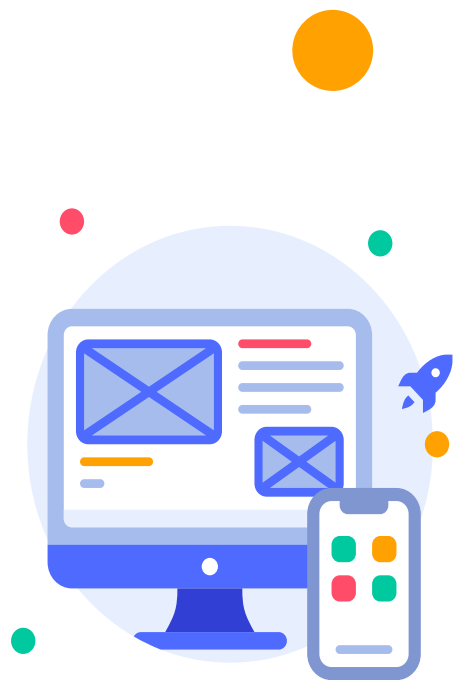


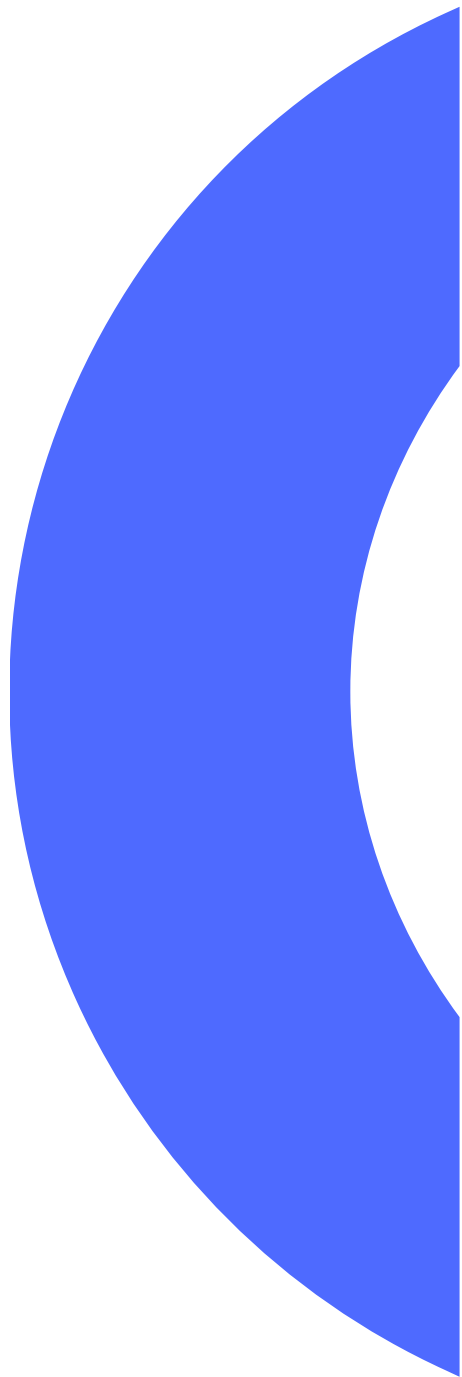


ARTIFICIAL INTELLIGENCE & DATA PRIVACY



B A L A N C I N G
I N N O V A T I O N &
P R O T E C T I O N





TOPIC

- Introduction
- Understanding AI in Education
- Benefits of AI in Education
- Challenges of AI in Education
- Privacy Concerns in Education
- Challenges of Data Privacy in Education
- Current Privacy Laws and Regulations
- Best Practices for Privacy in AI in Education
- Future Trends and Innovations in AI and Privacy
- Conclusion





UNDERSTANDING
AI IN
EDUCATION





Once upon a time, in a not-so-distant future, a university decided to implement an **advanced AI system to personalize education for its students**. The AI was designed to analyze each student's learning patterns, strengths, and weaknesses, providing tailored lessons and resources to help them succeed.

At first, the AI seemed like a dream come true for both faculty and students. It could **identify struggling students early on, recommend additional materials for advanced learners, and even predict which students might need extra support in specific subjects**. It was hailed as a technological marvel.

However, as time went on, **concerns about privacy** began to surface. Parents and students started to wonder just how much data the AI was collecting and how it was being used. The university had assured everyone that the data was anonymized and used solely for educational purposes, but doubts remained.

