



INDIA | MAY 25, 2023

# Building a scalable and intelligent platform with a learner-centric approach

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AWS India

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CTO  
Infinity Learn

# Education industry is adapting to rapid change



## Learning

Acceleration in adoption of online learning



## Innovation

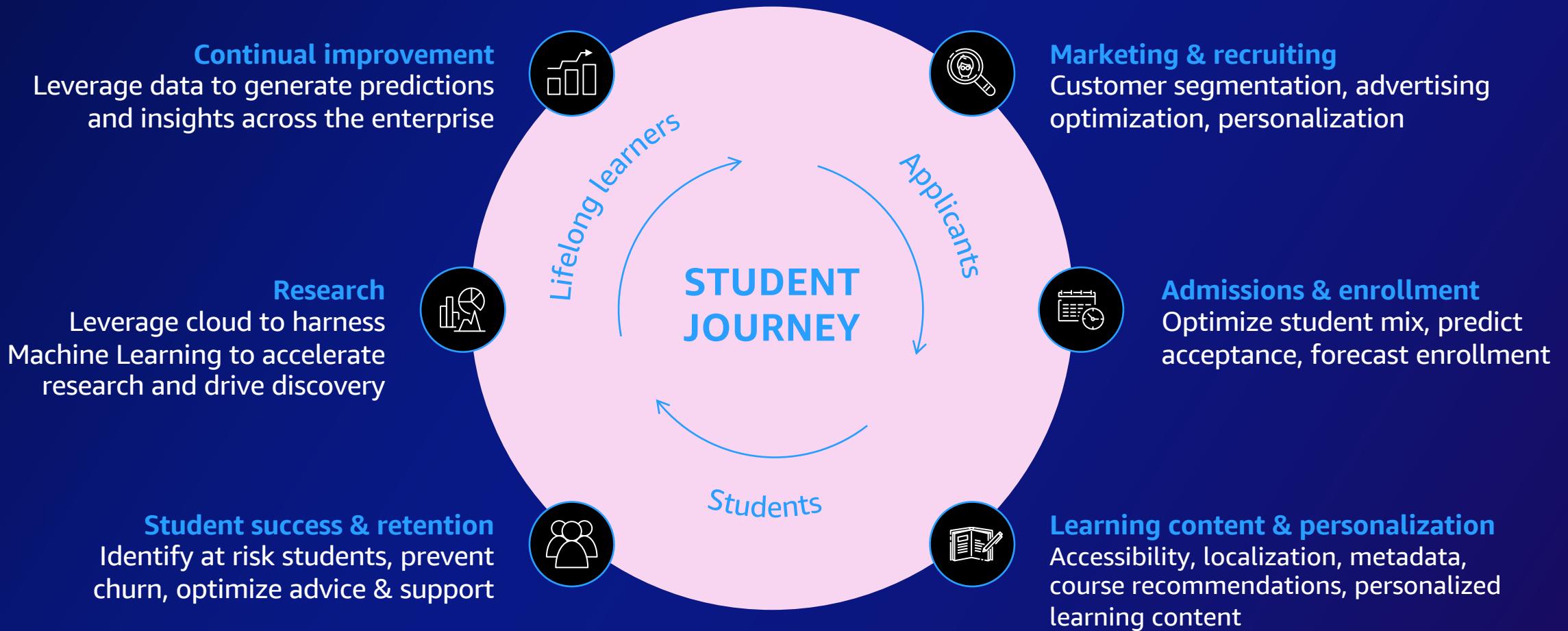
Competition from MOOCs, micro-degrees, and changing views about traditional education pathways



## Operations

Financial pressures and fiscal constraints requiring innovative solutions

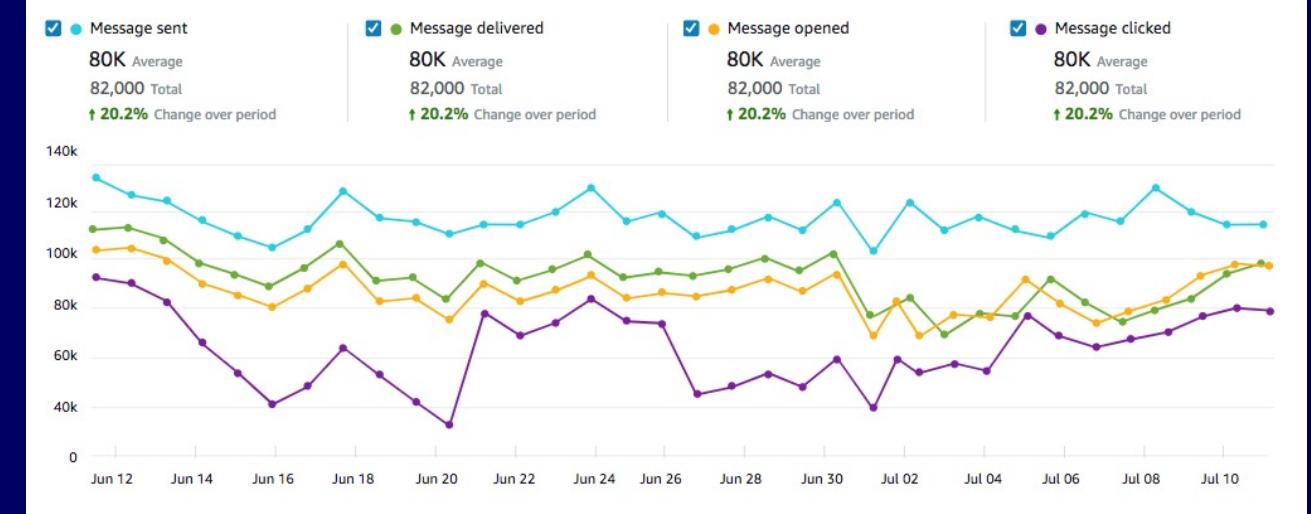
# Machine learning is helping power the transition



# Optimizing marketing and recruiting

Target the right prospective students and reach them more effectively

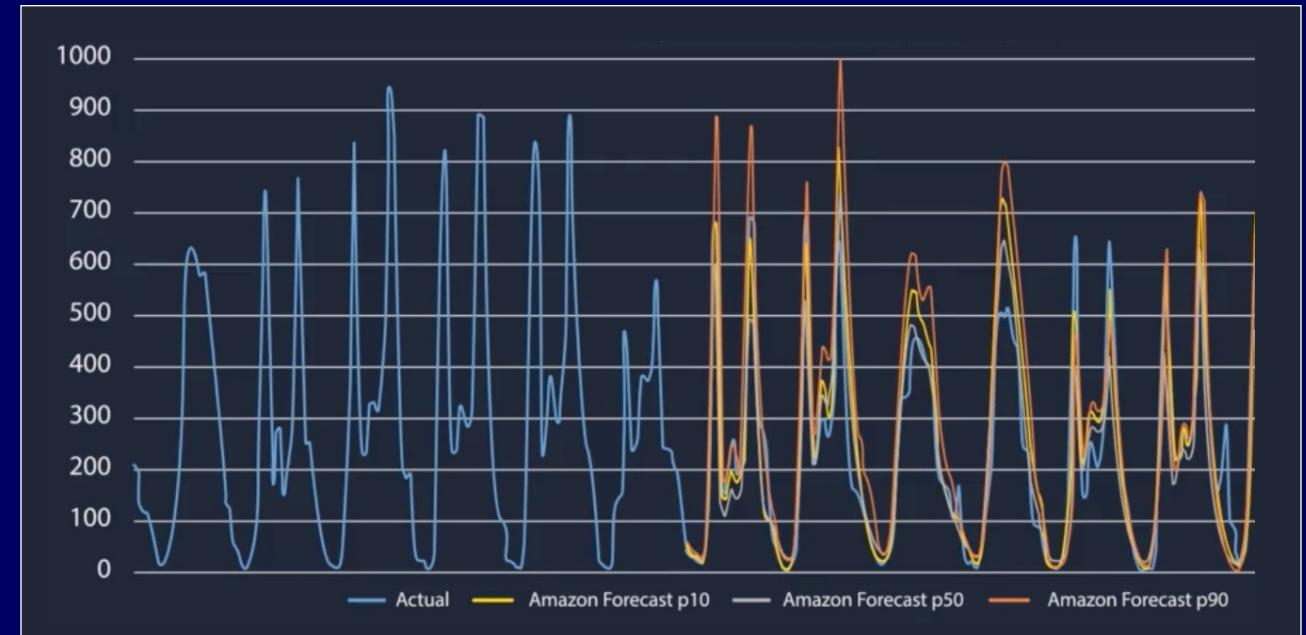
- Customer segmentation
- Advertising optimization
- Personalization



