

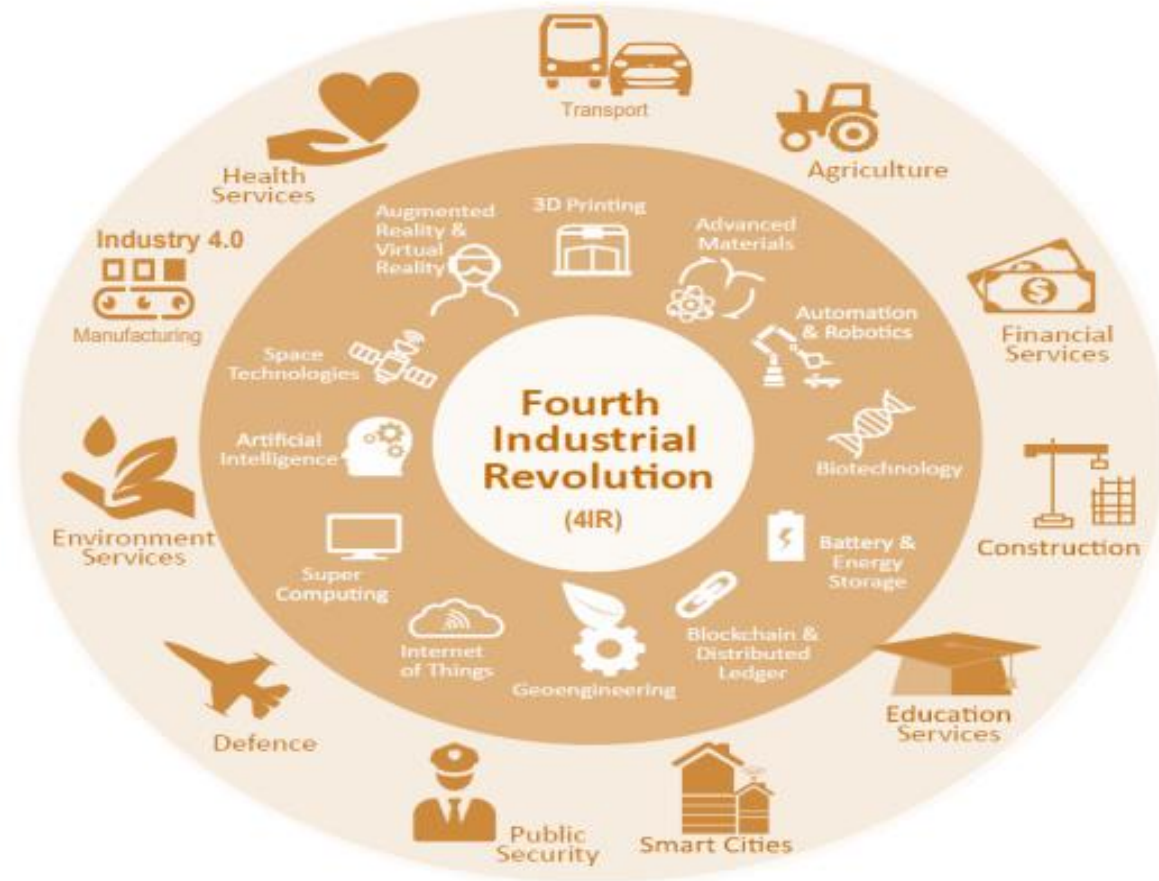
Emerging Technology (ET) and Its Application in formulating the Future Environment



Motivation For the Study

■ What is Emerging Technology?

- Emerging Technologies (ET) include a variety of technologies or its applications such as educational technology, information technology, nanotechnology, biotechnology, robotics, and artificial intelligence.^[note 1]
- New technological fields may result from the technological convergence of different systems evolving towards similar goals especially in related to technologies that is based on Industrial Revolution (IR) 4.0 . (1-Wikipedia)



Fourth Industrial Revolution (AIR) (Mid-Term Review of the Eleventh Malaysia Plan).

