

# AI-Driven Learning and Business Innovation in Adult Education

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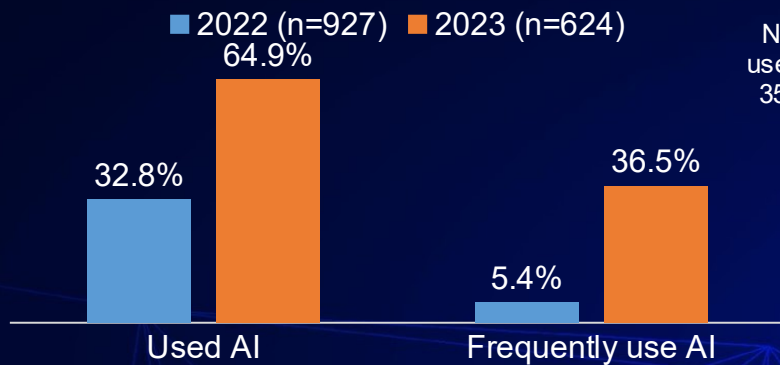


- State of AI in the Training and Adult Education (TAE) sector
- State of Innovation in the TAE sector
- Approach to use AI for Innovation
- Sharing by SAL
- Closing

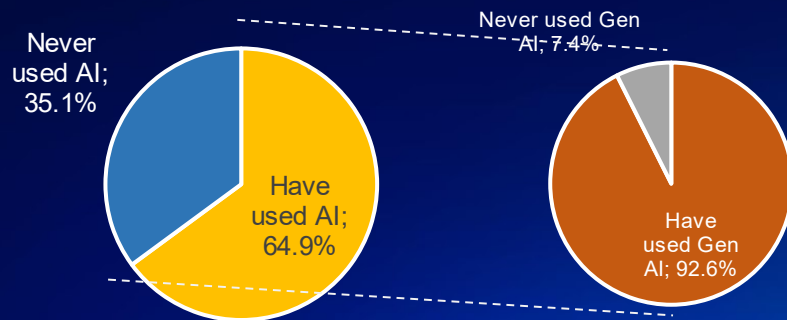
# Increasing use of AI in Singapore's (TAE) sector

Based on research done by IAL's Research Division in 2023:

**Changes in AI adoption from 2022 to 2023**



**Use of Artificial Intelligence in 2023 (n=624)**



\* Of the 64.9% who have used AI

NLP and text generation (63.0%)



AI-enhanced tools (42.3%)



Adobe creative cloud



Knewton

Visual AI and Design (15.6%)



Midjourney



DALL-E



# Do you use AI as part of your work?





# How do you use AI?

Do not edit  
How to change the  
design



# Can AI help your organisation to innovate?

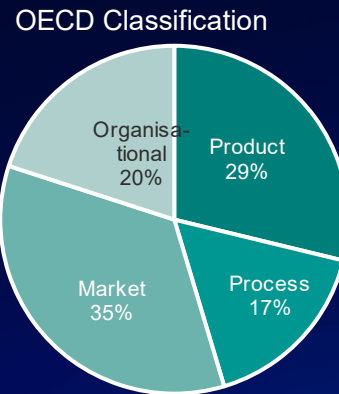
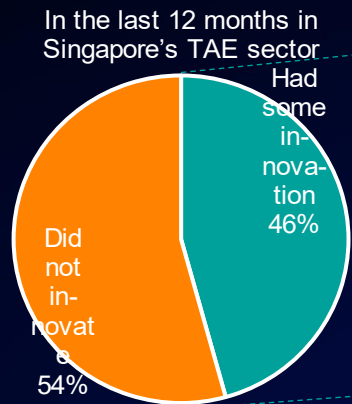
① The Slido app must be installed on every computer you're presenting from

**slido**

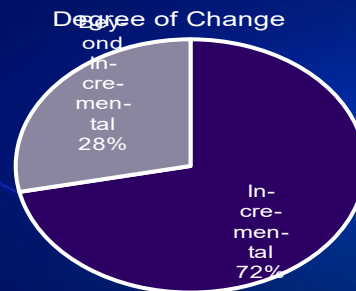
# What does Innovation in Singapore's TAE sector look like?