# Forecasting admissions and enrollment

Machine Learning powered  
forecast capabilities for:

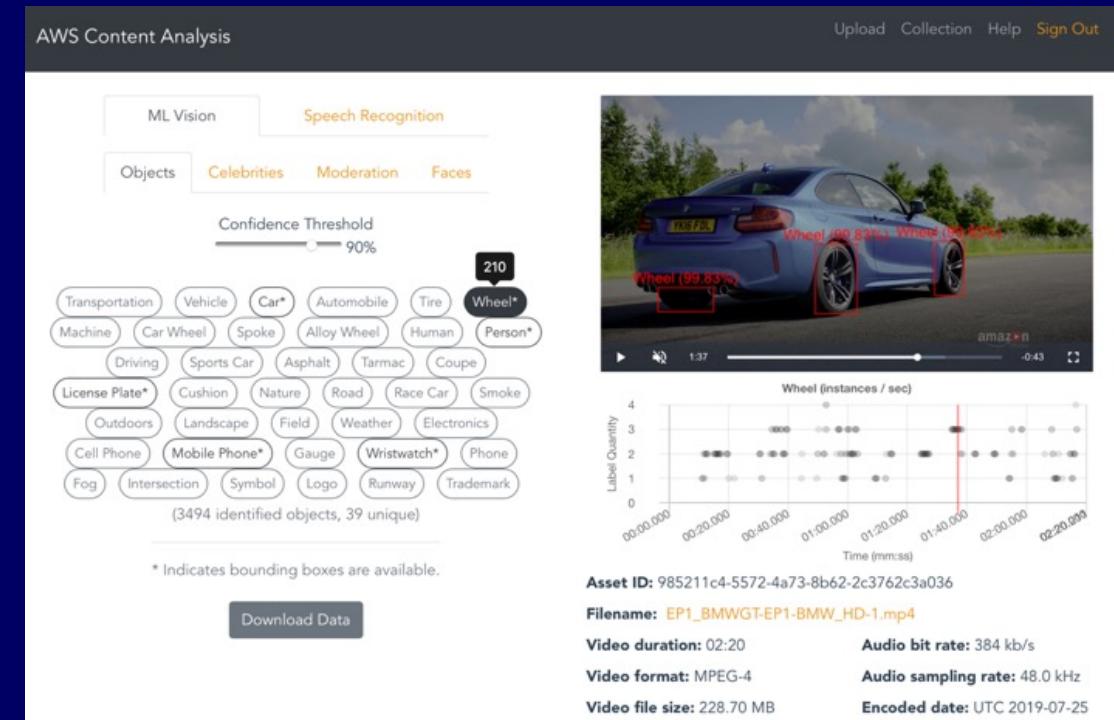
- Predicting enrollment
- Capacity planning
- Financial planning



# Learning content metadata extraction, content classification

## Extract metadata from learning content and digital collections

- Content classification
- Enhanced search
- Enables personalization



# Learning content— improving accessibility

Make learning content  
easy to find, access and use  
for all students

The screenshot shows a video player interface from echo. The video frame displays a man in a light blue shirt speaking. To his right is a diagram titled 'MAP VIEW' showing a low-pressure area (L) and a high-pressure area (H). Arrows labeled 'PGF' (Pressure Gradient Force) point from the high pressure towards the low pressure. A scale bar indicates distances of 0, 200, 400, and 600 km. Below the diagram is a formula: 'Pressure Gradient = Change in Pressure / Distance'. To the right of the video frame is a transcript of the lecture. The transcript text is as follows:

In the atmosphere.  
And understand that, we have enumerate  
the fact that there are three forces that  
actually cause wind directions and  
wind speed and  
we're gonna be able to determine  
what the wind speed is anywhere and  
what the wind direction is anywhere  
by knowing those three forces.  
The three forces we  
are interested in first of all,  
our the first force is  
pressure gradient force.  
The pressure gradient force is a force  
that always acts towards low pressure.  
Always acts towards lower pressure  
no matter where you are on Earth.  
There's high pressure in one spot and  
low pressure in another spot.  
The pressure gradient force is always  
gonna be working towards low pressure.  
Now when we say that, we're always  
talking about the horizontal.  
Pressure changes quite rapidly,  
vertically.  
But in terms of determining wind speed,

# Personalization

RECOMMEND CONTENT TO USERS TO ENHANCE DISCOVERY AND TAILOR LEARNING EXPERIENCES

People interested in the course also viewed



A large graphic of a target with three concentric rings. In the bottom-left corner of the bullseye is a small white square containing the "deeplearning.ai" logo.

Deep Learning  
deeplearning.ai

5 COURSES



The University of Michigan logo, which consists of a yellow "M" inside a blue square with the text "UNIVERSITY OF MICHIGAN" below it.

Applied Data Science with Python  
University of Michigan

5 COURSES



The University of Washington logo, which is a purple square with a white "W".

Machine Learning  
University of Washington

4 COURSES



A graphic showing a neural network with various colored nodes (blue, green, yellow) connected by lines, set against a teal background.

Neural Networks and Deep Learning  
deeplearning.ai

1 COURSE

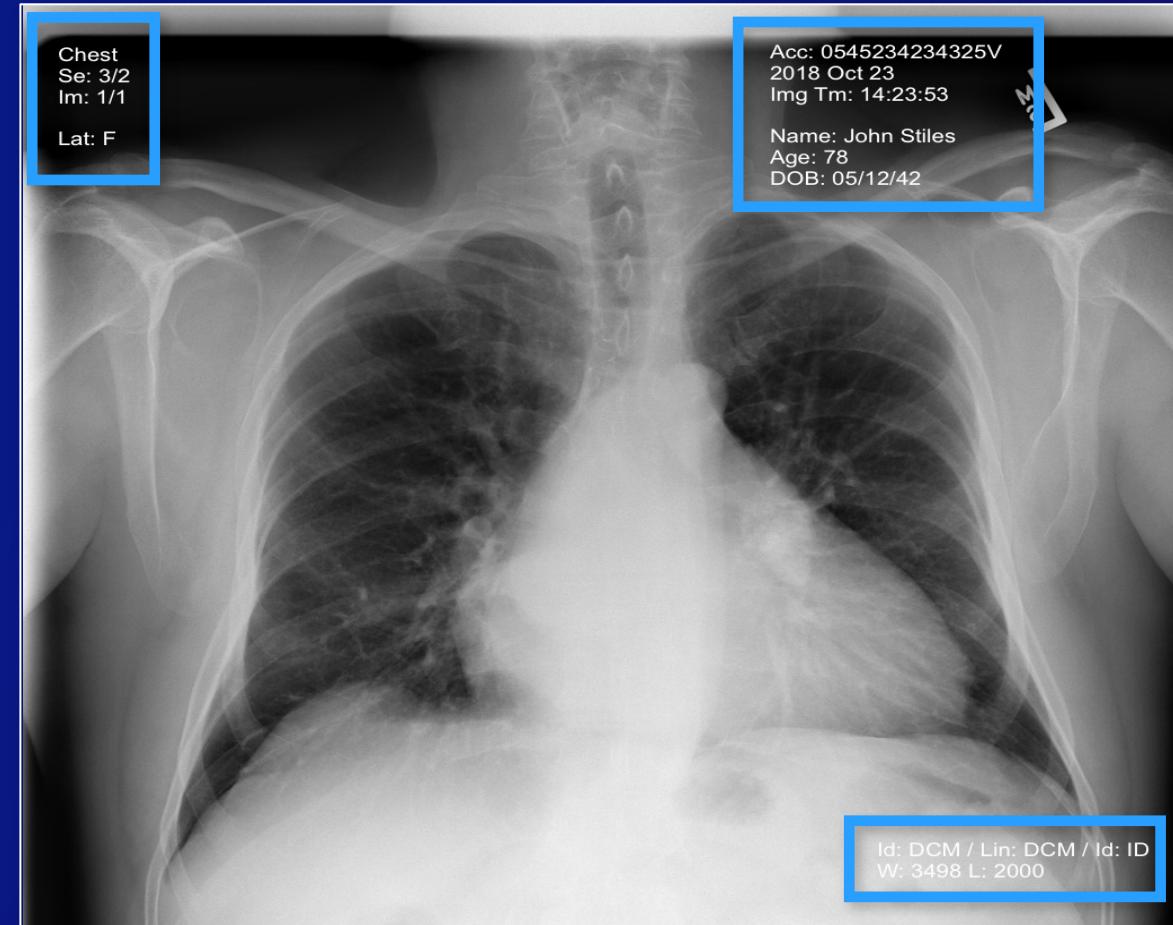
# **Student success - self service, tutoring, and support**