IR 4.0

Our Focus





Applications Of Blockchain



Digital IDs



Bitcoin



Real estate



Voting



Payment and
Transfers



Health Care

Internet of Things



Online music

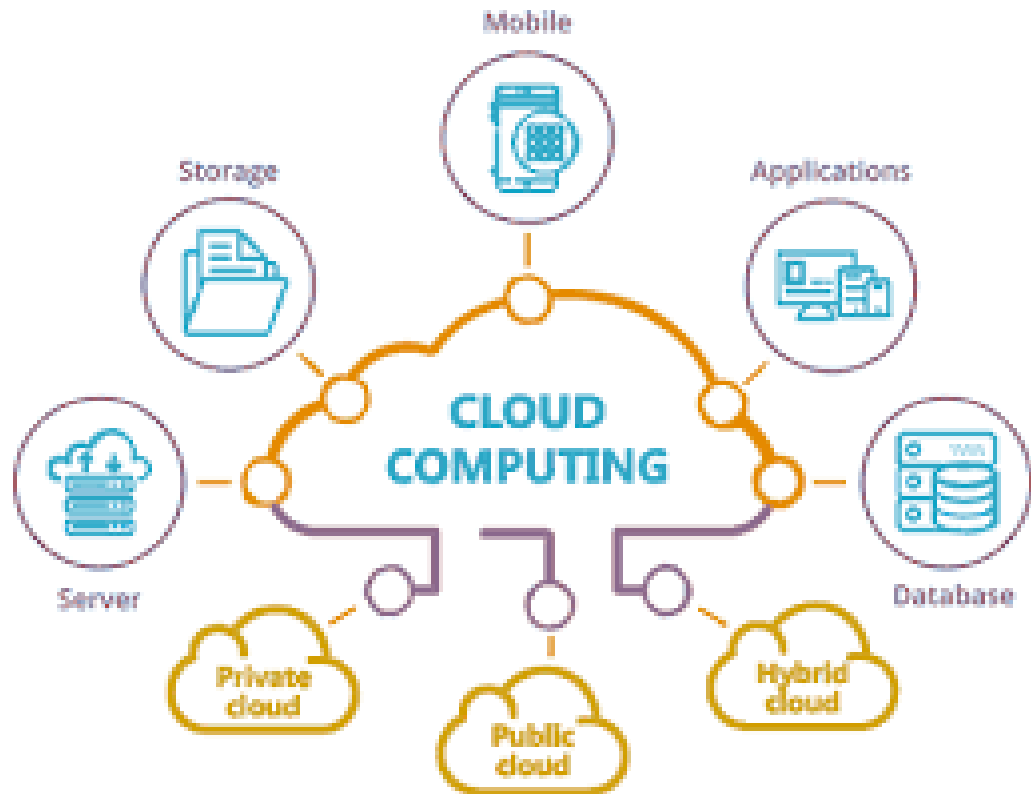


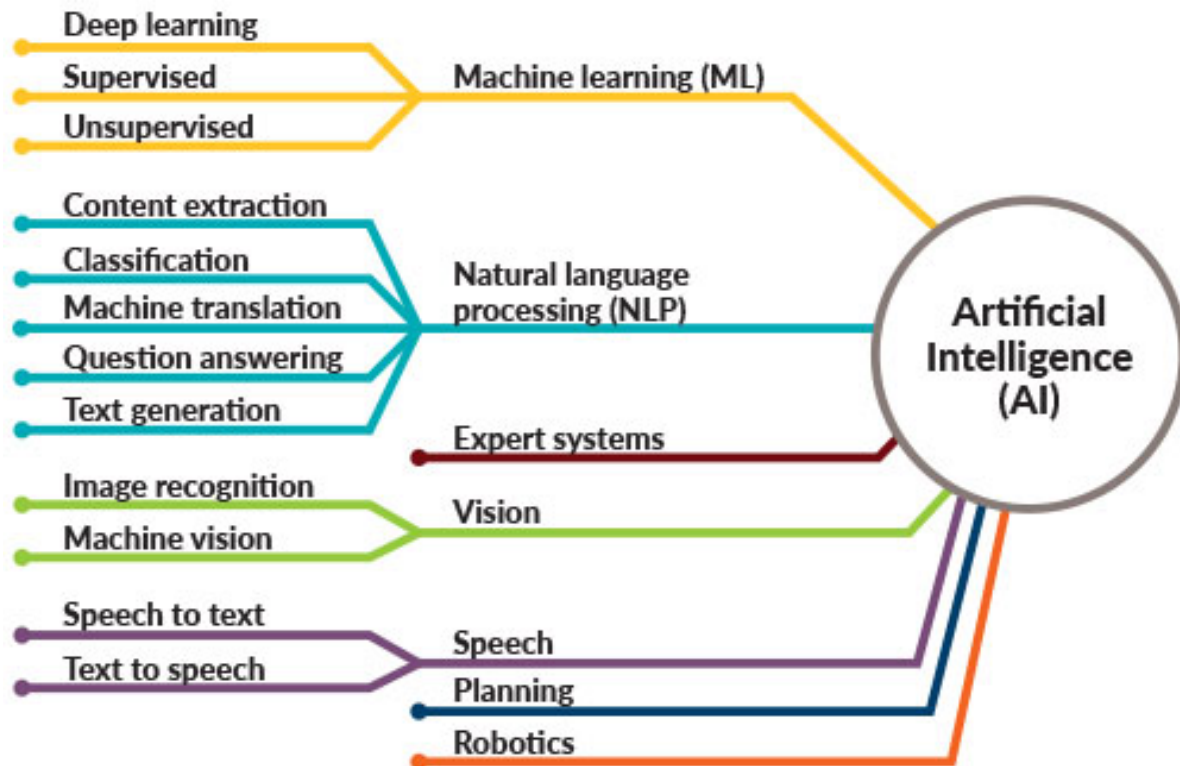
Banking



Law Enforcement







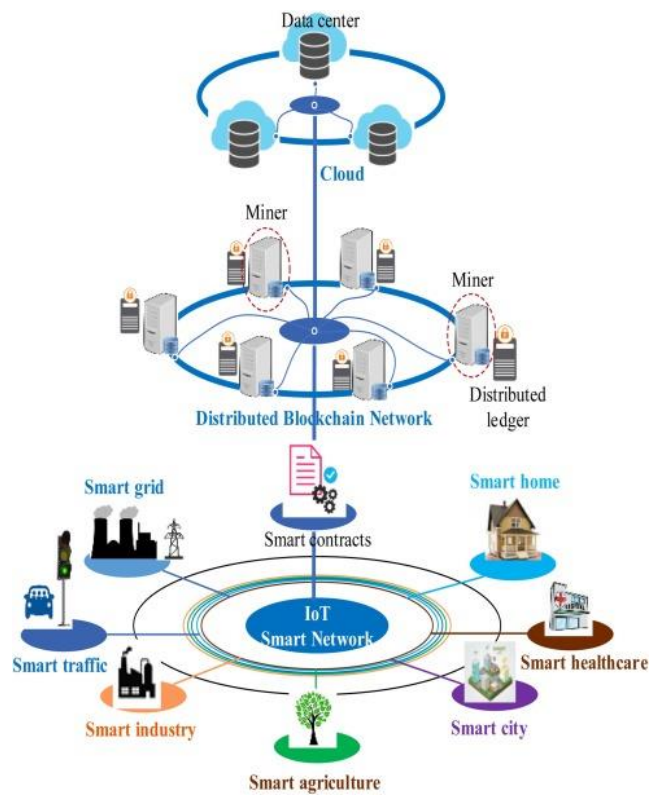