One day, a curious student named Alex decided to dig deeper into the AI's data collection process. With a bit of coding knowledge and determination, Alex discovered that the **AI was collecting not only academic data but also personal information like students' browsing history, social media activity, and even their conversations outside of school hours**.

Alarmed by this discovery, Alex brought it to the attention of a few classmates and together, they organized a meeting with their university president. The president was shocked and immediately initiated an investigation. **It was revealed that the AI system had been developed by an external company that had not been transparent about the extent of data collection**.

The university swiftly terminated its contract with the company, but the damage had been done. Parents and students lost trust in the use of AI in education, and privacy concerns became a significant roadblock to further implementation.

QUESTIONS ARISING

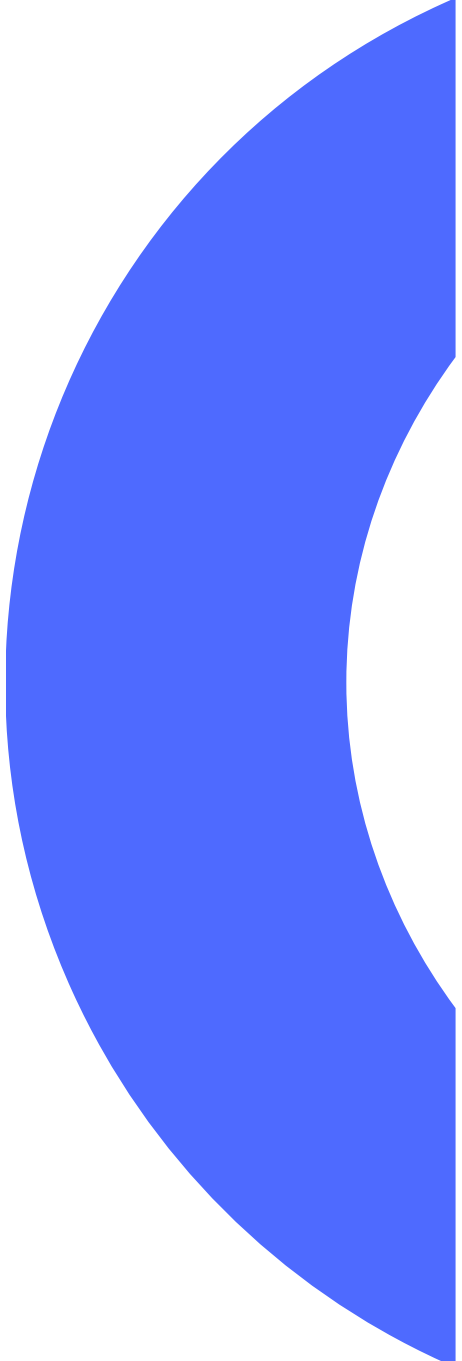
How much data has been collected?

How secure was the data being collected by the AI platform?

Who had access to this data, and for what purposes?

What safeguards were in place to protect students' privacy?



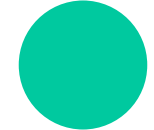


WHAT IS AI?

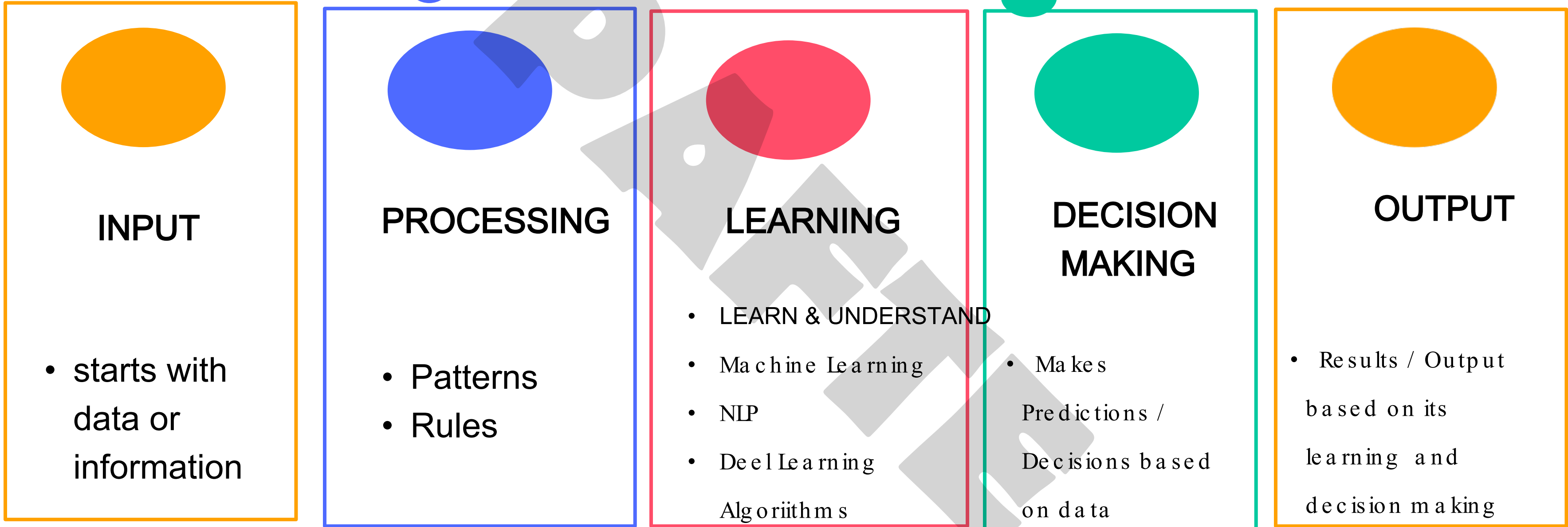
Artificial intelligence (AI) refers to the simulation of the human intelligence in machines.

