

GROUP TWO

PITCH 2024



# CARA

COLLABORATIVE APPROACH TO REIMAGINING AI EDUCATION

“MALAYSIA PUNYA **CARA**”

*MALAYSIA'S WAY*

23 - 27 SEPTEMBER 2024  
KUALA LUMPUR - MALAYSIA

# TEAM MEMBERS

**Claire Samanna**  
Health



**Gianluca Vidali**  
Chemistry



**Khoo Lin Sze**  
IT



**Mahnaz Laghaei**  
Civil



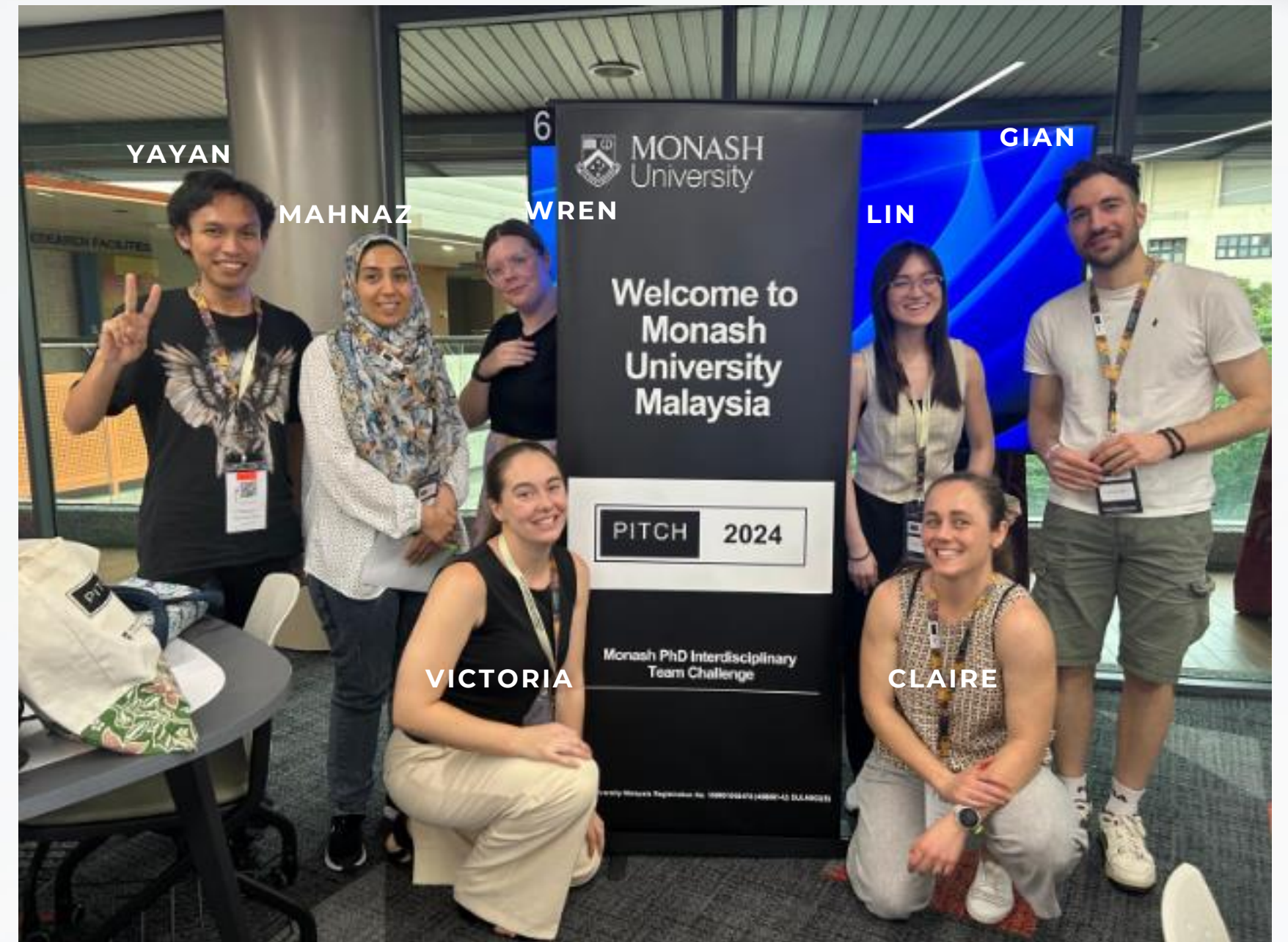
**Victoria Stock**  
Chemistry



**Wren Smith**  
Education



**Yayan Puji Riyanto**  
Business





# THE CHALLENGE

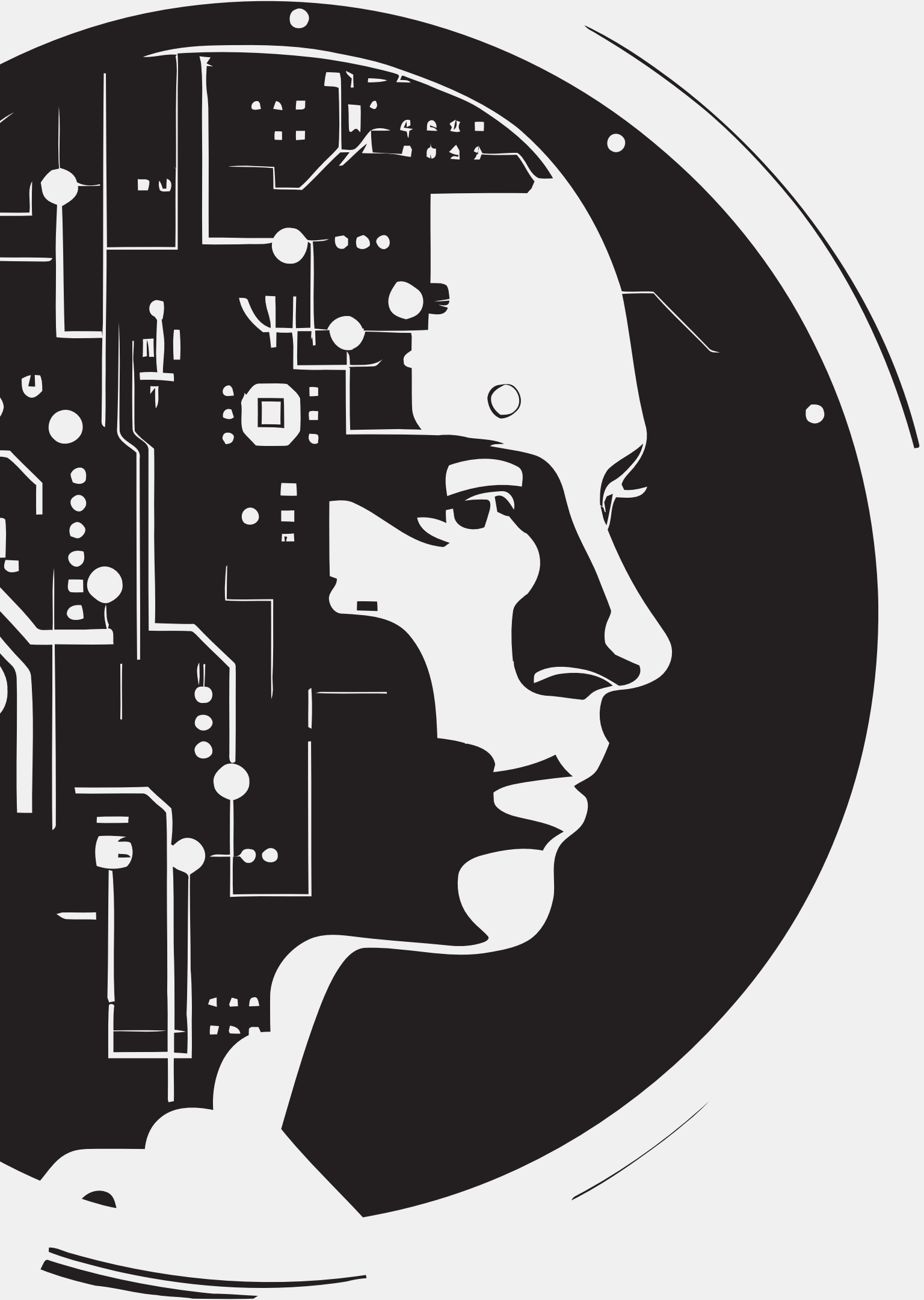
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Consider an **intervention or opportunity** that can enable the creation of **practical, scalable solutions** balancing rapid **'AI-driven technologies'** with **inclusive development**, shaping Malaysia's socio economic landscape for **future decades**.



# AI IS ...

- The simulation of **human intelligence** by **software-coded** techniques
- **Technology** that enables computers and machines to **simulate human** learning, comprehension, **problem solving**, decision making, creativity and **autonomy**.

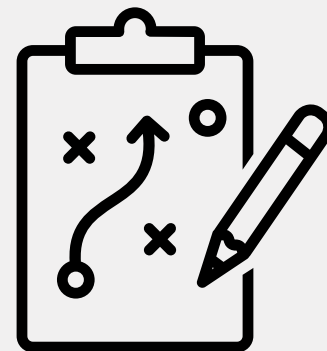


# MALAYSIAN **AI** LANDSCAPE



## Malaysia wants to be a world-leader in AI

The Asia-Pacific region stands to gain USD 3 trillion by 2030 if AI solutions are **adopted** and effectively implemented.



