

# Evolve a framework, to enhance, management decision making process around adopting AI in SMEs

## CONTEXT & BACKGROUND



- The term Industry 4.0 is about a new industrial revolution - one that talks of leveraging AI to integrate emerging technologies like big data, robotics, IoT & IoE and create manufacturing systems that are not only interconnected, but communicate, analyze, and use information to drive further intelligent action back in the physical world.



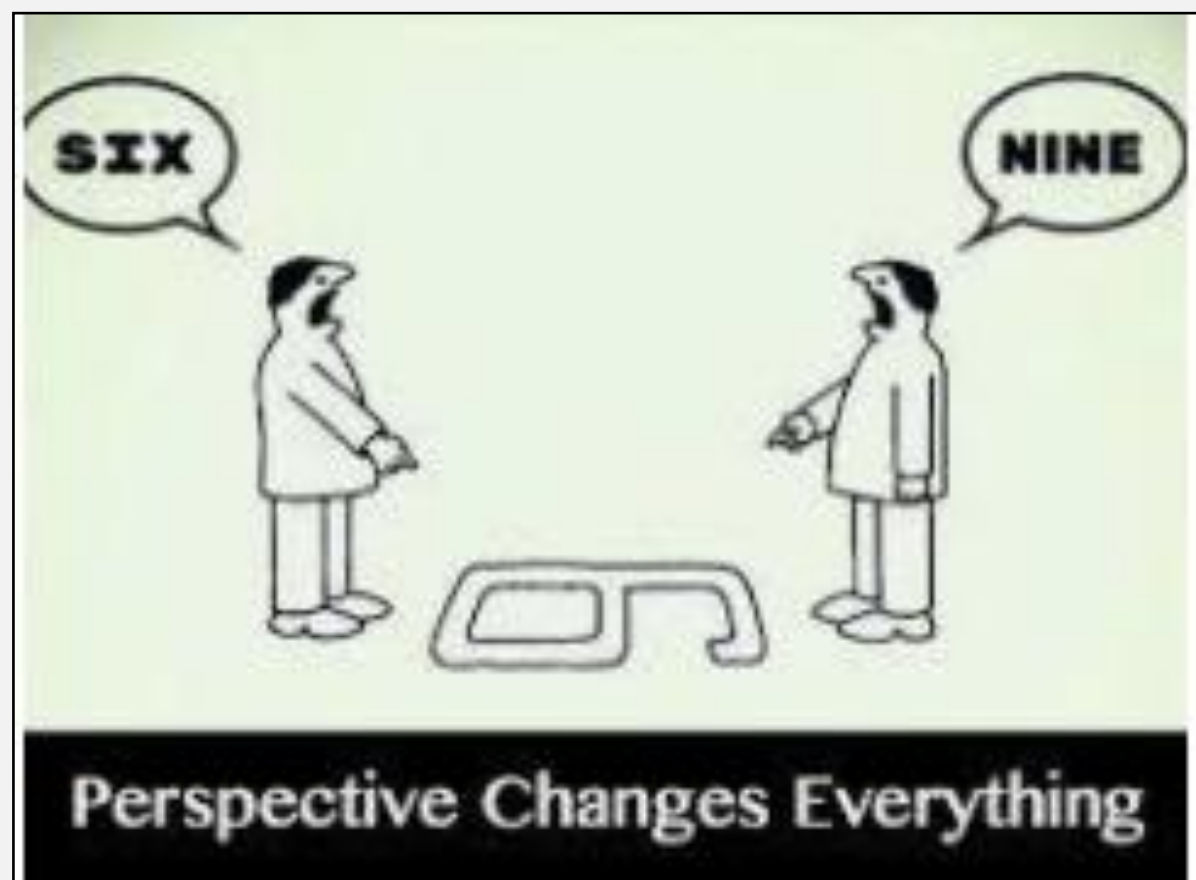
- SMEs are a focal point in shaping enterprise policy in the European Union (EU).
- The EU Commission considers SMEs and entrepreneurship as key to ensuring economic growth, innovation, job creation, and social integration in the EU (Europa, Statistics on SMEs -, 2021).
- Enterprises employing fewer than 250 persons represented 99 % of all enterprises in the EU.

## EXISTING LITERATURE

Summary of Journals on adoption of Technology	Authors
Discussion around a stronger role for EU in approaching AI adoption	Erik Brattberg, Raluca Csernaton, and Venesa Rugova
Importance of developing a competitive advantage by adopting ICT	Virginia Barba-Sanchez Maria del Pilar Martinez-Ruiz Ana Isabel Jimenez-Zarco
Investigate the adoption of ICTs in 11 micro-enterprises	Peter Wolcott, Mehruz Kamal and Sajda Qureshi
Characteristics of the firm and industry sector are contributory factors to the extent of adoption and exploitation of ICTs by SMEs	Helen Shiels Ronan Mclvor and Dolores O'Reilly
Acolection of Technological, environmental and oraganizational factors impact the adoption of digital technologies in SMEs	Morteza Ghobakhloo and Ng Tan Ching
10 factors responsible for the adoption of AI among SMEs	Anuj Kumar and Anjali Kalse

