



# INTEGRATION OF AI IN TEACHING AND LEARNING

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**AI mimics human intelligence  
using machines**



## **Use Cases of AI**

Face recognition

Autonomous vehicle

Recommendation of video clips in YouTube

Recommendation of books in amazon

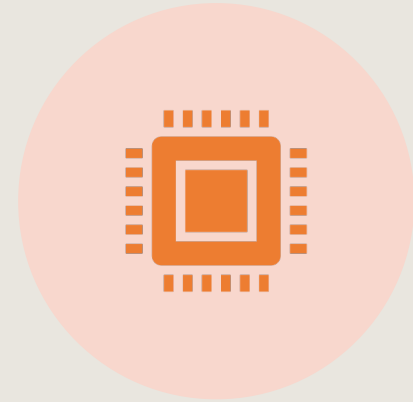
Digital servilance



GENERATIVE AI GENERATES NEW CONTENTS  
BASED ON PRETRAINED DATA, PRIMARILY  
LARGE LANGUAGE MODEL



A PROMPT CAN GENERATE A NEW  
ARTICLE, IMAGE, SPEECH AND VIDEOS



MACHINE CAN TALK TO HUMAN IN AN  
INTERACTIVE MANNER AND CAN BE USED  
IN MANY PURPOSES SUCH AS PERSONAL  
ASSISTANCE

