



# Innovating with Space: How GIS Powers Digital Transformation Across Industries

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# Introduction

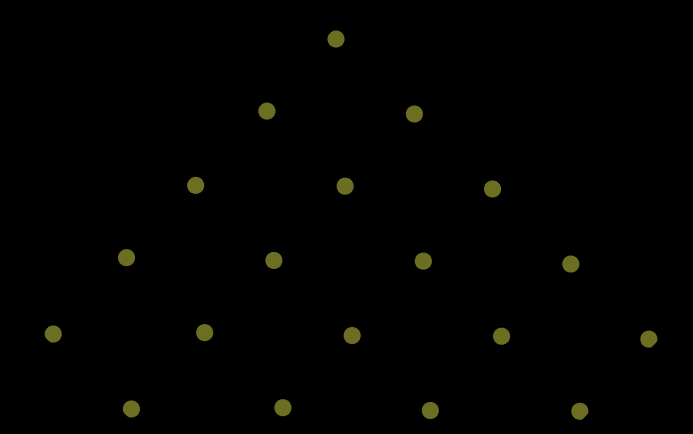
## GIS: A NICHE SYSTEM?

GIS is a technology that is used to create, manage, analyse, and map all types of location data





# Perceptions



1

GIS applications should  
only be developed on GIS  
Platforms

2

Real GIS applications can  
only be developed by GIS  
Professionals

3

Advancements in GIS  
academic research lead  
to advancements and  
acceptance of GIS in  
industries

# GIS

A DIGITAL TRANSFORMATION

ENABLER

Centralized platform for cross-industry integration

Multi-dimensional data processing in real-time

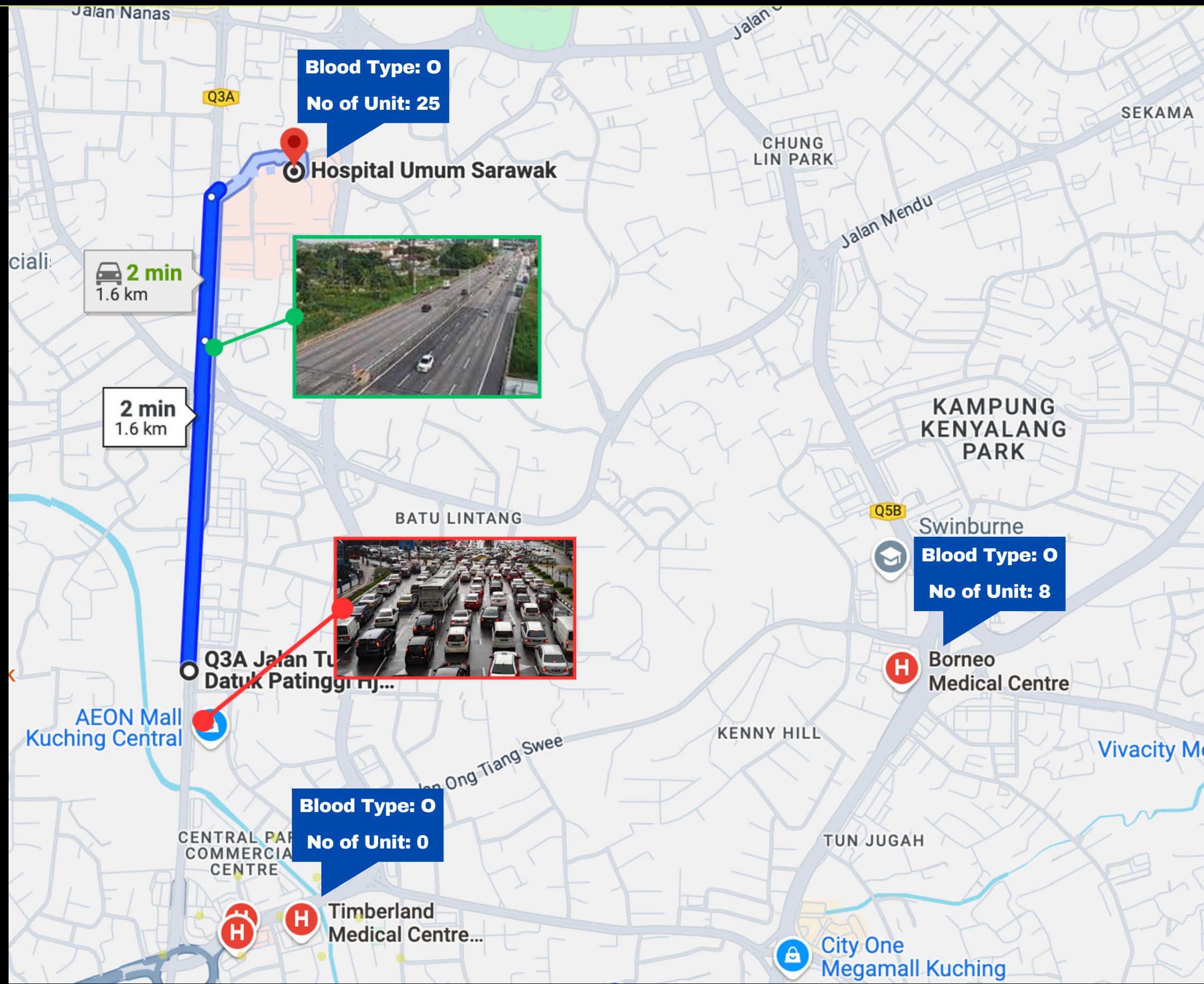
Automation and data flow across enterprise systems