Conversational AI, self service  
and smart campus initiatives

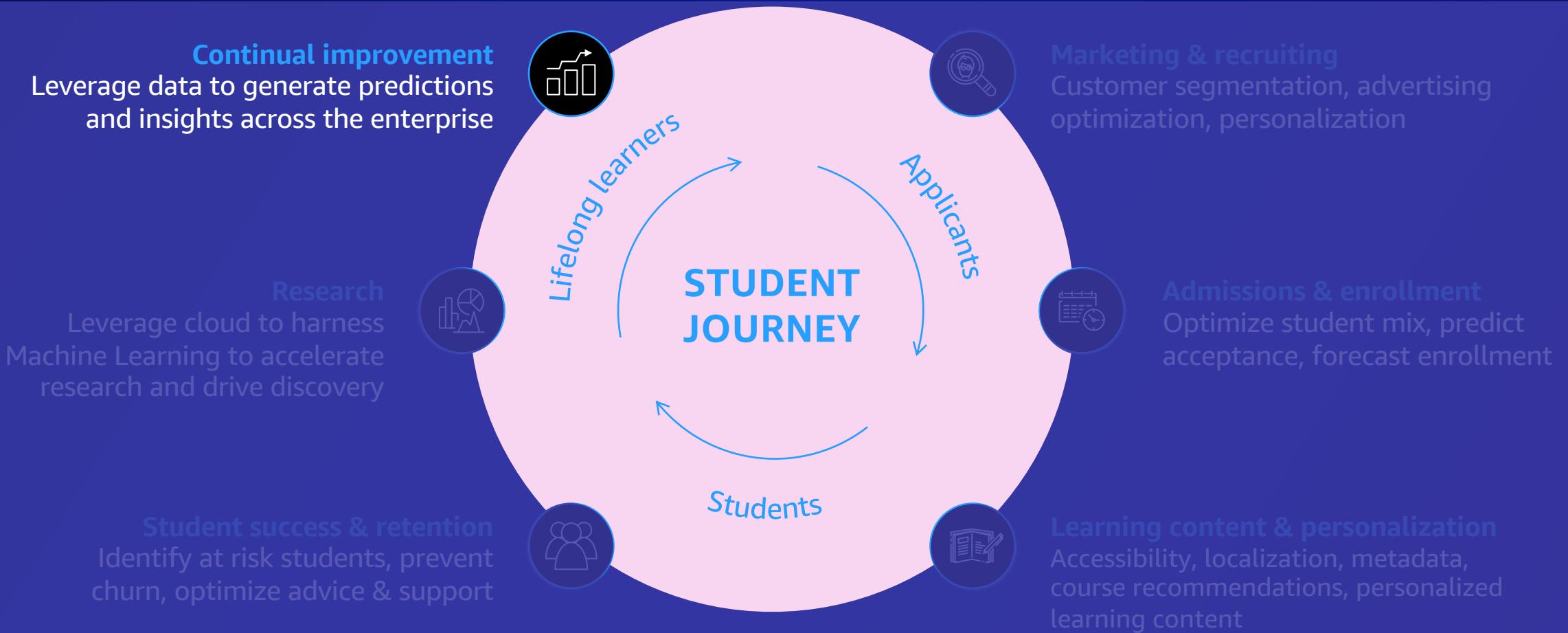


# Accelerate research

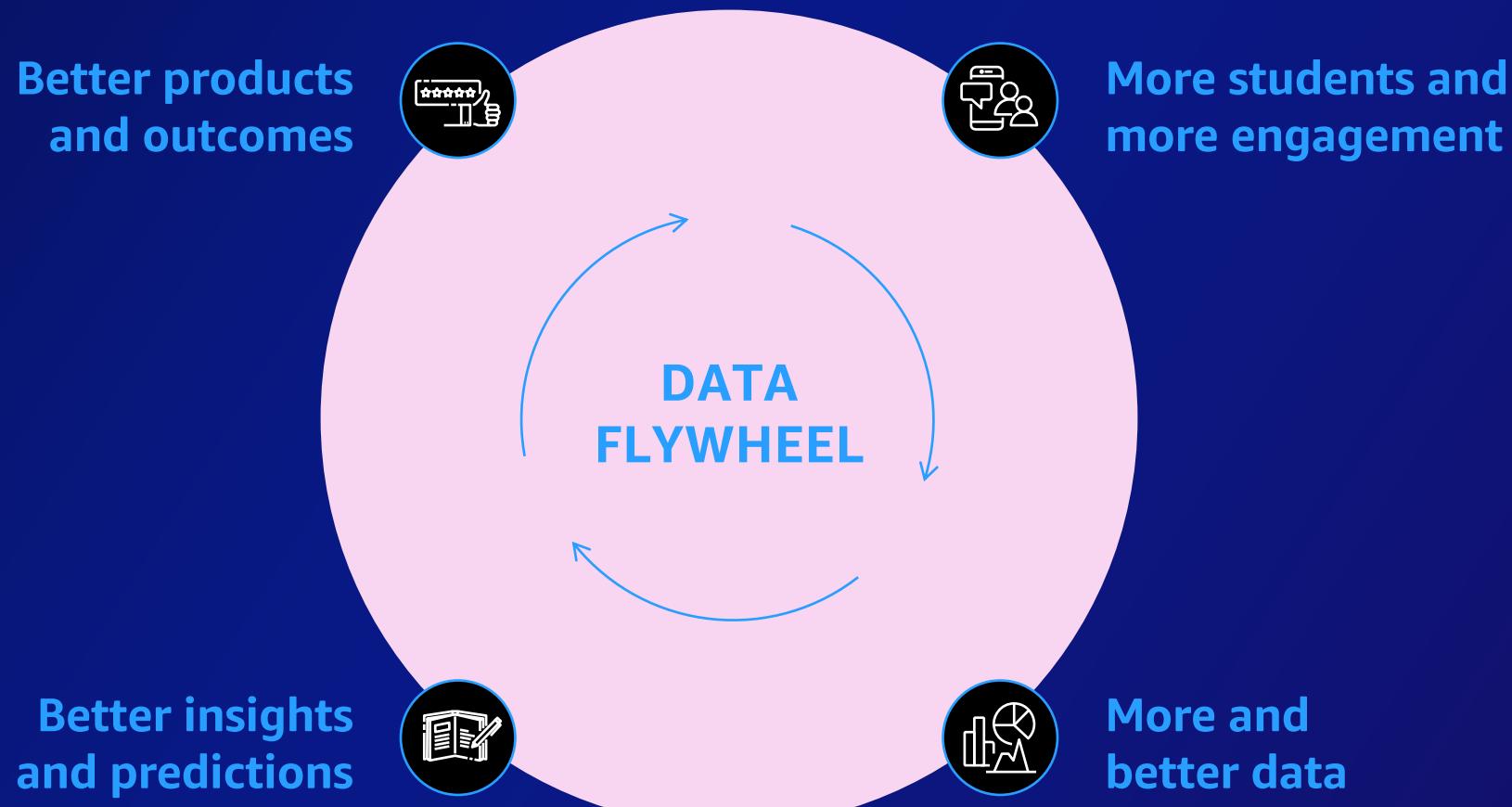
Empowering research teams  
for applied research using  
machine learning



