

# Sustainable Education in India through Artificial Intelligence: Challenges and Opportunities

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# Agenda

1

Understanding  
Educational Ecosystem

Special focus on the Indian  
educational system



2

Artificial Intelligence

Scope of Artificial  
Intelligence in Indian  
educational system



3

Challenges and  
Opportunities

From Privacy and Security to  
Legal Frameworks



4

Conclusions

Role of Market and  
Government

# Introduction

## Education in India has moved into massification phase

- Indian education has reached from elite to the phase of massification
- There are innumerable challenges because of this massification

## Sustainable solutions for emerging challenges

- Emerging challenges due to massification needs sustainable approach
- India being developing country needs sustainability as key perspective

## Artificial Intelligence driven sustainable interventions

- Role AI can play for the sustainable solutions of challenges emerging in Indian education system
- AI Interventions for resource efficient support

# Overview of Indian Educational System

**1**

## Recruitment

Higher student-teacher ratio and alleged unfair recruitments

**2**

## Guidance & Counselling

No or less work-life balance amongst students

**4**

## Quality Assurance

Lengthy process of monitoring and evaluation and less transparent

**6**

## Planning and Administration

Lack of efficiency and hierarchical decision making

**3**

## Examinations

Less smooth and discontinuous process

**5**

## Teaching & Learning

Increase in strength and issues in choosing papers

# Scope of Artificial Intelligence: The Road to Future

## Recruitment

Improving performance of underperforming demographic regions through data analytics

## Guidance and Counselling

Predicting dropping out and suicides

## Teaching and Learning

Course recommender system

## Finance, Planning and Administration

Use of Application Programming Interfaces  
Named Entity Recognition tools

## Examinations

Use of Natural Language Processing

## Accountability & Performance Monitoring

Use of sentiment analytics based polarity scorer

# Challenges, Opportunities & Conclusions

**1**

**Privacy and  
Security**

**3**

**Interpretability  
and  
Transparency**

**4**

**Governance,  
Accountability  
and Legal  
Frameworks**

**2**

**Fairness and  
Bias Correction**

**5**

**Human  
Resource and  
Finance**

Conclusions: Challenges & opportunities are similar to the other developing countries. Apart from market Governmental intervention and institutional framework is required.

**Thanks for your attention!**  
**Question?**