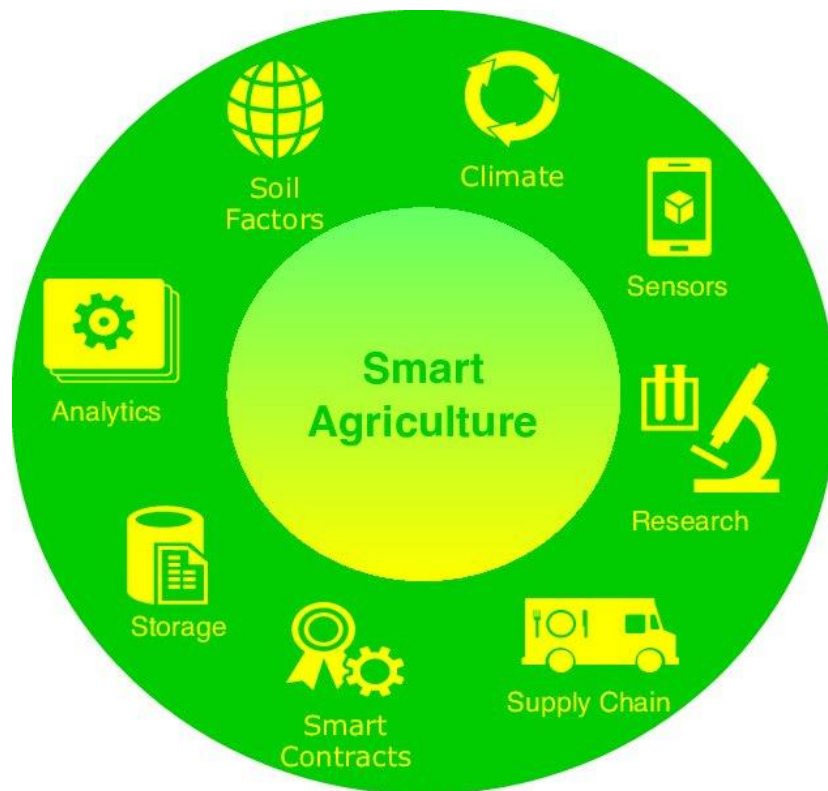




Future Landscape of ET: The Examples

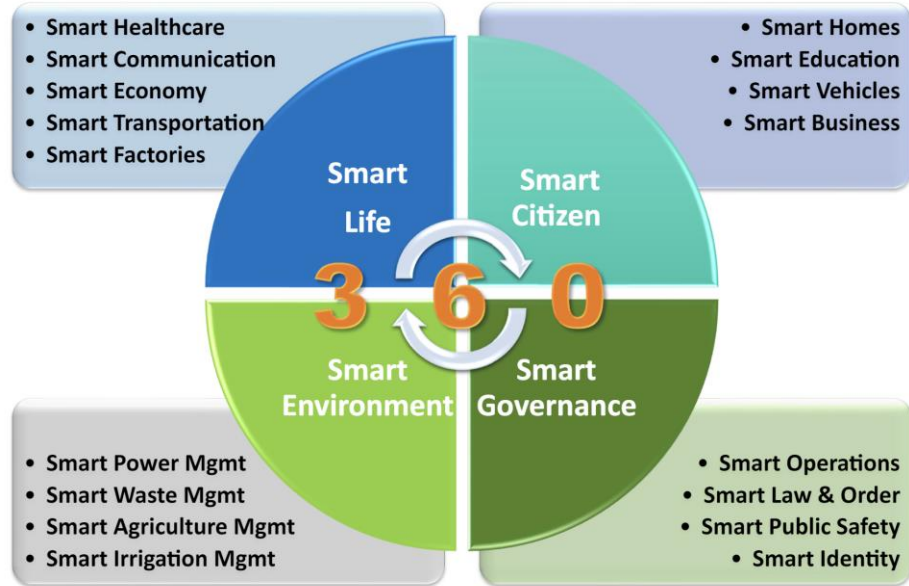
- As an Overall Example
- In Agriculture Sector
- In Smart Cities