# Machine learning is helping power the transition

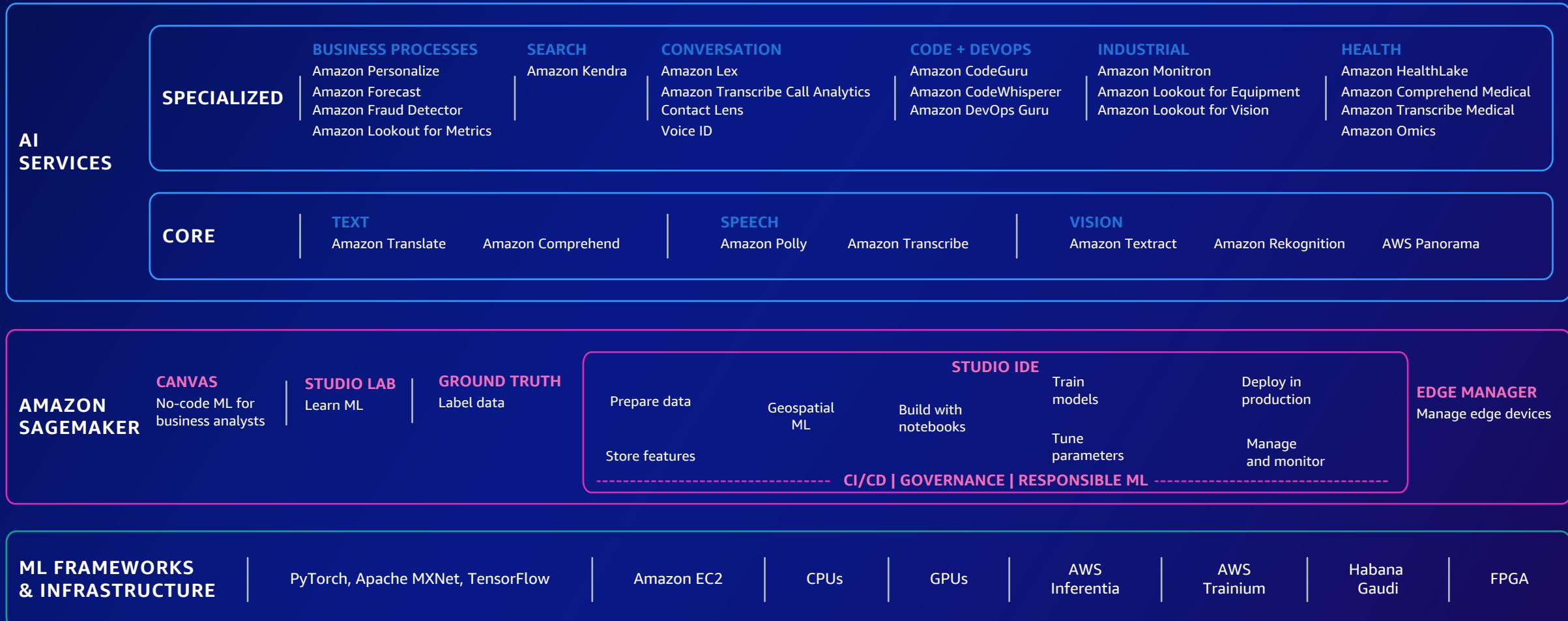


# Create the feedback loop for education



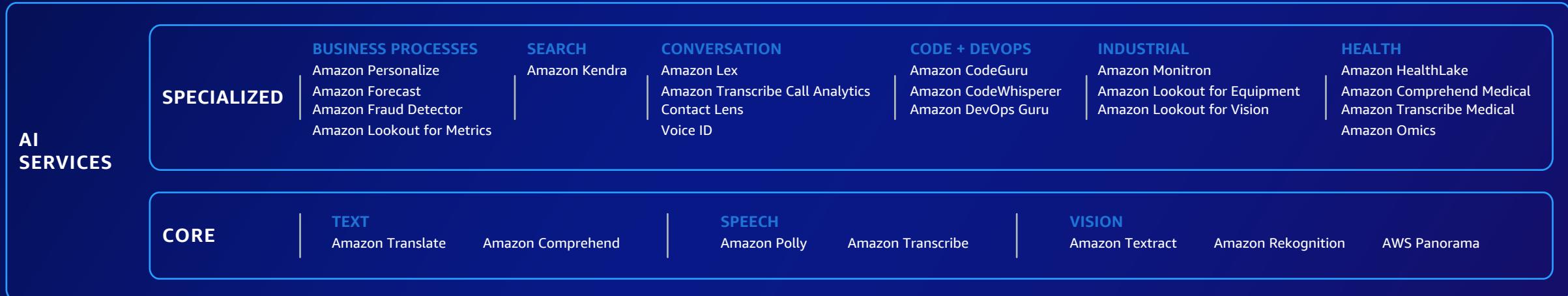
# The AWS AI/ML stack

BROADEST AND MOST COMPLETE SET OF MACHINE LEARNING CAPABILITIES



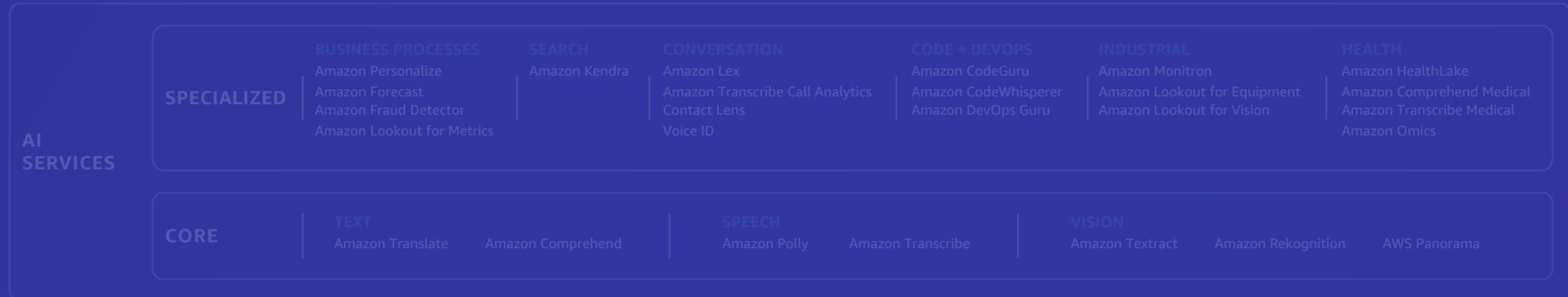
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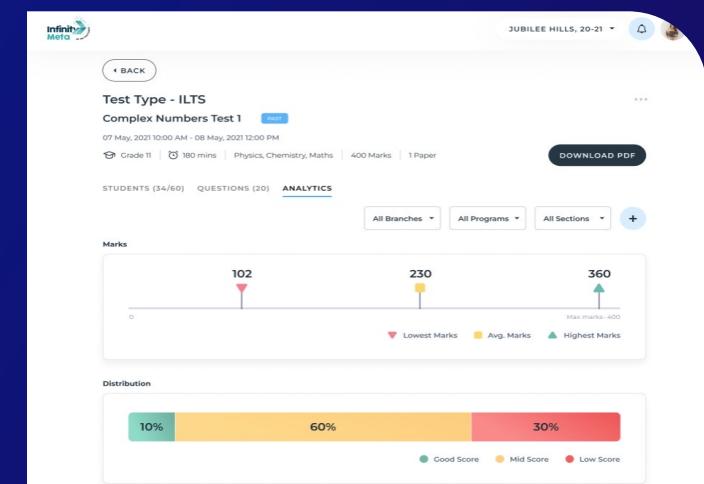
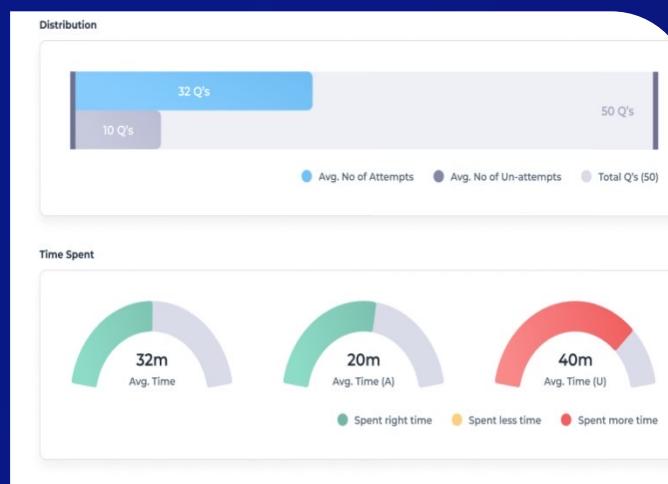
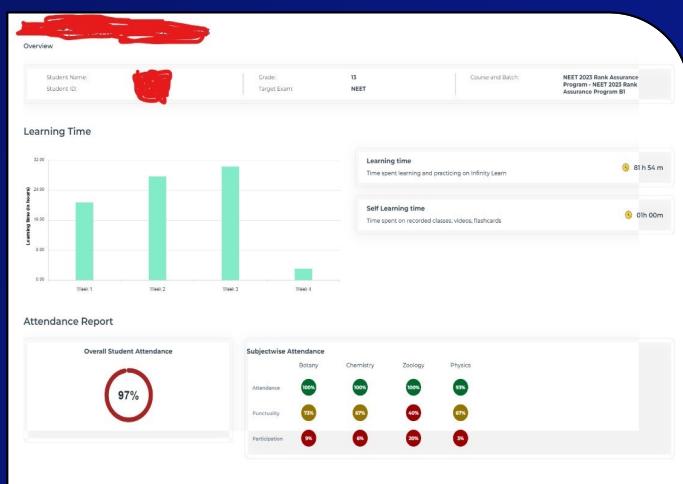
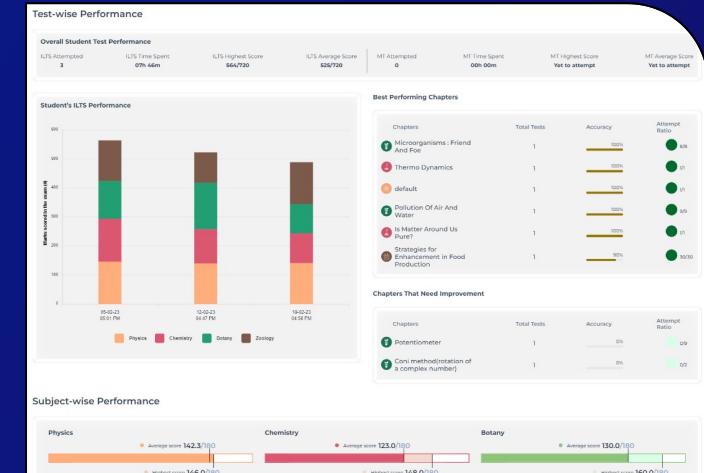
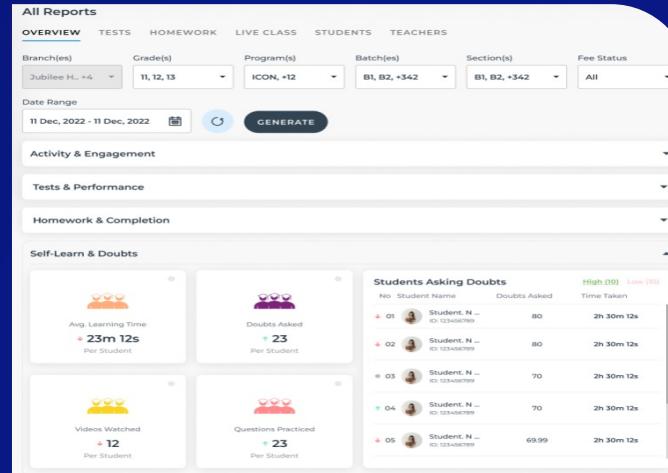