Task requiring human intelligence:

- learning from experience
- adapting to new situations
- understanding natural language
- recognizing patterns
- making decisions



HOW AI WORKS



HOW AI WORKS IN EDUCATION

DATA COLLECTION

- Student data, scores, submissions, interaction with application

ANALYSIS

- Patterns & Insights
- Student struggles
- interaction with application

PERSONALIZATION

- based on analysis, customize learning experience

FEEDBACK & ASSESSMENT

- Immediate feedback of student's work

ADAPTIVE LEARNING

- Can adapt the difficulty of lessons in real time

TEACHER SUPPORT

- automation of administrative tasks like grading and tracking student progress

CONTINUOUS IMPROVEMENT

- continuously learns and improves its recommendations and teaching methods based on how students respond. It adapts and gets better over time.



WHY AI IN EDUCATION?

ENHANCED LEARNING

AI offers personalized learning experiences adapting to learning

EFFICIENCY AND PRODUCTIVITY

AI offers personalized learning experiences, adapting to individual students' needs and learning styles.

DATA DRIVEN INSIGHTS

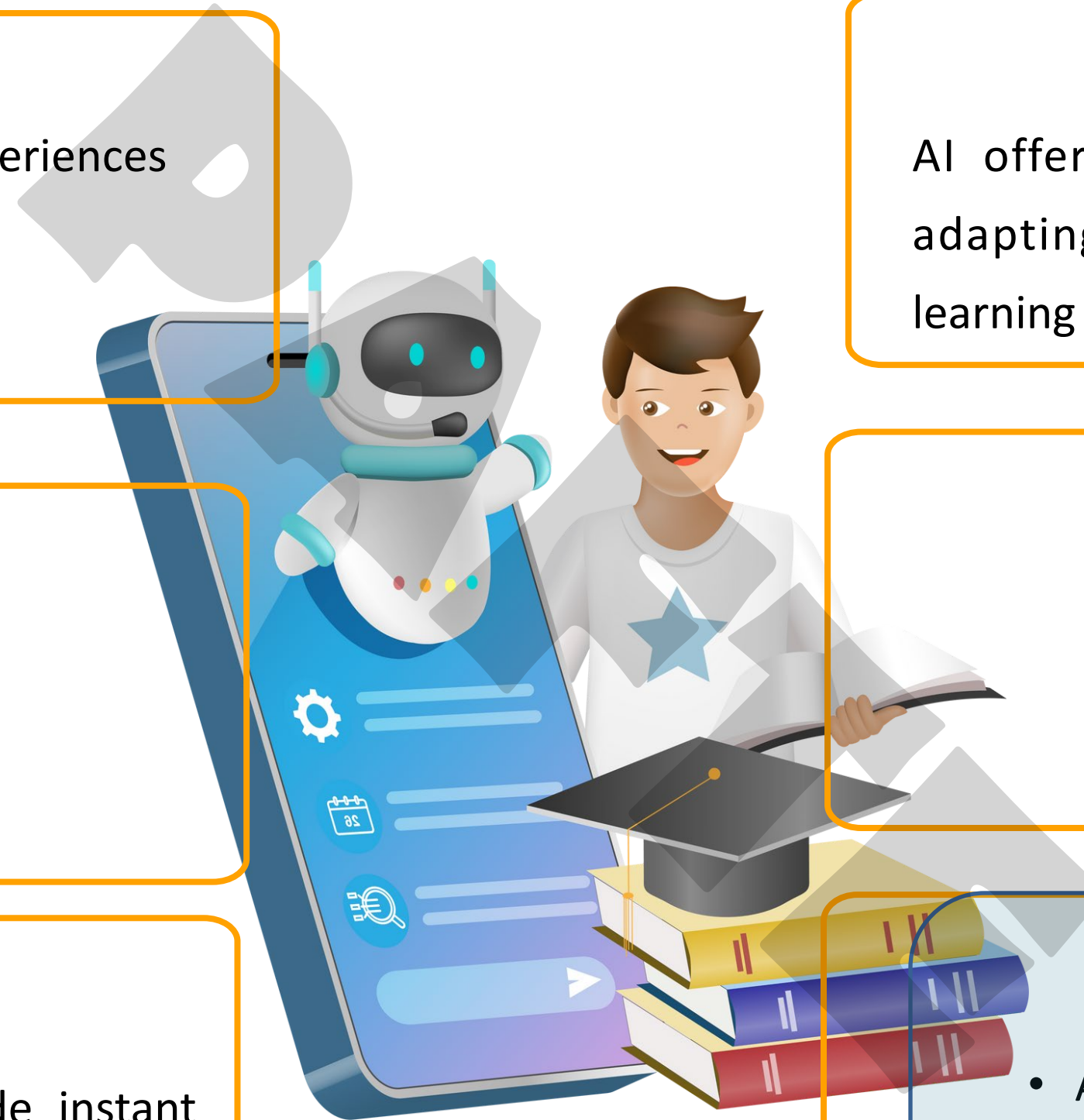
ACCESSIBILITY & INCLUSIVITY

SMART TUTORING

- AI-powered tutoring systems provide instant feedback and support, enhancing student engagement

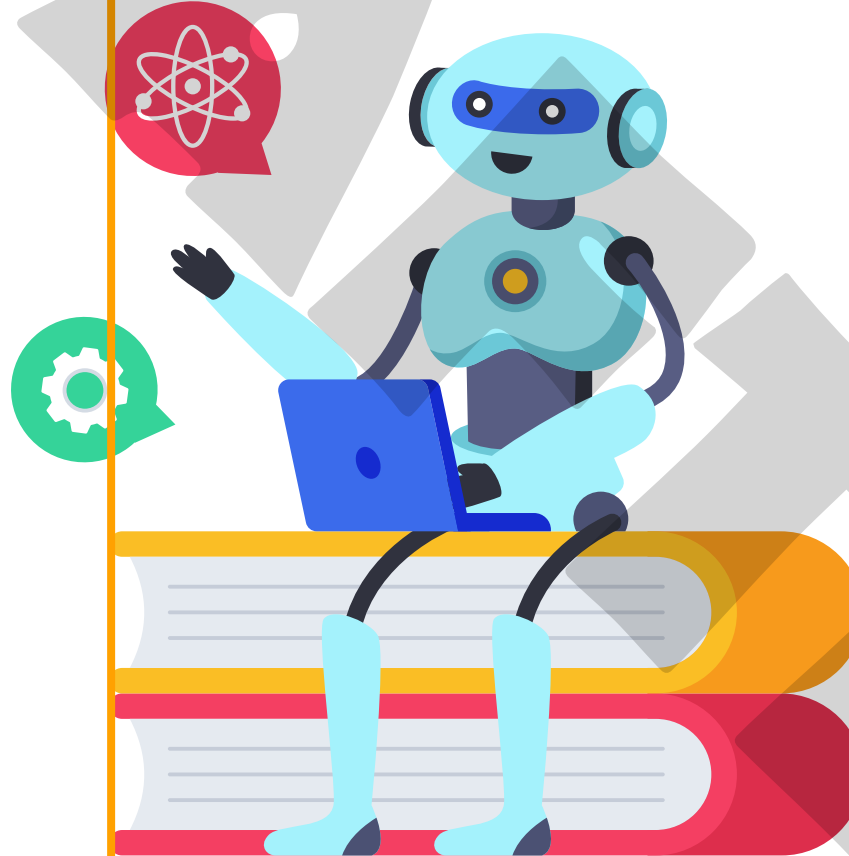
PREPARING FOR THE FUTURE

- AI equips students with skills needed for technology-driven world boosting their employability