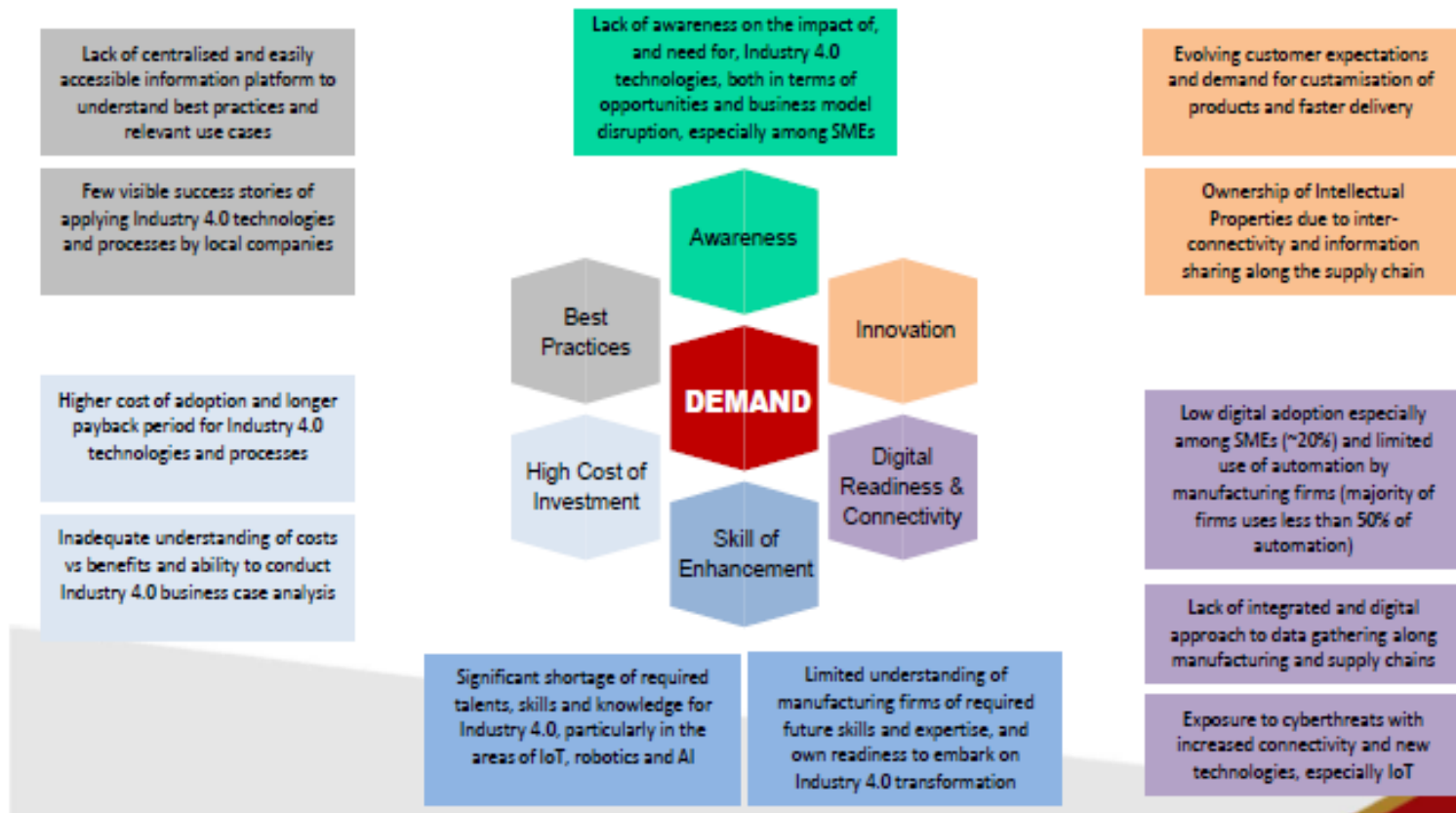


MOTIVATION FOR THE STUDY

- 360 degrees of smartness in smart city - a system-of-systems approach: An Example