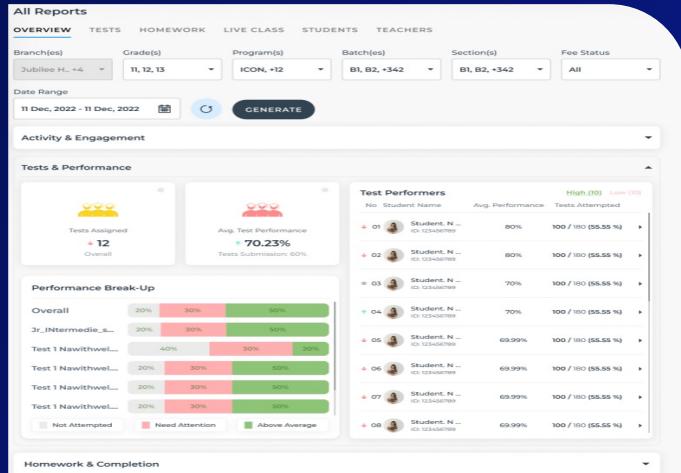


# The AWS AI/ML stack

BROADEST AND MOST COMPLETE SET OF MACHINE LEARNING CAPABILITIES



# Deeper students insights to transform learning experience



BUILD 008

# Infinity Learn: Transforming Learning Experience !!!

Anil Kommineni  
CTO  
Infinity Learn by Sri Chaitanya



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# Our purpose



**Why do we  
exist**

Powering learner's  
progress



**What we do**

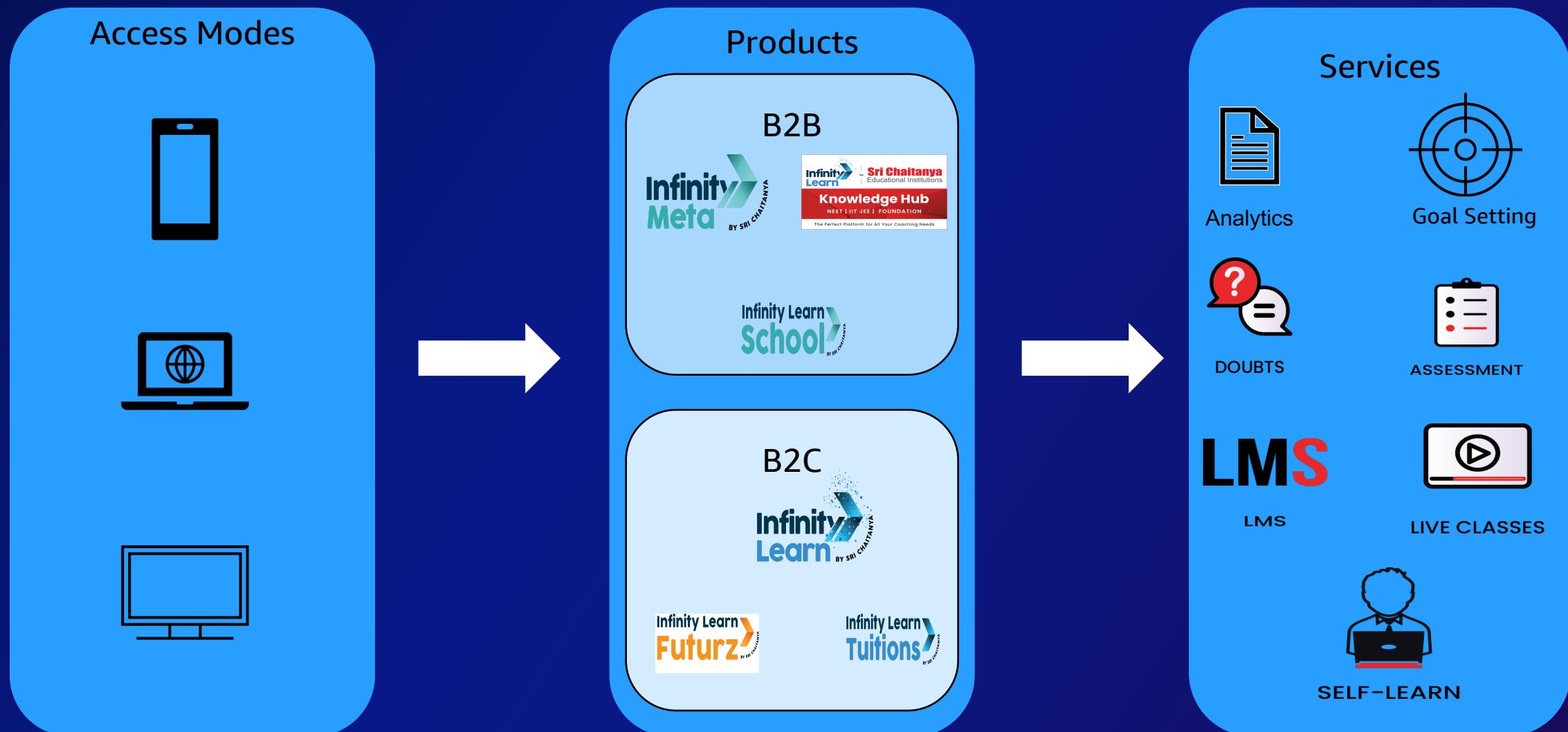
Success partners to  
3 million learning  
journeys