## Government Plans for AI

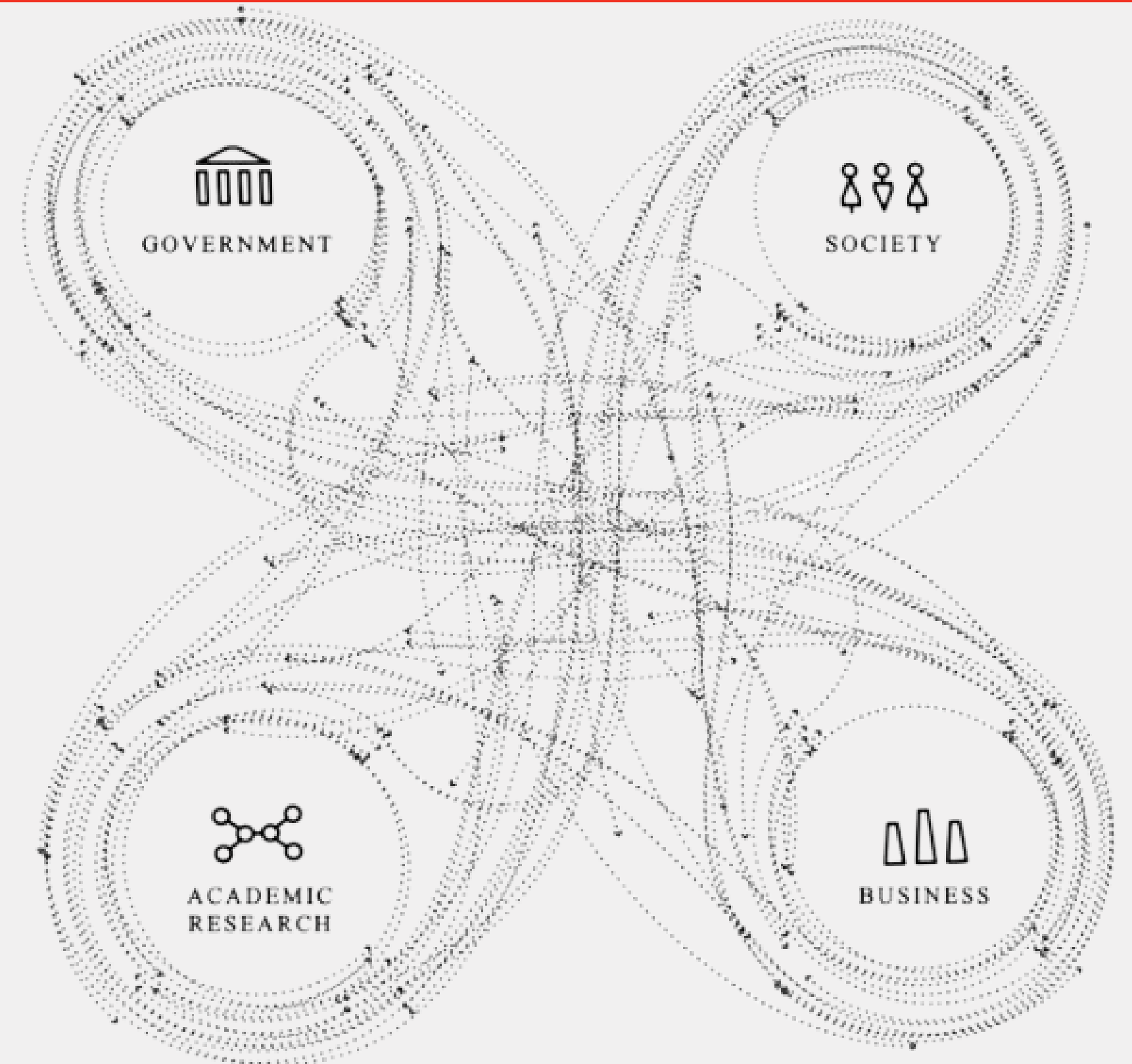
Focus on specific strategy documents: Artificial Intelligence Roadmap, Digital Economy Blueprint, Ekonomi Madani, Industrial Master Plan 2030, Twelfth Malaysia Plan

# MALAYSIAN LANDSCAPE

## Quadruple Helix:

In the planning documents\* four main stakeholders have been identified as vital in AI implementation

- Government
- Academia
- Industry
- Society



\*) Malaysia's AI-RMAP, DEB, Industrial Master Plan 2030

(Fig.: Taratori et al., 2021)

# AI IN MALAYSIA

## CURRENT FOCUSES



Government & Smart Cities



Finance



Healthcare



Agriculture



Manufacturing automation



Education (by 2027)

## CURRENT GAPS



Small business



Rural areas



Cultural heritage and tourism



Small retail sectors



Engaging minority groups

## In reality

AI has yet to deliver significant productivity gains despite its potential.

Malaysia risks missing out on opportunities if AI adoption is not optimised and tailored to local needs.

There is a large societal gap in the understanding of AI.

# Three words that come to mind when you hear 'AI'

From the people of Kuala Lumpur, September 2024

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\*Verbal consent was provided prior to filming



