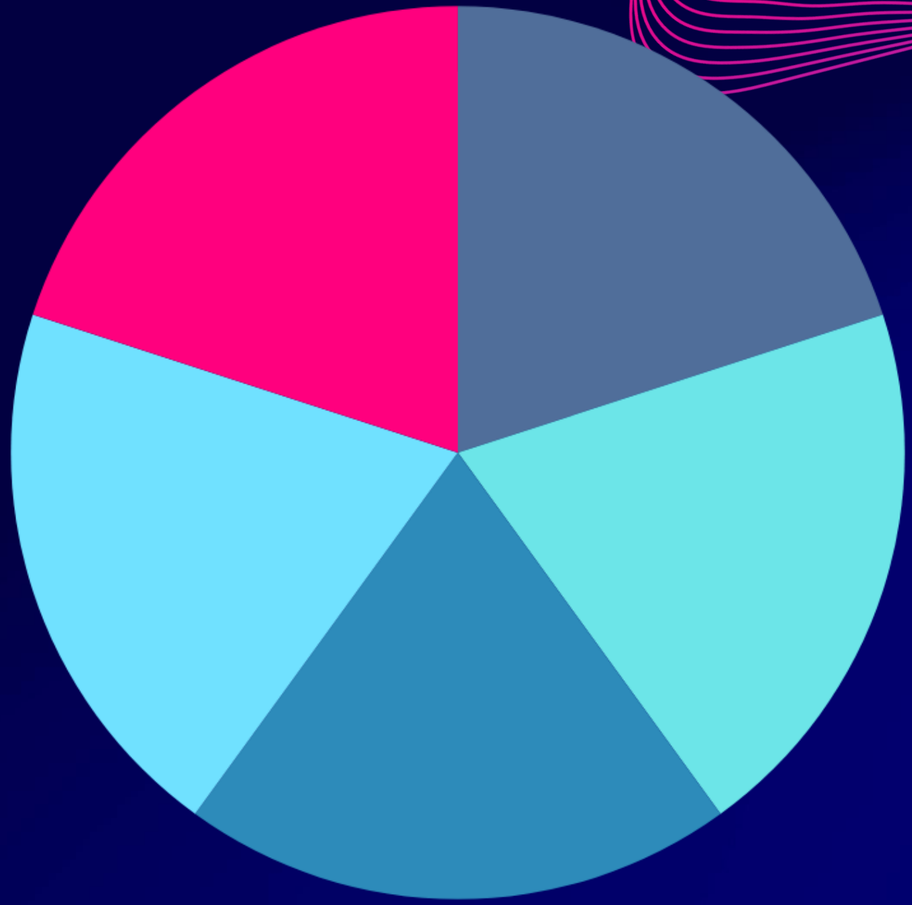
- GLOBAL MINDSET
- STRENGTHENING INNOVATIVE CAPACITY
- INSTILLING SOCIAL RESPONSIBILITY



Ecosystem

TALENT

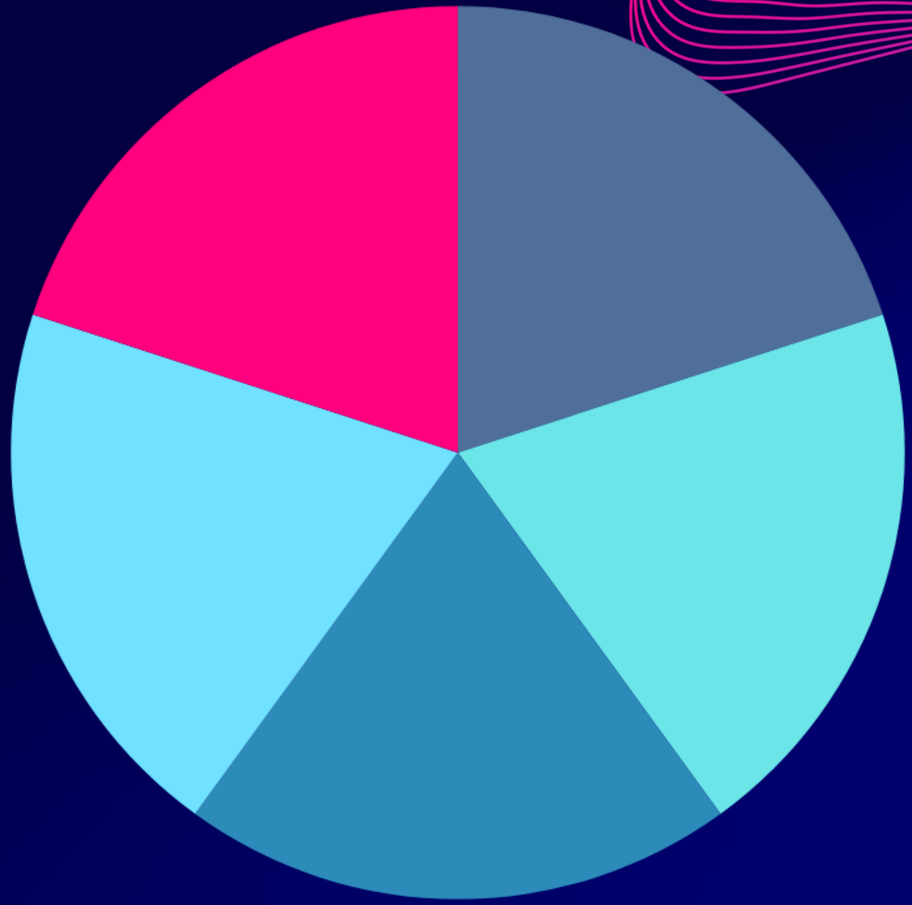
- Malaysia’s AI Talent Roadmap 2024–2030
  - Launched 10 May 2024 as a national strategy
  - Coordinates workforce, higher education, industry, and public sector
  - Aim:produce, upskill, retain AI talent
  - Aligns education providers, government agencies, and industry partners



Ecosystem

TALENT

- Malaysia as Southeast Asia’s AI Hub
  - AI positioned as a cornerstone of the economy by 2030
  - Driving adoption in healthcare, education, agriculture
  - Investments in AI start-ups, research hubs, digital transformation policies
  - Projected contribution: US$115 billion (RM530 billion) in 5 years



Ecosystem

CLOSING THOUGHT

“AI WON’T SOLVE CLIMATE CHANGE—PEOPLE WILL, USING AI RESPONSIBLY.”

THANK YOU!

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