**How we do**

"in-class and after-  
class" hybrid  
learning solutions

# Our products and services



# Our presence

Led by promoters who have dedicated 36 years towards transforming education sector in India

650K



**Learners**

750



**K12 Schools**

30K



**Teachers**

- 1.2M+ video minutes
- 225K minutes of LIVE video streaming everyday
- 1500 videos watched everyday
- 10K+ questions practiced everyday

2.5 M+



Questions  
attempted

1.5M+



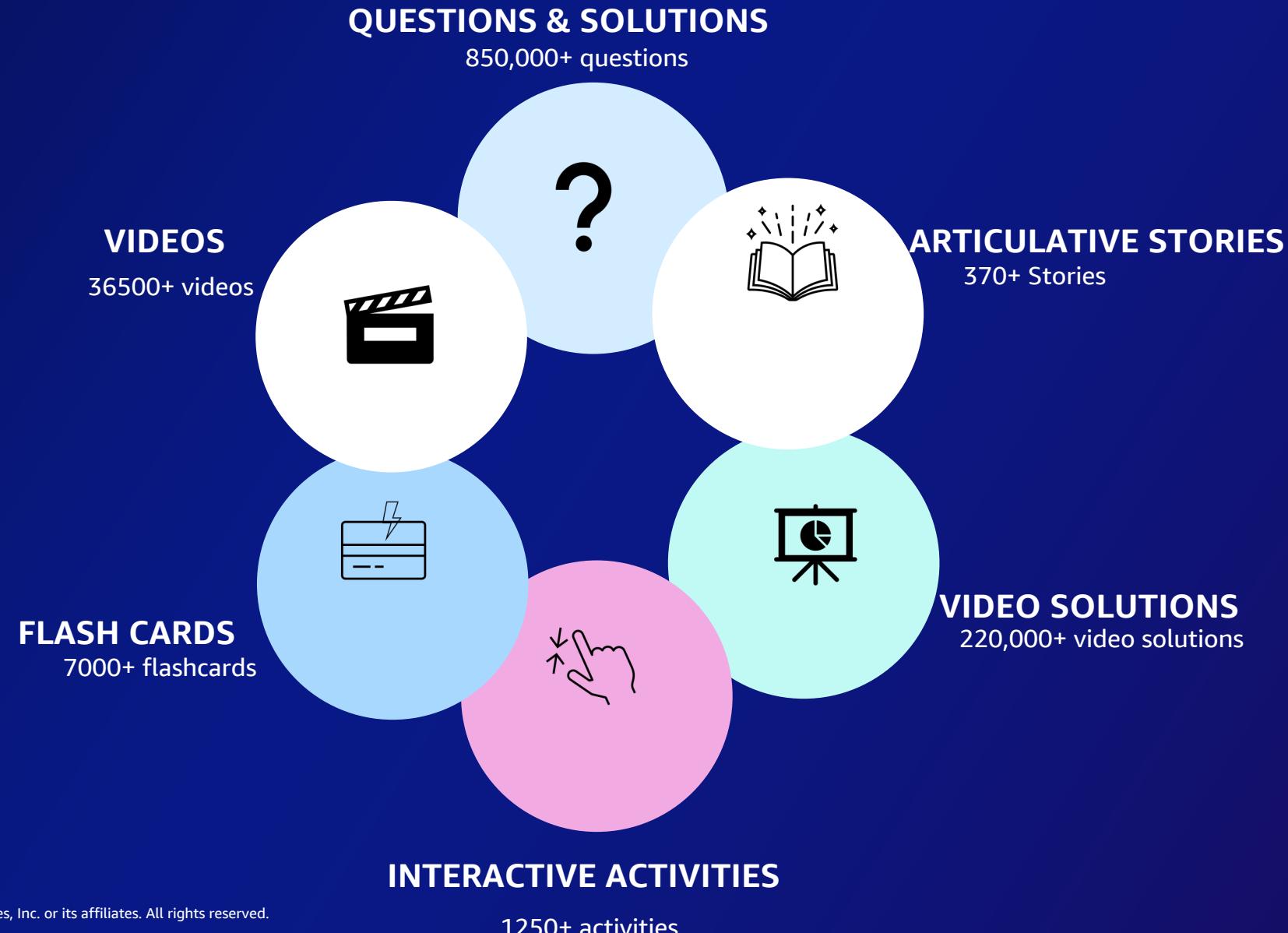
Minutes of  
LIVE classes

200K+



Doubts  
solved

# Our assets



# About IL and AWS association



# AWS powering our platforms

The illustration shows a person sitting at a desk, looking at a laptop screen. On the desk, there are icons for various AWS services: Amazon S3 (red cubes), Amazon EKS (blue hexagon with a white 'K'), Amazon EC2 (orange cube with a white 'E'), and AWS Lambda (orange cube with a white 'L'). To the left, there's a whiteboard titled 'PLATFORMS CMS INMOBIUS' with a blue lightning bolt icon.

**1** 2 lacs + Video Solutions

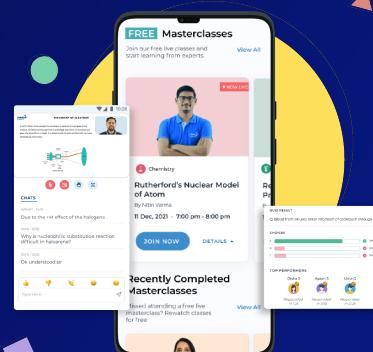
**2** Thousands of Flash Cards

**3** Concept wise interactive activities

**4** Deep Insights based on learners style

# Any time anywhere learning: Leveraging power of technology

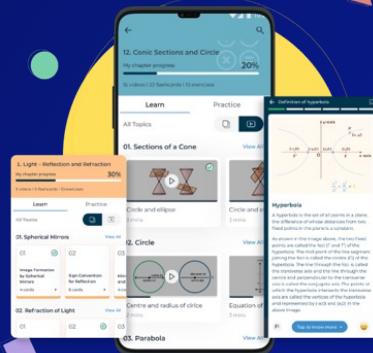
## LEARN THROUGH INFINITY LEARN MASTERCLASS



## REVISE AND PRACTICE THROUGH ASSIGNMENTS



## LEARN AT YOUR OWN PACE ANYTIME, ANYWHERE



## ROUND THE CLOCK INSTANT DOUBT RESOLUTION





# Adaptive Learning & Generative AI

# Enhancing learners experience



## Adaptive Learning

- Knowledge Graph
  - Personalized content rendering
- Recommendation Engine
  - DRS
  - Dynamic context based assessments
- CYOT (Create Your Own Test)
  - Adaptive practice tests
- Goal-Setting
  - Shortest learning path to success



## Generative AI\*

- Doubts
  - Ability to respond to questions
- DRS (Doubt Resolution System)
  - Resolve queries on-the-fly
- Surge and Engagement
- Dynamic Question paper
  - Adjust complexity based on responses
- Search\*
  - Algolia
  - ChatGPT