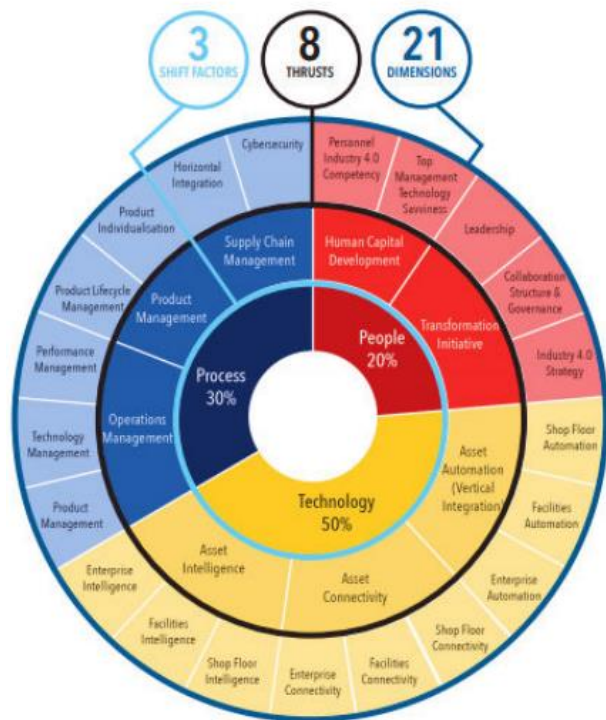
Problem identification





Current Issues

Our Focus – Gap Analysis



Focuses on people and the entire organisation.

Emphasis on strategies towards having a right set of workforce



Focuses on management system in running business operations, supply chain and product lifecycle.

Emphasis on smart and strategic public-private partnerships, security, sustainability and product co-creation.



Focuses on the application of intelligent, connected and automated technologies.

Measured at three different layers of the business: Shop floor, enterprise and facility



Objectives of the Project

Therefore, the objective of this study is to assess ETs readiness and implementation in the public sector in Malaysia.

The specific objectives of this study are to:

- 1) Determine the level of readiness of public sector agencies for ET.
- 2) Obtain information on the current landscape of ET readiness and implementation in the public sector.
- 3) Identify gap analysis for public sector ET implementation.



SCOPE OF THE STUDY

The scope of this study are to:

- 1) Overcome sectoral silos and use ETs as part of overall public sector reform and development strategies.
- 2) Identify ETs readiness challenges and develop a comprehensive and validated framework for assessing ETs readiness in the Malaysian public sector.
- 3) Develop an ETs implementation strategy to entice and empower identified public sectors to become responsible stakeholders in the digitization agenda.
- 4) Offer coordinated policies for emerging technologies to support the Government's aspirations to achieve the Sustainable Development Goals Vision for Shared Prosperity 2030, the Malaysian Digital Economy Blueprint (MyDIGITAL) and the 12th Malaysia Plan.
- 5) Provide more efficient, effective, and modernized public services. National planning will become more data-driven and intelligent to meet the demand and expectations of the citizens.

Sharing our success story

No.	Project Name	Year Project
1	Big data quality Model of imperfect information to sustain decision making in Malaysia Healthcare (MOHE)	2020
2	University of open research data repository (UORDRE) (UPM)	2017
3	Cloud-based education as a service (CaaS) Model for Collaborative Learning Environment in higher learning institutions	2017
4	Study on digital competence of Malaysian youth	2015
5	Feasibility study and transaction advisory services for the development of national science and technology park (NSTP) at national university of science and technology (Ongoing Project) (NSTP, 2022/16007/GP;SWASTA).	2020
6	Baseline Study on National Policy on Science, Technology & Innovation (NPSTI) Indicators	2021



Thank you