Robot, Data,



# THE QUADRUPLE HELIX AND THE CHALLENGE

## Malaysia's current weaknesses

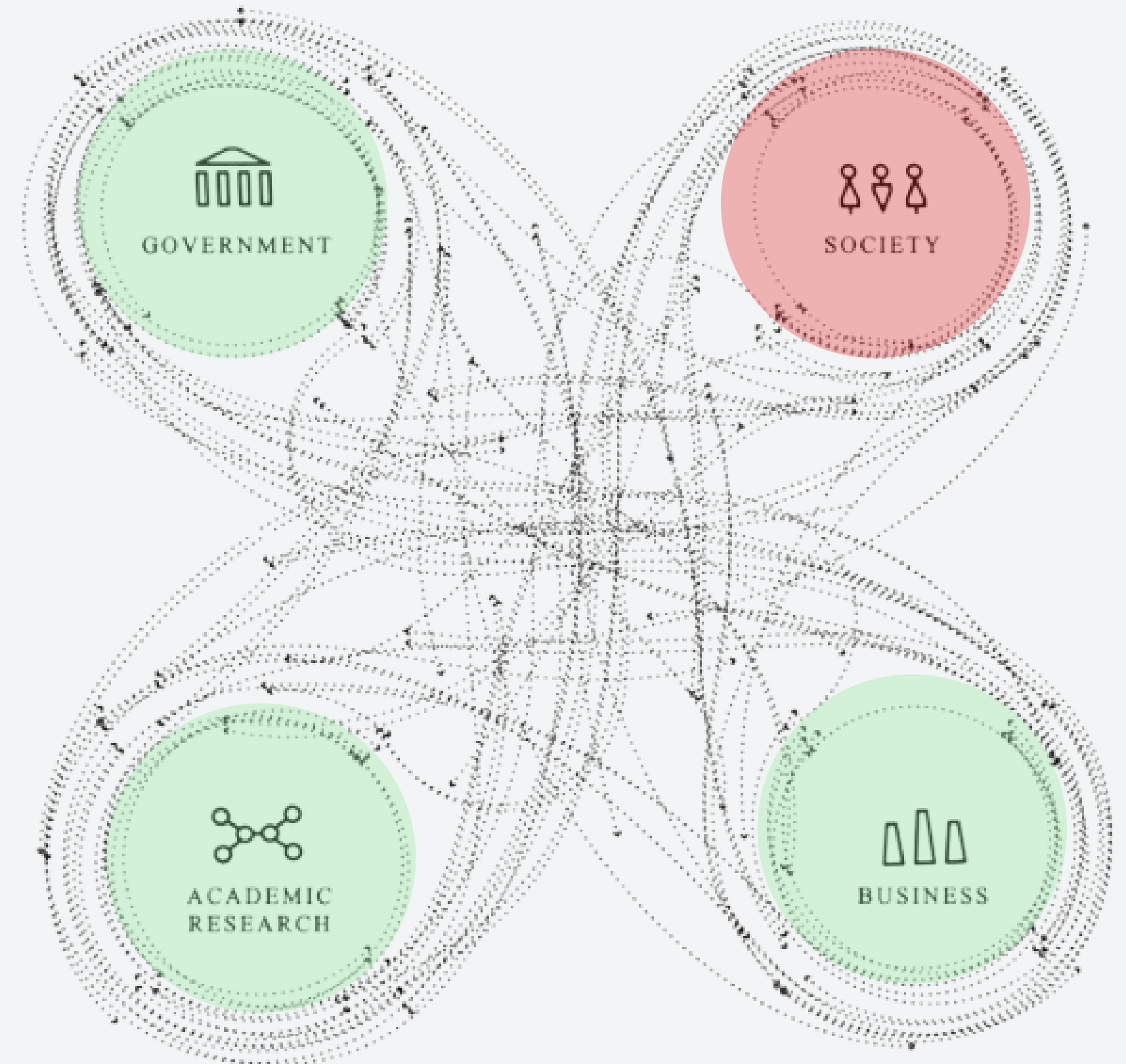
- Lack of focus on societal engagement
  - Including regional/rural areas
  - Including minority groups
- Lack of investment in future generations

## Our challenge:

- Ensure inclusive development of AI technologies across future decades

## Our focus:

- Offer an intervention in the implementation phase of educational hubs to ensure inclusive development
- Offer an opportunity to students and future AI leaders to continue engagement

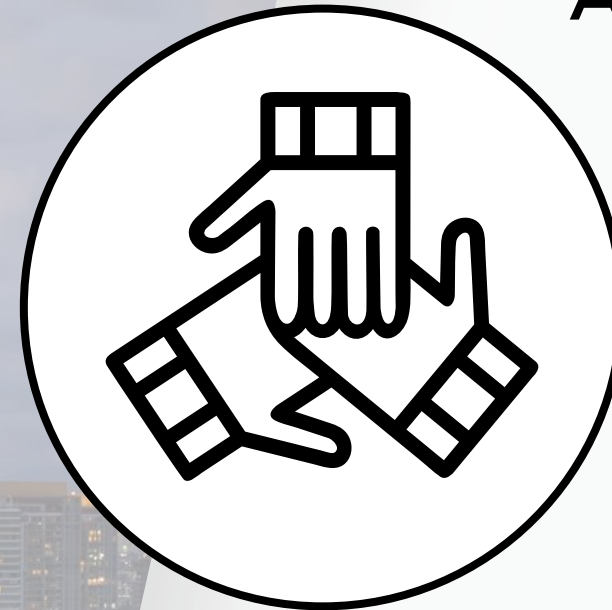


(Fig.: Taratori et al., 2021)



# CARA

## COLLABORATIVE APPROACH TO REIMAGINING AI EDUCATION



### **CARA for Educators**

Empowering educators to support student critical thinking around AI



### **CARA CHALLENGE**

Empowering students to contribute to the development of AI solutions across Malaysia

“Malaysia Punya  
**CARA**”  
*Malaysia's way*

# SOCIETY, INCLUSION & AI EDUCATION

## S4.1 Offering Comprehensive and Inclusive AI Education

Malaysia  
National AI  
Roadmap  
2021 - 2025  
(AI RMAP)

Targeted  
Outcomes

- Integrate AI education in Science, Technology, Engineering, Arts, and Mathematics
- Integrate AI into university undergraduate programs **beyond** computer science and engineering
- Emphasis on Principles of Responsible AI: reliability, security, **inclusiveness**, **pursuit of human benefit**

- Collaboration between the quadruple helix
- Inclusive development



S4.1 Offering Comprehensive and Inclusive AI Education

Malaysia  
National AI  
Roadmap  
2021 - 2025  
(AI RMAP)