# Insights - What makes us different

## STUDENT PROGRESS REPORT

All Reports

OVERVIEW TESTS HOMEWORK LIVE CLASS STUDENTS TEACHERS

Branch(es) Jubilee H... +4 Grade(s) 11, 12, 13 Program(s) ICON, +12 Batch(es) B1, B2, +342 Section(s) B1, B2, +342 Fee Status All

Date Range 11 Dec, 2022 - 11 Dec, 2022 GENERATE

Activity & Engagement

Tests & Performance

Tests Assigned Overall + 12 Avg. Test Performance + 70.23% Tests Submission: 60%

Performance Break-Up

Overall 20% 30% 50% Jr\_Intermediate 20% 30% 50% Test 1 Nawithwel... 40% 30% 20% Test 1 Nawithwel... 20% 30% 50% Test 1 Nawithwel... 20% 30% 50% Test 1 Nawithwel... 20% 30% 50% Not Attempted Need Attention Above Average

Homework & Completion

All Reports

OVERVIEW TESTS HOMEWORK LIVE CLASS STUDENTS TEACHERS

Branch(es) Jubilee H... +4 Grade(s) 11, 12, 13 Program(s) ICON, +12 Batch(es) B1, B2, +342 Section(s) B1, B2, +342 Fee Status All

Date Range 11 Dec, 2022 - 11 Dec, 2022 GENERATE

Activity & Engagement

Tests & Performance

Homework & Completion

Self-Learn & Doubts

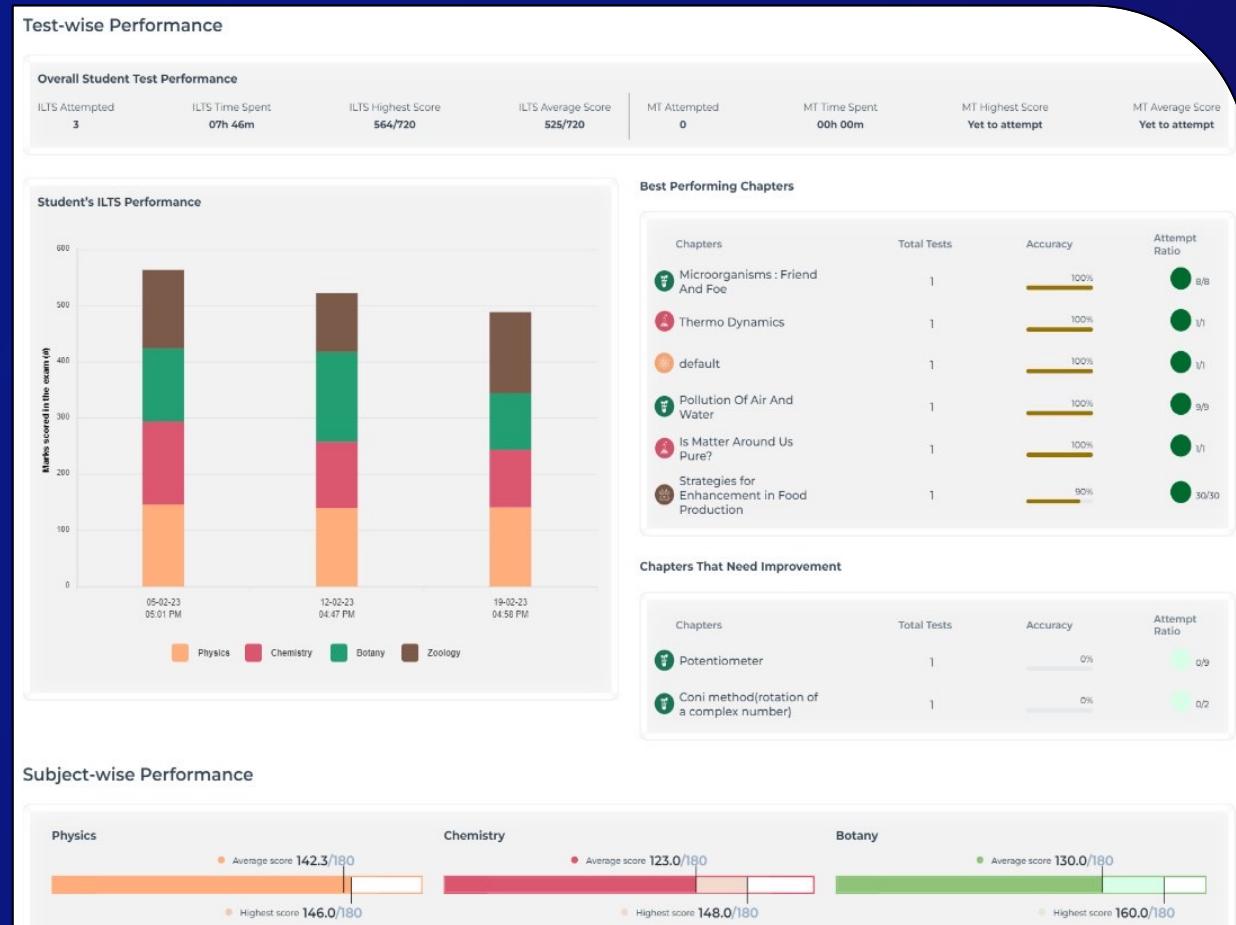
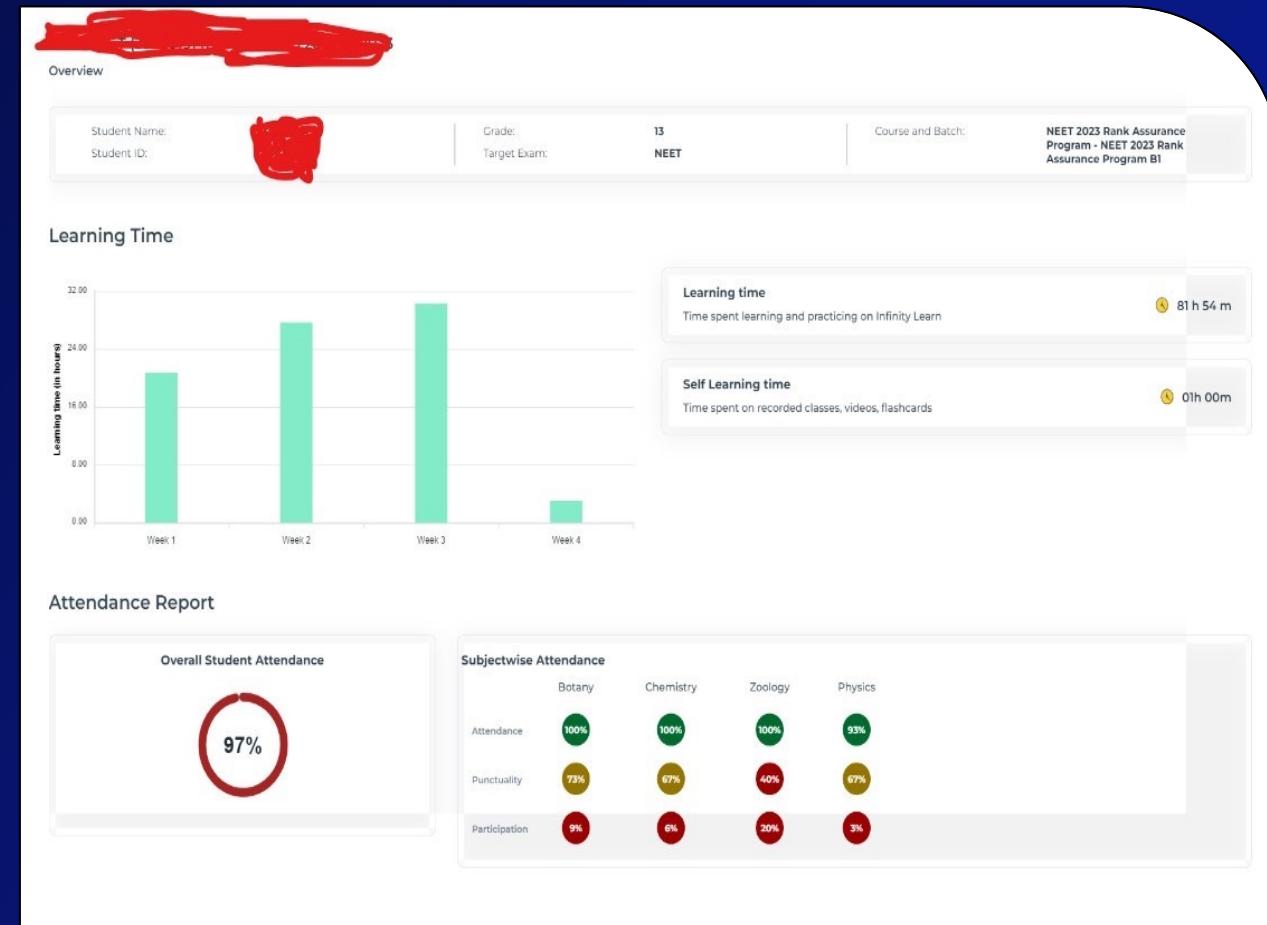
Students Asking Doubts