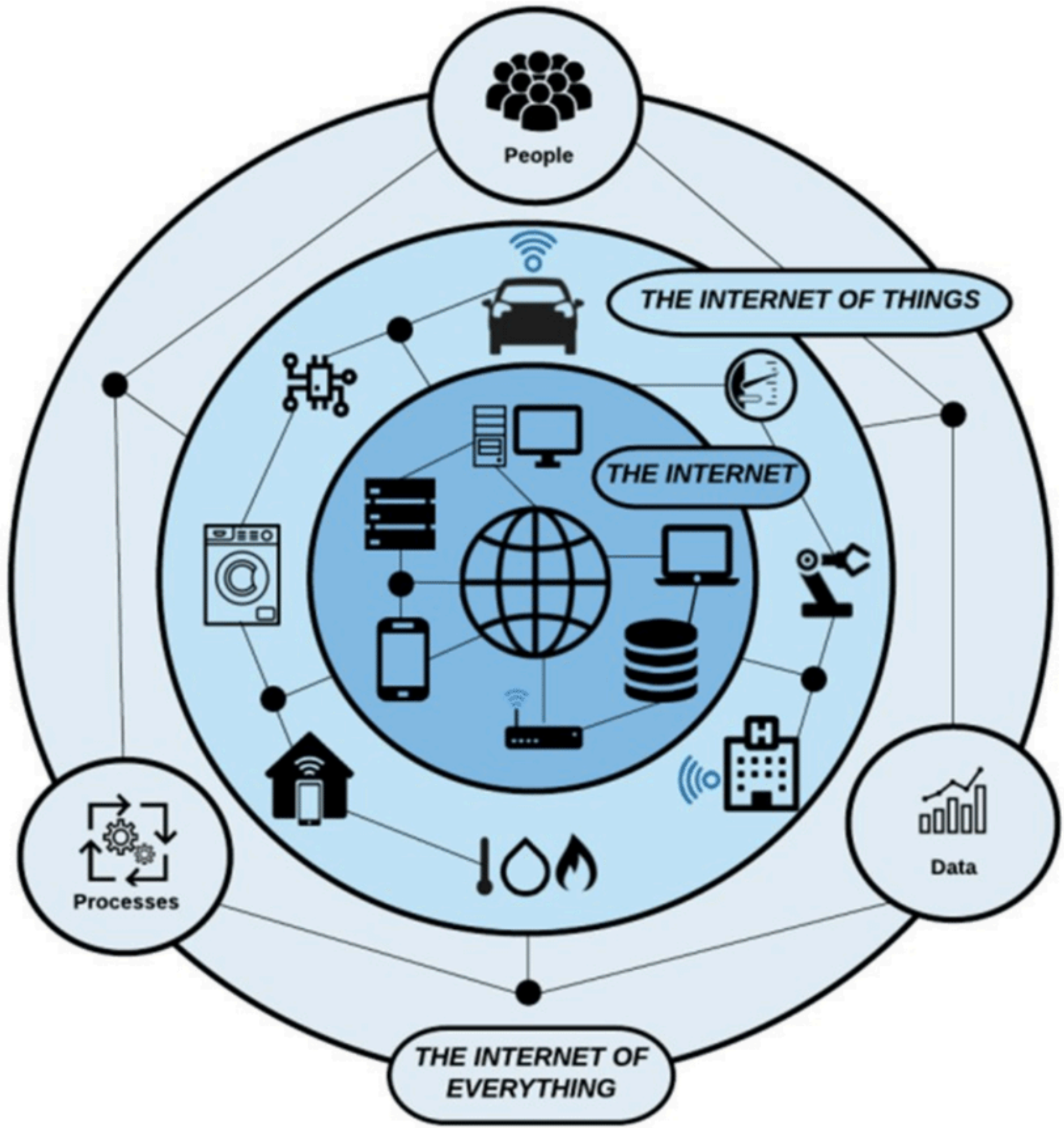


# Location Intelligence: Real-Time and Predictive Analytics

Predictive actionable spatial insights

Combining GIS with machine learning and collective intelligence for real-time decision-making



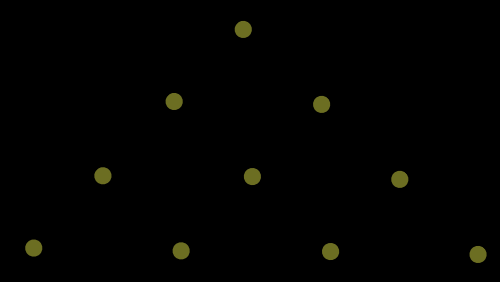


## Spatial Data Infrastructures and the Future of Data Interoperability

The importance of real-time data interoperability

Interoperable and Open data frameworks

Scaling GIS data across platforms and institutions



# Digital Twins for Future Cities

Real-time monitoring and scenario planning

Smart city operation management

**PlugSecurity**  
(n), the plugins for Soft City

System Status: CCTV (7), Cooling (0), Server (0), PSD (0), Elevator (0), Fire Alarm (1), Air Conditioning (1), Access Control (1), Environmental (1), etc.

| Alert Type  | Critical          | Major                   | Minor  |
|-------------|-------------------|-------------------------|--------|
| Alert Count | 1                 | 1                       | 1      |
| Alert ID    | Alert Description | Alert Time              | Action |
| AC-4        | 공조시설 화재           | 2019. 8. 20. 오후 8:58:54 | 확인     |
| RC-01       | 냉동기 화재            | 2019. 8. 20. 오후 8:58:54 | 확인     |