Gaps in Implementation:  
Societal Inputs for Inclusive Development

- Differences in education levels and socioeconomic situations
- Differences in knowledge, needs, and motivations
- Teacher-centred educational practice

- Inclusive Development
- Collaboration between QUAD

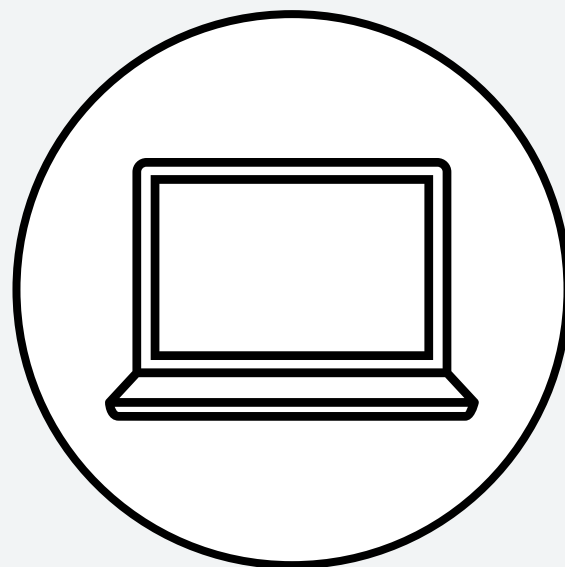
Targeted  
Outcomes

# CARA FOR EDUCATORS



## Collaborative & Critical Thinking Model

- Support educators to develop a framework for **AI critical thinking**: problem-solving, case studies
- Promote a shift from teacher-centered practice to **collaborative learning** environments
- Collaboration with Malaysia Board of Technologists (MBOT): **industry** expertise and insights
- Engage **community leaders**: local adaptations



## Collaborative Programs

- Introduction to AI courses with Raspberry Pi Foundation
- Teacher and student workshops with Experience AI
- AI untuk Rakyat
- Penang AI Education Hub
  - AI for schools program

# CARA FOR EDUCATORS

## Addition of Scenario-Based Learning within professional Development



- Consider **AI applications** to **local needs** and challenges
- Critically analyze **ethical and societal implications** of AI
  - Jobs, education, and ethical dilemmas specific to local contexts