Results from the Innovation in the Business of Learning (IBL) Study

Survey of 304 training providers (TPs) in Singapore between April and September 2024:



Innovations shared by respondents	OECD Classification	Degree of Change
Added fresh courses to the curriculum for variety	Product	Incremental
Launching AI training programme to upgrade current data collection	Product	Beyond incremental
Classes are recorded live and provided to learners as post training support	Process	Incremental
Automated assessments to improve efficiency	Process	Beyond incremental
Broadened reach through enhanced social media strategies	Market	Incremental
Market high end courses in China	Market	Beyond incremental
Reorganised registration process	Organisational	Incremental
Implemented learning analytics to track performance	Organisational	Beyond incremental



In the European Community Innovation Survey (2022), 51% of companies had some innovation in the last 24 months

To go beyond incremental innovation, the innovation would require new technology/skills, enter a new market, or both

- Similar level of innovation when comparing globally
- Wide variety of innovations
- Most innovations are “incremental”

# What do training organisations in Singapore need for innovation?



Excessive bureaucracy and hierarchy can impede the innovation process.

Productivity is driven by quality management and worker development. These features will help organisations drive innovation.

Adequate resources are the primary enabler of innovation. Collaboration and smart resource allocation can help when there is a lack of resources.



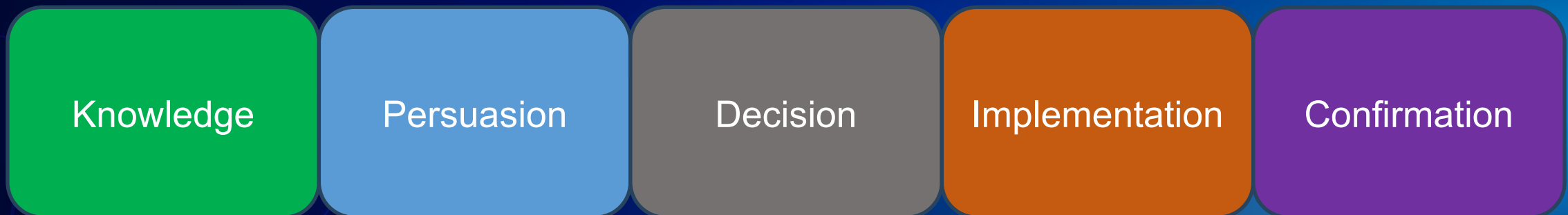
# AI and Innovation

## Resources

- How can AI reduce the resources I need for what I am doing?
- How can AI maximise the use of resources you are working with?
- Are there resources you have that hasn't been utilised but can be with the help of AI?

## Productivity

- How can AI support productivity?
- How can AI enable the skills present in my organisation to be better utilised?
- How can AI encourage continuous learning in an organisation?



Rogers' Innovation Decision Process Model

# Case Study: Singapore Academy of Law

Sharing by SAL will show us how AI can:

- Enhance utilisation of skills
- Reduce resource requirements for high-quality training
- Expand reach to more learners



# Case Study: Singapore Academy of Law

## Sharing by Ms Delphine Loo

Chief Legal Officer and Senior Director of Learning and Professional Development Division

Delphine Loo is an Exco member of the Singapore Academy of Law (SAL) and holds the designation of Chief Legal Officer as well as Senior Director of Learning and Professional Development. She is also the Data Protection Officer for SAL Group of companies.



# Enhancing Legal Expertise with Gen AI





# SAL's Objectives



## Augment Learning

To augment current courses and enable learners to learn and practice soft skills at their own pace



## Curriculum Development

Leverage Gen AI tools to develop and deploy courses to shorten the go-to-market time