Summary of Journals on Decision Making Framework	Authors
Evaluation framework of decision-making in SMEs with four main components: environment, organization, decision-maker and process.	Yanhai Zhao, Ye Yao
Compare and contrast two such frameworks: Robust Decision Making and Epoch-Era Analysis	Enayat A. Moallemia, Sondoss Elsayah, Michael J. Ryan
Broaden the traditional approach to leadership and decision making and form a new perspective based on complexity science	David J. Snowden and Mary E Boone

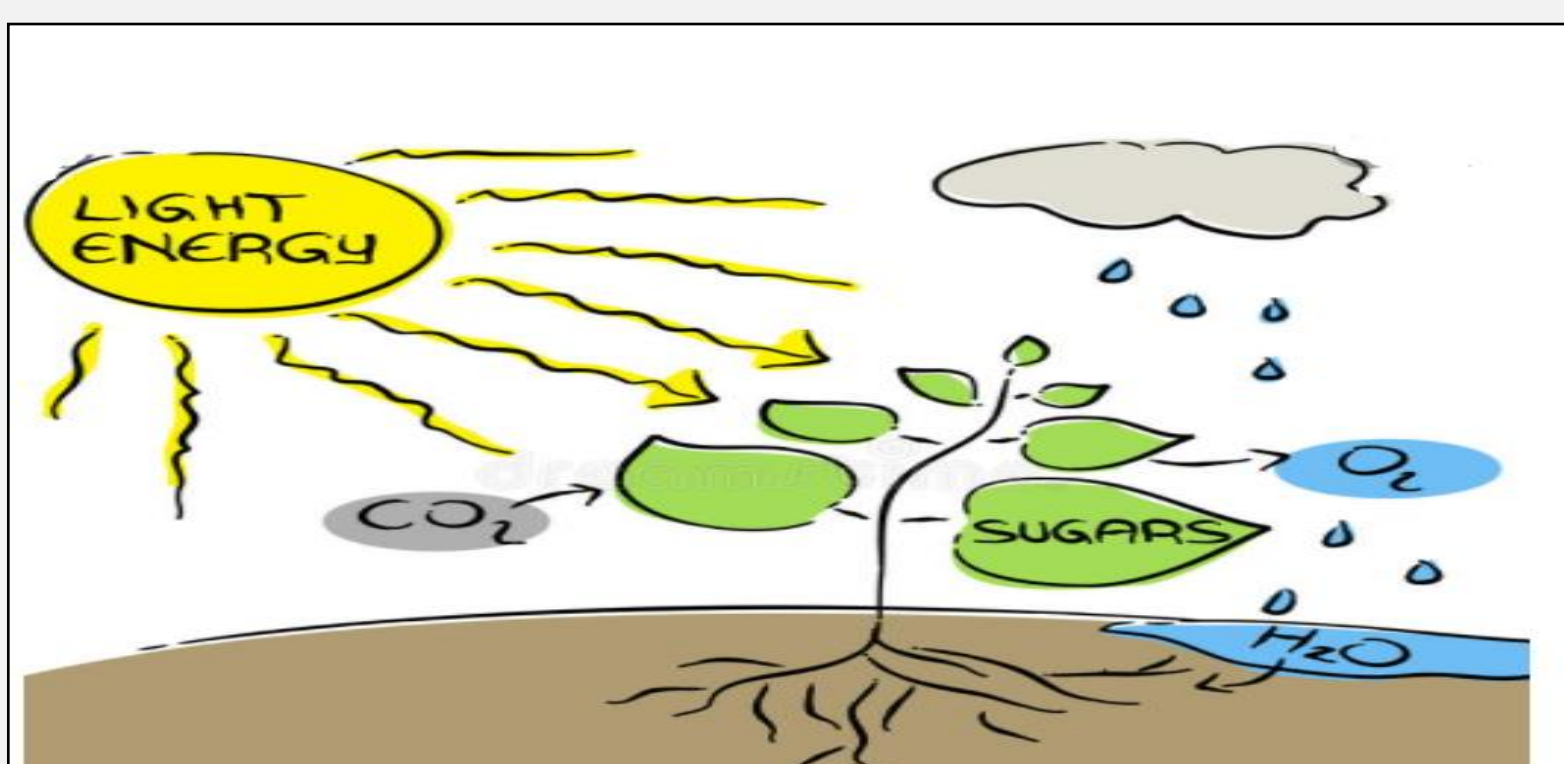
## RESEARCH QUESTION & PLAN



- Current perspective of management on AI adoption? – Qualitative approach by interviewing management of SME's
- The influencing factors :
  - Uncertainty of breaking a set framework
  - Absence of right skill sets.
  - The material and human cost.
  - Change Management issues.
  - Employee reaction.



- Factors evaluated by management before setting up an AI strategy?
  - Qualitative approach through interviews and literature review.



- Synthesizing decision-making theories, to evolve a framework thereby enhance the management decision making process around adopting AI – Qualitative approach through literature review and analyzing results from the research questions.
- Practically apply the framework on SMEs to compare results and gather feedback.