# AI IN EDUCATION

## THREAT / OPPORTUNITY

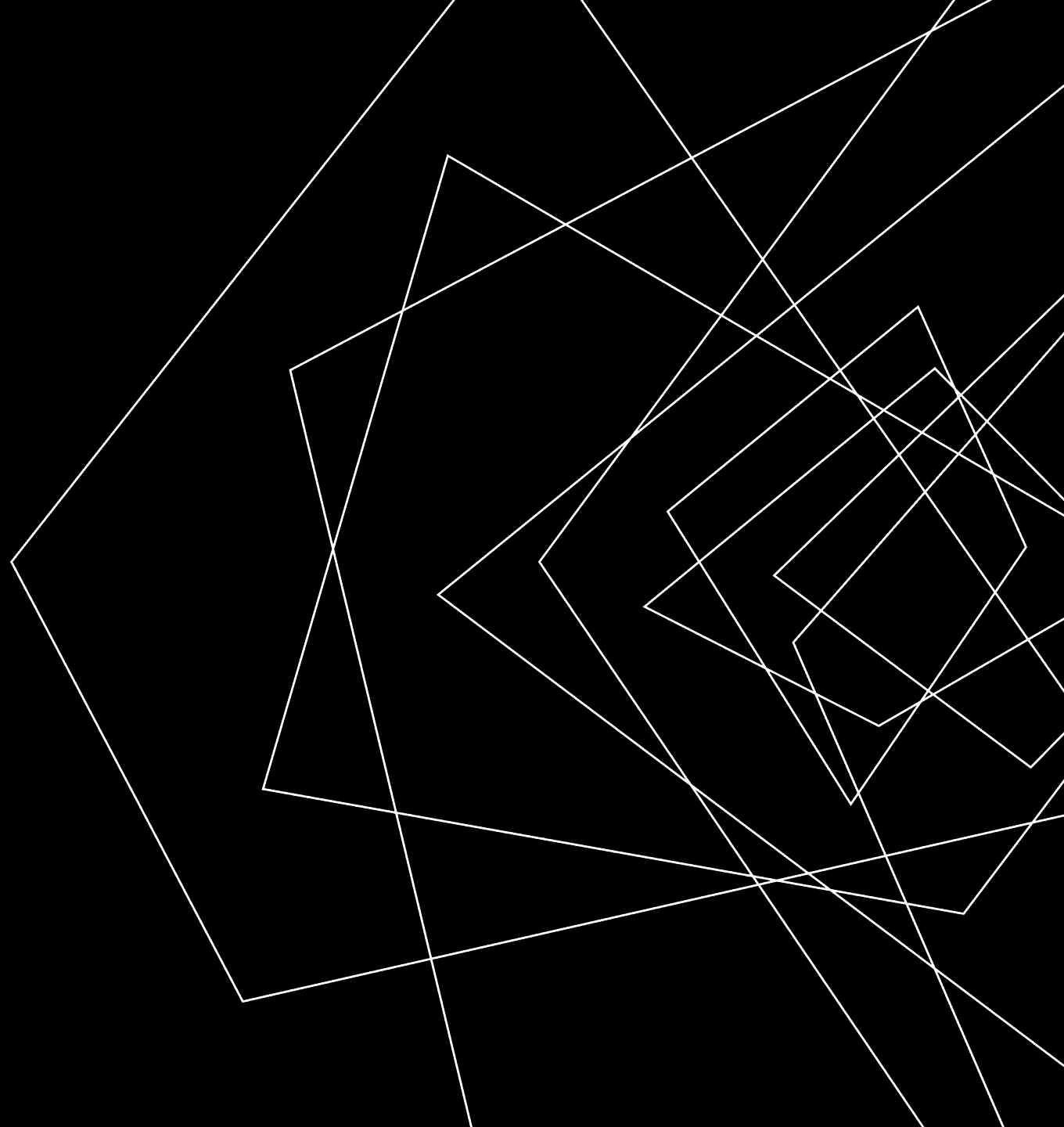
Trends

Adaptation

Vision

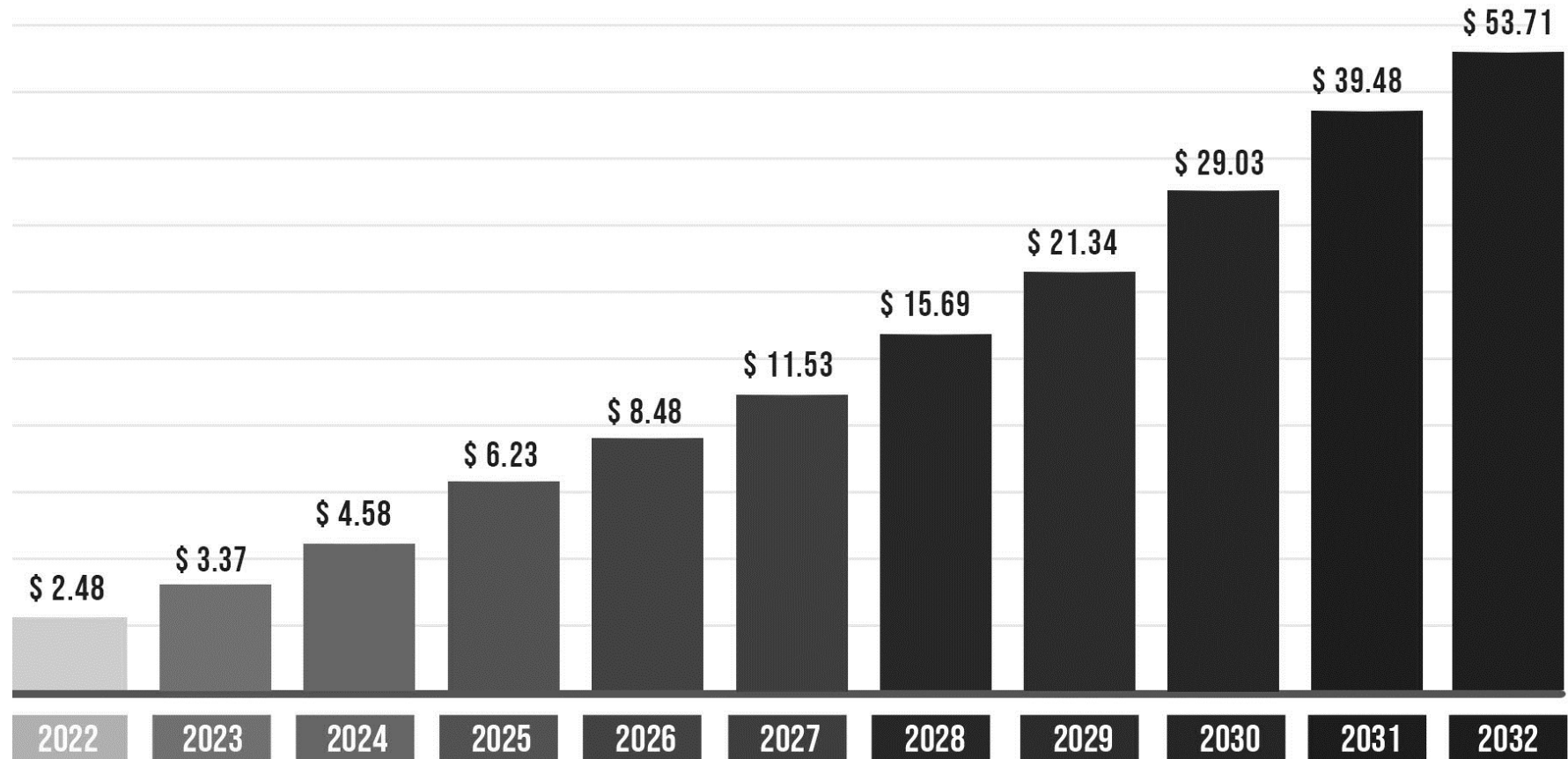
Way forward

Reflection



# TRENDS

AI in Education Market Size in USD billions  
2022 to 2032



*Vision research report 2023*

# ECO SYSTEM

## AI IN TEACHING AND LEARNING

<b>By Component</b>	Solutions Services
<b>By Deployment</b>	Cloud On-premise
<b>By Technology</b>	Natural Language Processing (NLP) Machine Learning
<b>By Application</b>	Learning Platform & Virtual Facilitators Intelligent Tutoring System (ITS) Smart content Fraud and Risk Management Others
<b>By End-use</b>	K-12 Education Higher Education Corporate Training & Learning