No	Student Name	Doubts Asked	Time Taken
01	Student. N ... ID: 123456789	80	2h 30m 12s
02	Student. N ... ID: 123456789	80	2h 30m 12s
03	Student. N ... ID: 123456789	70	2h 30m 12s
04	Student. N ... ID: 123456789	70	2h 30m 12s
05	Student. N ... ID: 123456789	69.99	2h 30m 12s



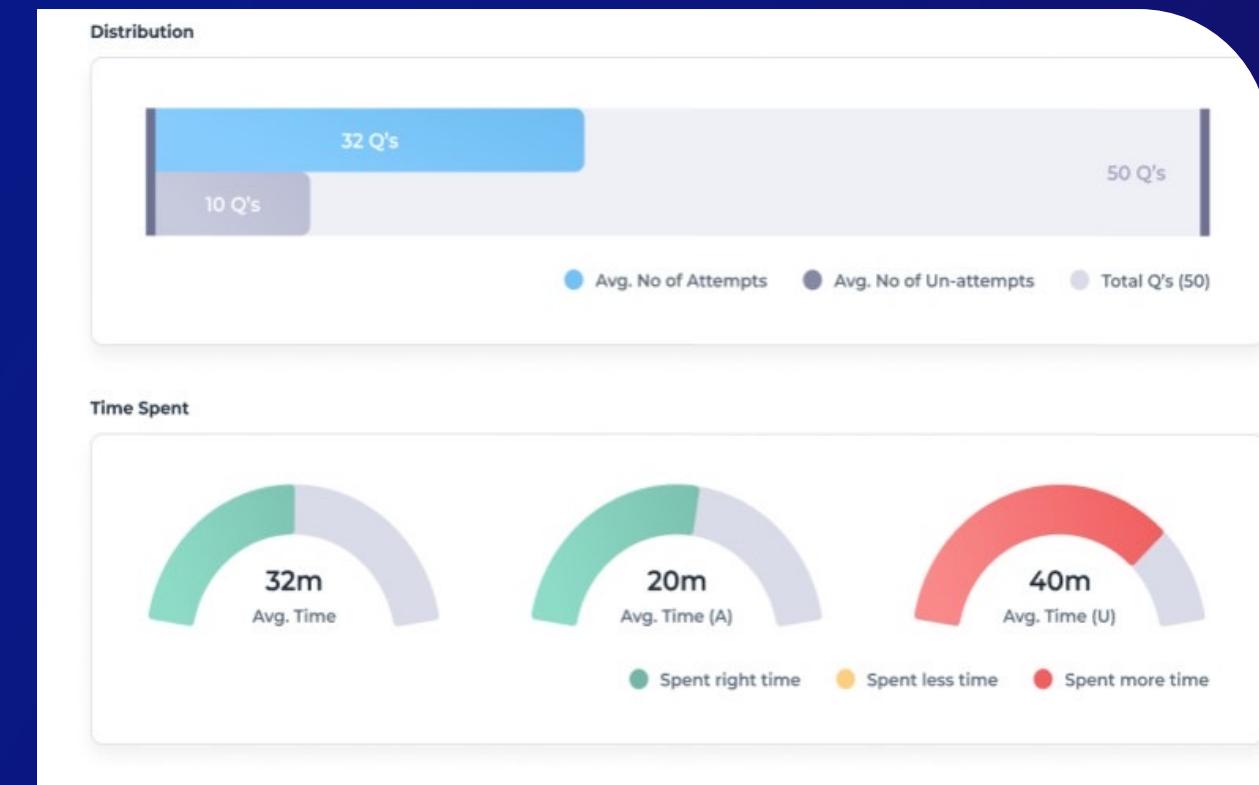
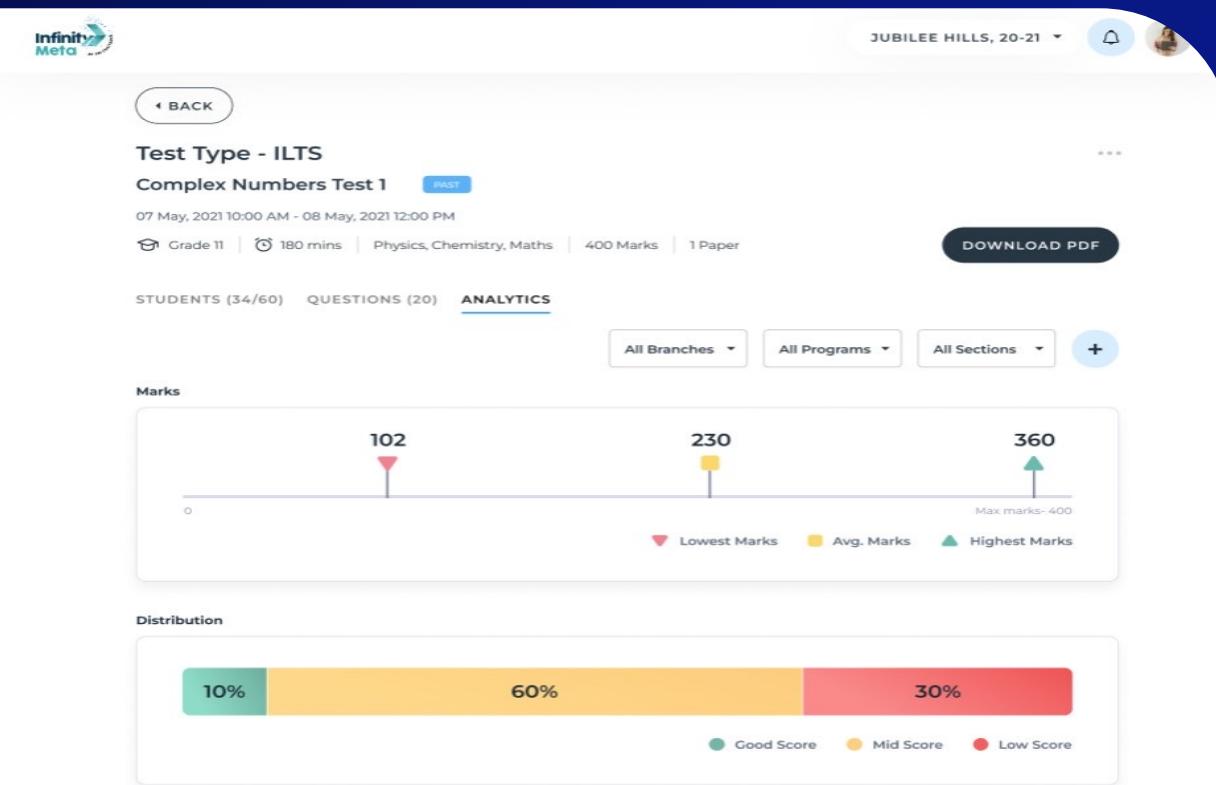
# Insights - What makes us different

## STUDENT PERFORMANCE REPORT



# Insights - What makes us different

## STUDENT EXAM REPORT



skillbuilder.aws 

# Your time is now

## Build in-demand cloud skills your way



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# Thank you!



Please complete the  
session survey

Sachin Punyani

Solutions Leader, Public Sector  
AWS India

Anil Kommineni

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