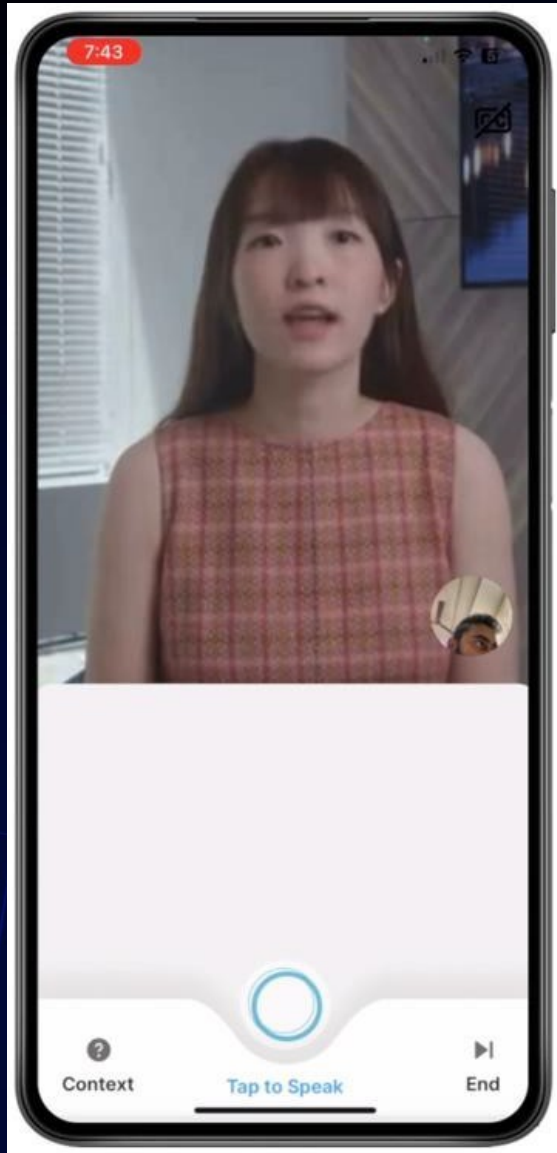
## Safeguards & Content Control

SAL to have control to input reference materials and to put in necessary safeguards to ringfence content provided

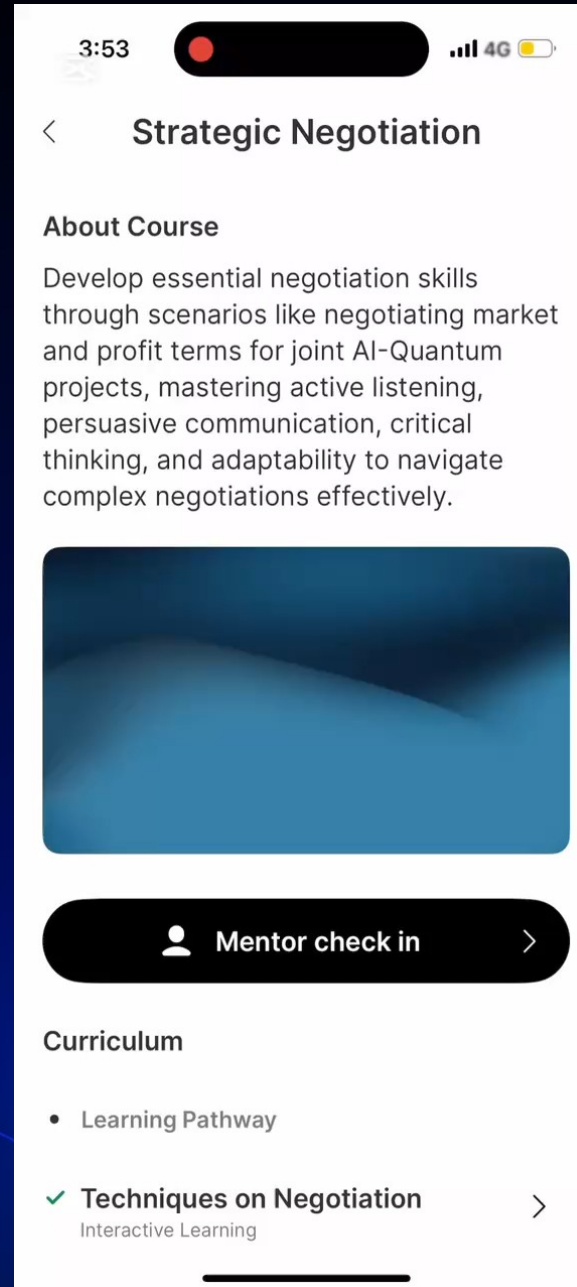


## Alignment with Competency Frameworks

Content to be aligned to SAL's own competency frameworks to assess learners



- SAL is working with Frontiermind to augment soft skills learning via Gen AI App
- SAL has developed the following modules:
  - Strategic Negotiation
  - Handling Difficult Witnesses
  - Therapeutic Justice