| AC-1        | 에스컬레이터 고장         | 2019. 8. 20. 오후 8:58:54 | 확인     |

Temperature Graphs: Total Temperature, etc.

**SDEC** CENTRE OF EXCELLENCE  
Digitalising Sarawak

**SDEC Technology Accelerator**

**DIGITAL RESEARCH & TECHNOLOGY TRACK**

**50** University Spin-Offs  
**1,500** research talents

**UNIVERSITY & DIGITAL R&D**  
IP on Digital Technology  
Digital Talent Development

**TECHNOLOGY VALIDATION**  
Digital Testbeds and Living Labs

**IR4.0**  
PROTOTYPING LAB

**Science On Wheels**

**STEM INITIATIVES**  
STEM and Digital Upskilling Programs for Schools

**SARAWAK DIGITAL**

**INDUSTRY LINKAGE**

**LAUNCH SARAWAK**  
Malaysian Business Angels Network (MBAN) Sarawak Chapter

**STARTUP & MSME DIGITALISATION TRACK**

**500** High Impact Startups  
**80%** of SMEs Digitalised

**SARAWAK DIGITAL INNOVATION HUBS**  
Development and Digital Content Programs  
Digitalization of Startups and SMEs

**ACCELERATOR & MARKET ACCESS**  
Scale up programs with partners with investment potentials

**DiUA**

**SME Digitise!**

**IMPACTGARAGE**



# Shaping the Future of GIS

**1**

Driving innovation through inter-disciplinary collaborations

**2**

Expanding GIS into new applications and industries

**3**

Collaborating across academia and industry



# Thank You

For Your Attention