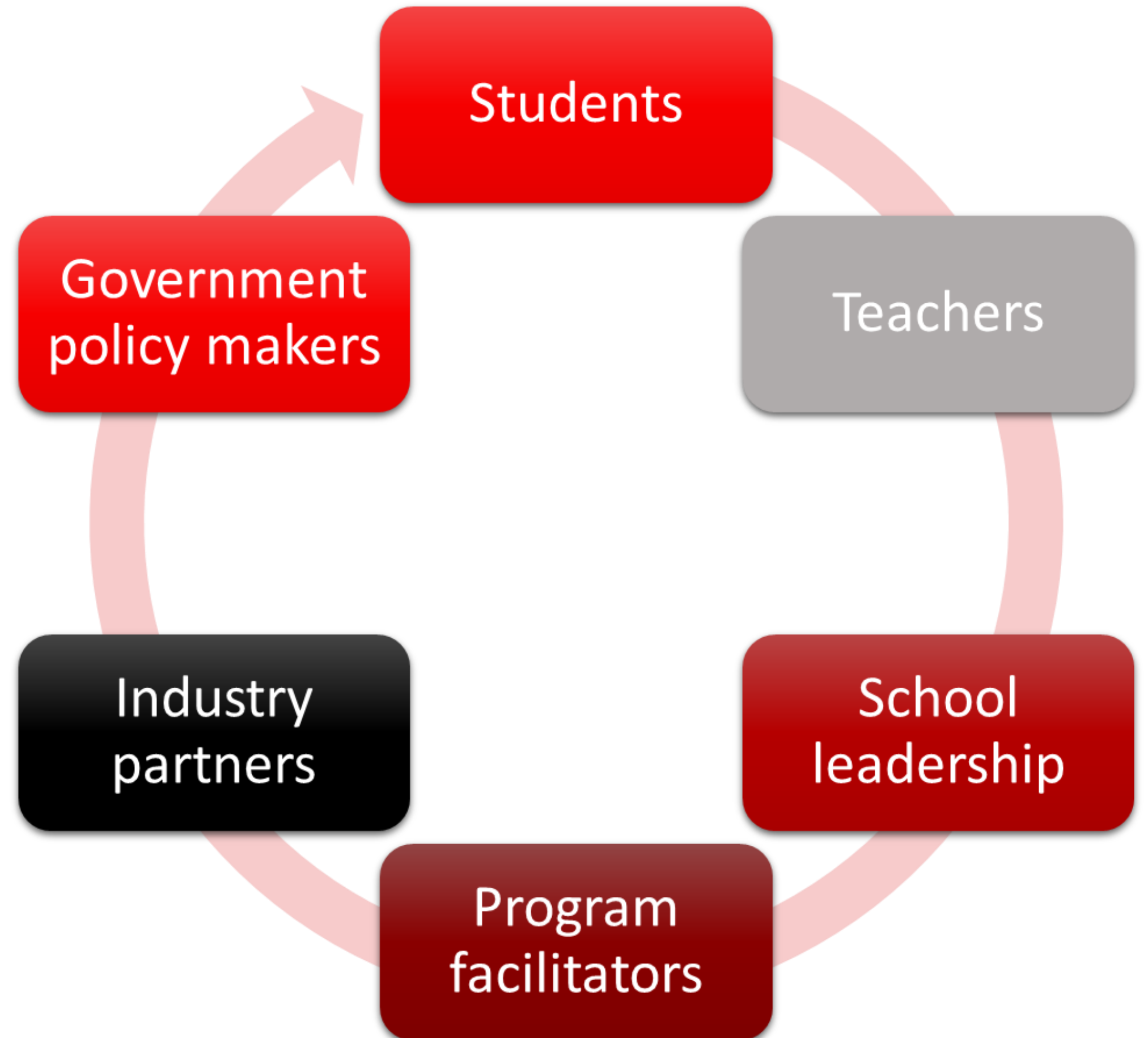
## Opportunities for peer networks



- **(State and District Level)** Teacher Activity Centres and Resource Centres: share resources, ideas and experiences in producing teaching materials
- **(National and Global Level)** Open-Educational Resources: open-source resources for sharing case studies

# CARA FOR EDUCATORS

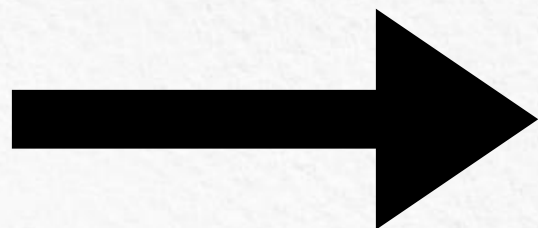
Establishing an **open channel** of communication between **teachers** from all regions of Malaysia and **curriculum decision-makers**, extending through 2027 and beyond, to support the integration of **AI** into school education.



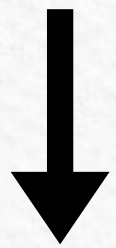


S4.1 Offering Comprehensive and Inclusive AI Education

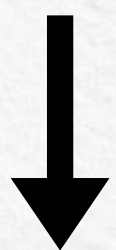
Malaysia National AI Roadmap 2021 - 2025 (AI RMAP)



Collaboration between teachers and industry experts



Professional development for educators