**Adaptivity In Learning**

**Enhance Feedback Loops**

**Virtual Reality (VR) And Augmented Reality (AR) In Education**

**AI-Powered Intelligent Tutoring Systems**

**Natural Language Processing (NLP) For Language Learning**

**AI Quiz Makers**

**ChatGPT**

**POWER OF AI  
IN TEACHING AND LEARNING**

## Traditional

Lecturer

Assistant Professor

Associate Professor

Professor

## 21st Century Look

Junior Facilitator

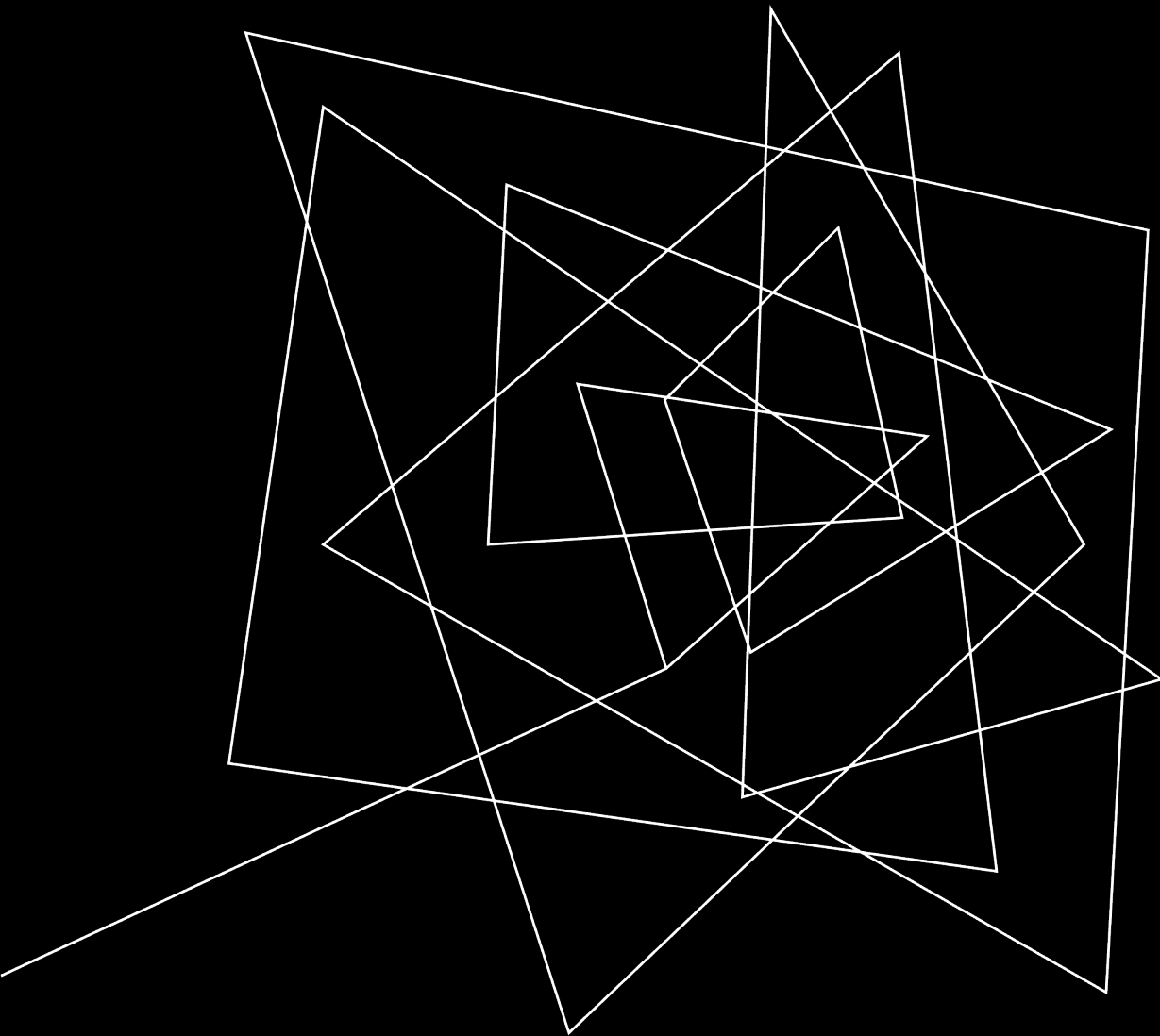
Senior Facilitator

Assistant Facilitator

Associate Facilitator

Facilitator





## VISION

*By harnessing the power of AI, educators can unlock new avenues for student engagement, optimize learning resources, and create tailored learning experiences that cater to the unique needs of each student.*

# WAY FORWARD

**Adaptive Learning:** “Used to teach students basic and advanced skills by assessing their present skill level and creating a guided instructional experience that helps them become proficient.”

**Assistive Technology:** AI can help special needs students access a more equitable education, for example by “reading passages to a visually impaired student.”

**Data and Learning Analytics:** “AI is currently being used by teachers and education administrators to analyze and interpret data,” enabling them to make better-informed decisions.

**Facilities Management:** AI is effective at “monitoring the status of power, Wi-Fi and water services; alerting the facilities management workers when problems arise.”