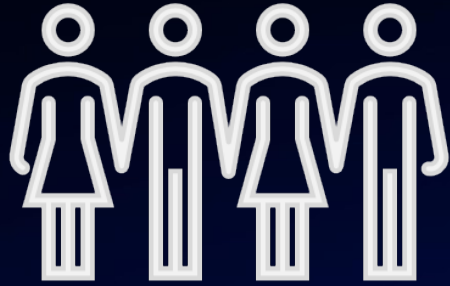


# Does Gen AI Augment Learning?



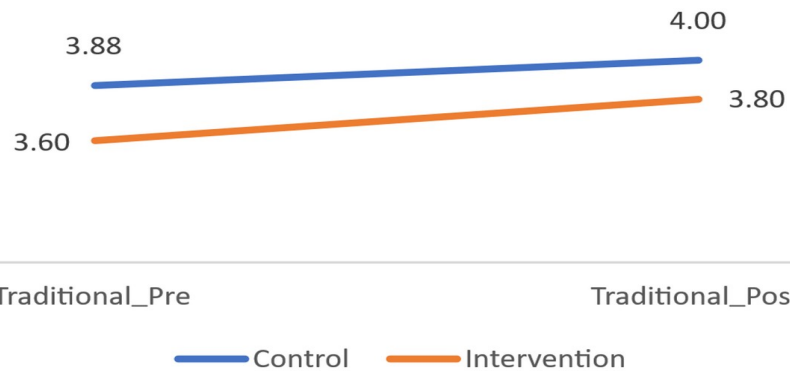


# Testing Gen AI App for Training



- Conducted a study with 18 NUS, SMU and SUSS first- and second-year students on SAL's Strategic Negotiation Module
- Learners had relatively little or no prior learning on negotiation
- Learners attended a lecture on Strategic Negotiation and was then split into 2 groups – control and intervention
- One group was given a traditional resources to support the learning and the other group was given Gen AI App

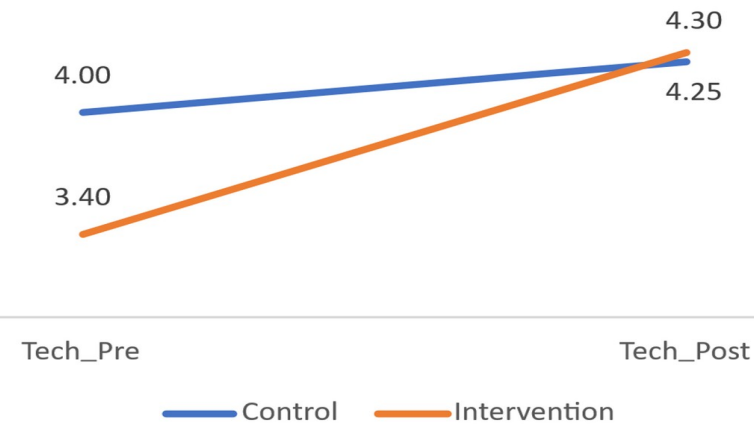
### Traditional Learning Methods



Change in scores for both groups minimal using Traditional Learning Methods

Change in scores in intervention group significant after the Gen AI App learning experience.

### Tech-enabled Learning Methods



*"I like the ability to **learn at my own pace** and repeat the lessons if necessary to get more clarity. The interactive app also allows me to practice what I learnt receiving **tailored and spontaneous feedback**."*

*"By far, the most **impactful learning experience** for me was the real life role-playing/ simulation exercise , along with the feedback that was given immediately after . This helped me **retain the learnings better** than watching videos, reading etc."*

*"it was **helpful in using AI to test out negotiation prior to going face-to-face** with a real life individual roleplay"*

*"The **avatar's voice** was quite **monotonous**." / "The [avatar's] voice is very **jarring** as it sounds too **robotic**."*

*"The app was a bit **laggy**."*

**Positive comments were learning related**  
**Negative comments were technical related**

## SAL aims to...



Develop more courses using Gen AI



Conduct further studies and tests to gain more insights



Collaborate with others to create courses using Gen AI



Find out more about possible  
innovations with AI



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