Ongoing feedback



- Inclusive Development
- Collaboration between QUAD

Targeted Outcomes



# CORE VALUES



## Collaboration (Cipta)

Co-create solutions by engaging the societies



## Accessible (Akses)

Enhances accessibility for inclusivity



## Reflective (Refleksi)

Reflective of societal needs



## Application (Aplikasi)

Promotes practical applications

3RD-23RD OF NOVEMBER 2025

# CARA CHALLENGE

Collaborative Approach to Reimagining AI Education



Are you ready?  
Your 2 weeks starts now!

Use AI to tackle your community's problems and you could win a trip to Google Headquarters in California, USA.

Enter your submissions to [CARA.challenge@CARA.com](mailto:CARA.challenge@CARA.com)



# Challenge

ent for tertiary students; 2-  
primary and secondary students.

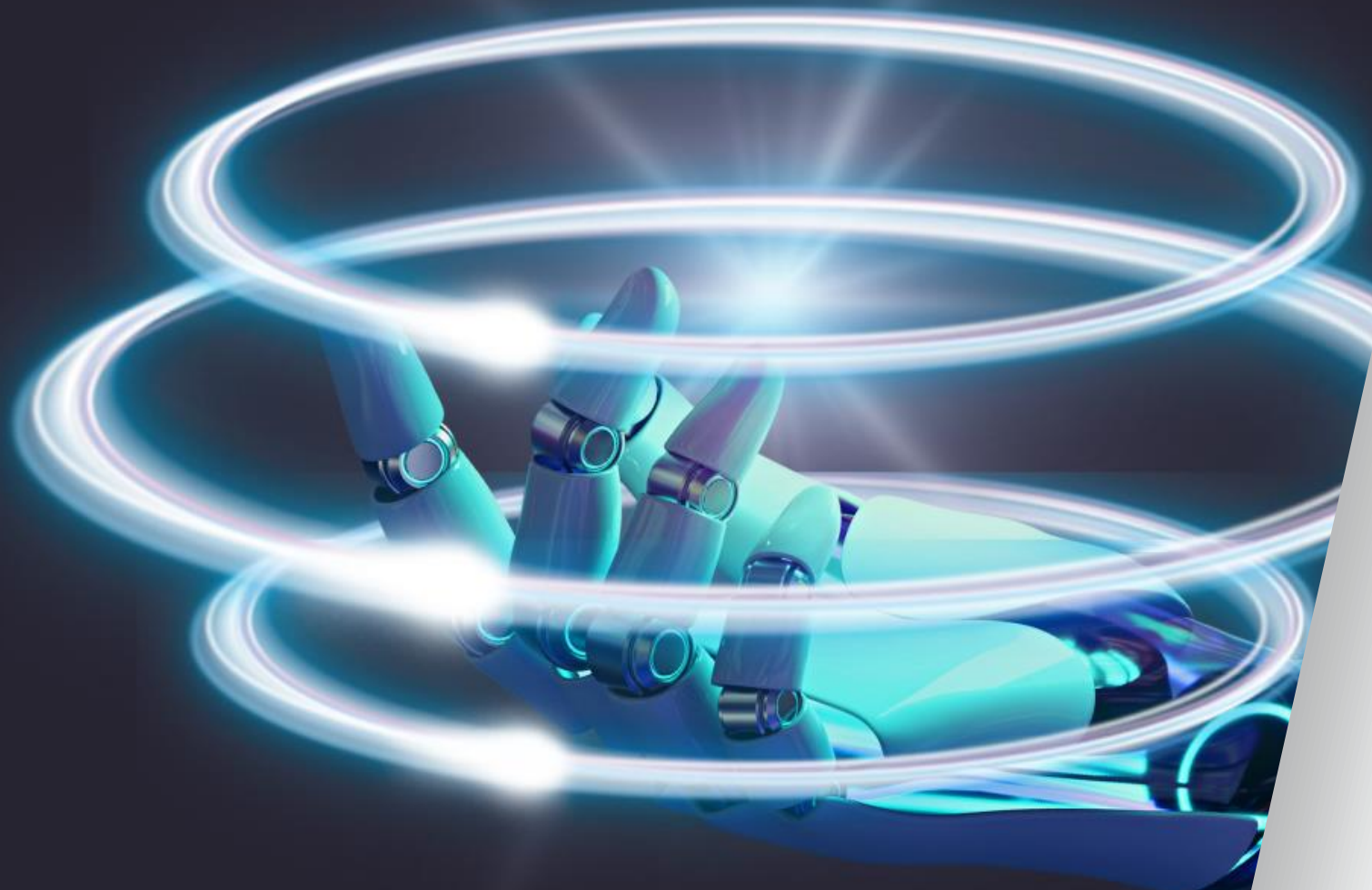
introductory AI activities like  
es or teaching educators to  
(or Malaysia).