**System Management:** AI is currently being used to manage entire schools, powering student records systems, transportation, IT, maintenance, scheduling, budgeting, etc.

*<https://medium.com/@janelreyneke/integrating-ai-into-education-possibilities-and-challenges-425a89a304a2>*

# EXAMPLE USAGE

Plagiarism Detection

Exam Integrity

Chatbots for Enrollment and Retention

Learning Management Systems

Transcription of Faculty Lectures

Enhanced Online Discussion Boards

Analyzing Student Success Metrics

Academic Research

Connected Campuses

# RECENT INITIATIVES



Online math tutor



Personalized assistance



Voice to text assistance



Learning assistance



Helping educators to use technology.



Journalism to ignite education



Khan Academy

Smart assistance for learners and educators



Personalized assistance for learners



## A QUOTE FROM SAL KHAN, TED TALK 2023

*“ If the good actors don'ts advance in AI,  
bad actors will surely do and that will make  
the AI more of a challenge than an  
opportunity ”*

[https://www.youtube.com/watch?v=hJP5GqnTrNo&ab\\_channel=TED](https://www.youtube.com/watch?v=hJP5GqnTrNo&ab_channel=TED)

A series of white, overlapping geometric lines forming various polygons and shapes on a black background, located on the left side of the image.

# REFLECTION

START SMALL

PARTNER WITH A RELIABLE AI  
PROVIDER

FOSTER ETHICAL AND CRITICAL  
THINKING