Students work with local  
real-world problems using AI

Students tackle nationwide  
(MOSTI).

# CARA CHALLENGE

Collaborative Approach to Reimagining AI Education



Are you ready?  
Your 2 weeks starts

Use AI to tackle your community's problems

## CARA Challenge Incentives

### Primary

- Funding for prototype implementation
- Monetary Prize or Laptops/Technology
- Class trip to Monash University Malaysia for a tour of AI facilities/Q&A with an expert

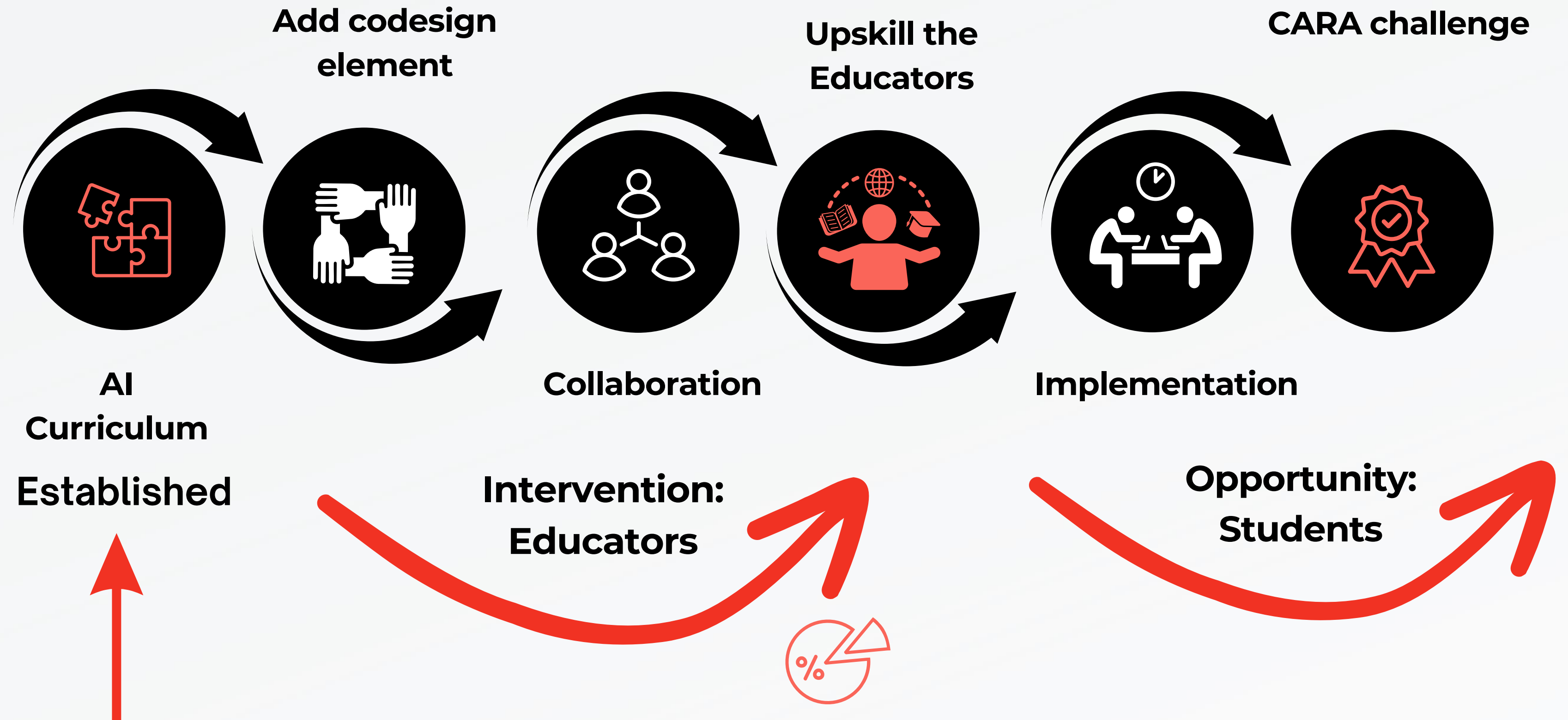
### Secondary

- Funding for prototype implementation
- Individual/Team monetary prizes
- Individual/Team government or industry shadow day (MDEC or MOSTI)

### Tertiary

- Trip to California to visit Google headquarters (Funded by MDEC or MOSTI)
- Individual monetary prizes & Software

# CARA STRATEGY



# PROJECT TIMELINE



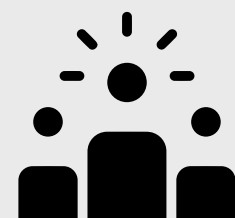
**2025**

Launching of the project at Monash Malaysia & UiTM, starting pilot projects in schools in Selangor



**2027**

CARA implemented across most of the schools and universities in West and East Malaysia



**2029**

Increasing the number of financial partners, improving collaboration with universities overseas.



**2031**

CARA implemented for all the universities and schools in Malaysia.

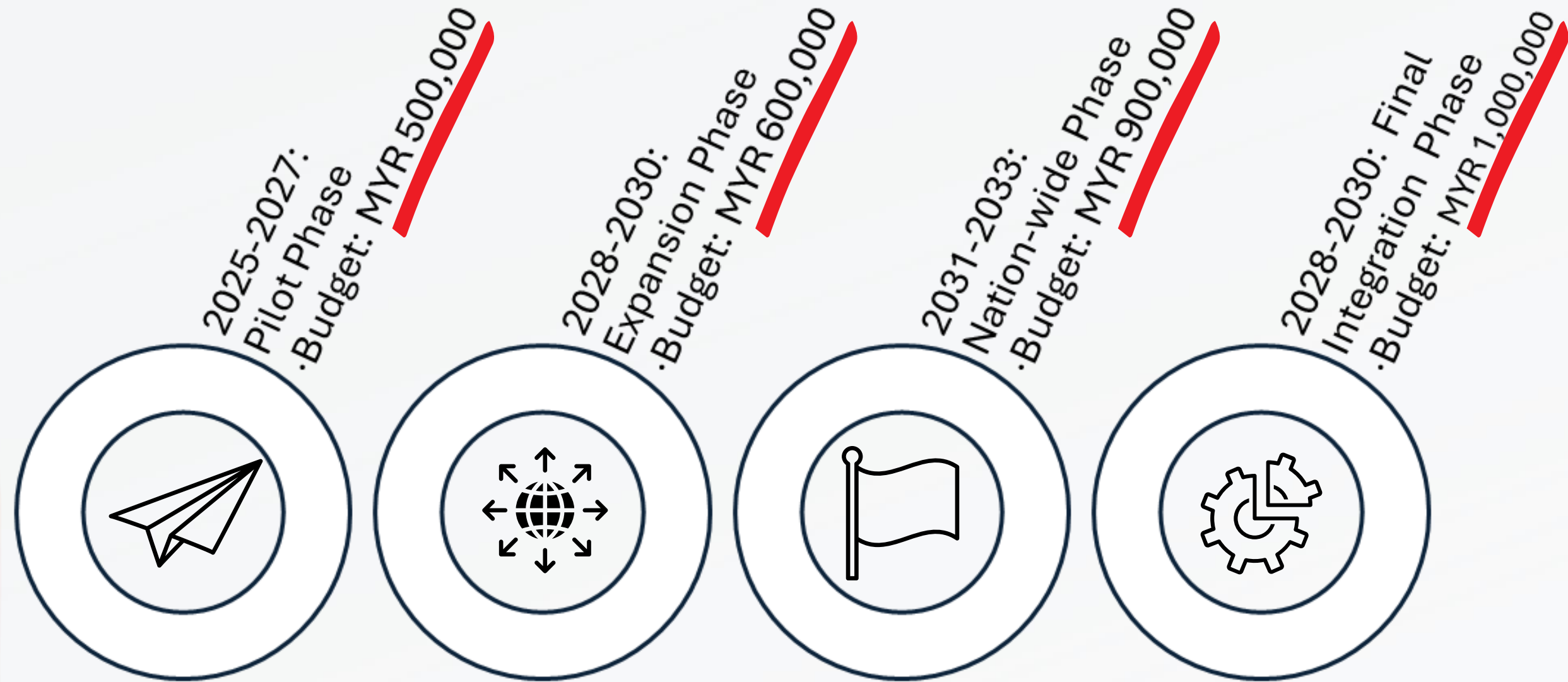


**2033**

CARA become a central part of the Malaysian education system.



# BUDGET FORECAST





# POTENTIAL FUNDING OPPORTUNITIES



KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI



# CARA IN A NUTSHELL...



\*) VIDEO GENERATED BY AI USING PROMPTS

# TERIMA KASIH (THANK YOU)



GIAN

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Business

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**GROUP TWO**

**PITCH 2024**