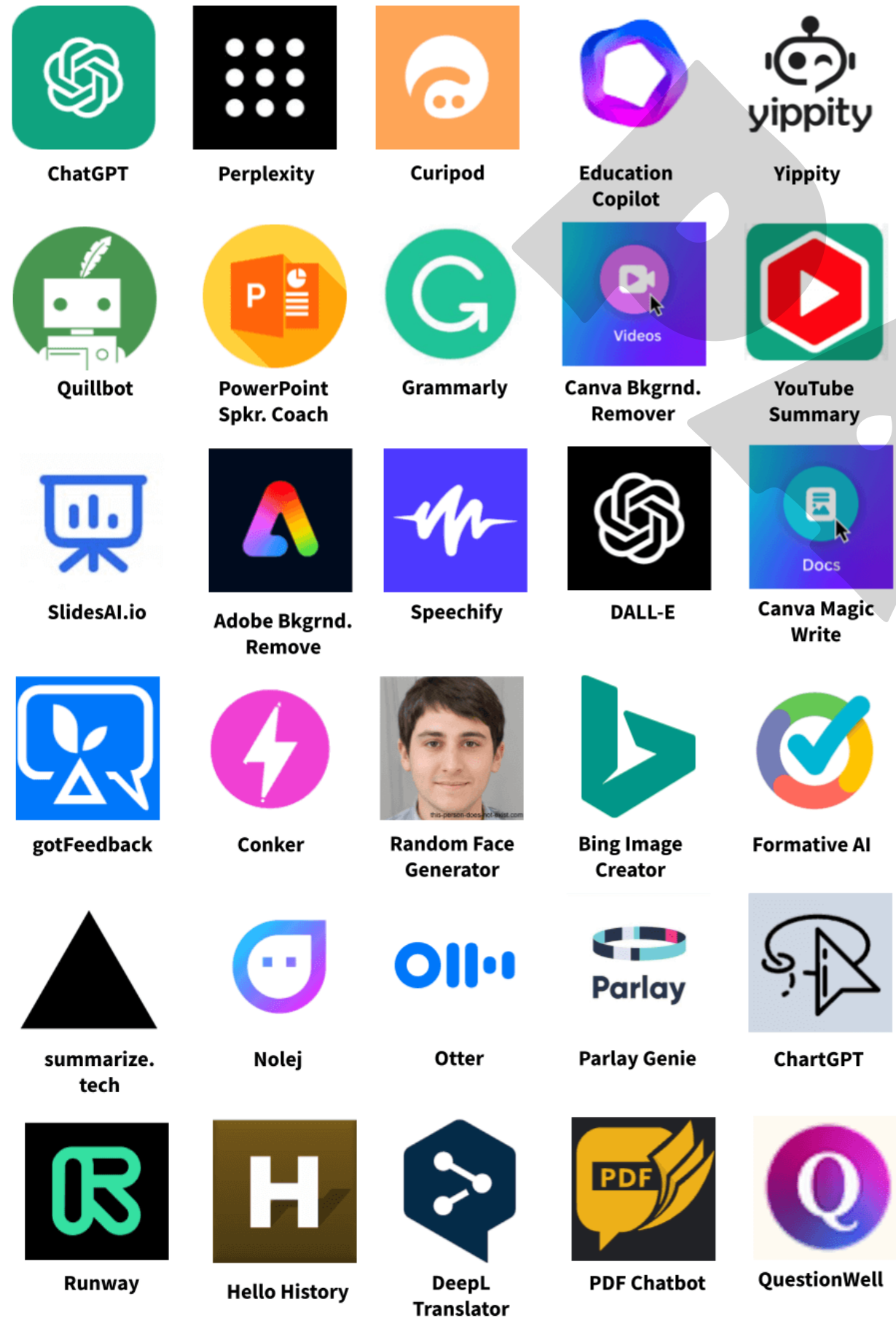
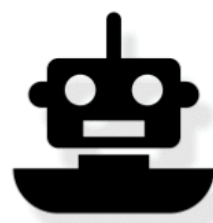
HOW IS AI USED IN EDUCATION?

- Classroom Behavior Management
- Lesson Planning
- Class Audio Visual
- Language Learning
- Learning Management Systems



- Assessment
- Professional Development
- Maintenance
- Cybersecurity
- Safety Security
- Gamification
- Staff Scheduling

30 AI tools to use in the classroom



AI Tools for Teachers

Lesson Planning	
Marking / Report Writing	
Admin and organisation	
Adaptive tools	
Personalised Learning	
Chat bots	
Creativity	
Research/ Academic writing	



UNDERSTANDING PRIVACY IN EDUCATION



PRIVACY CONCERNS ON AI IN EDUCATION



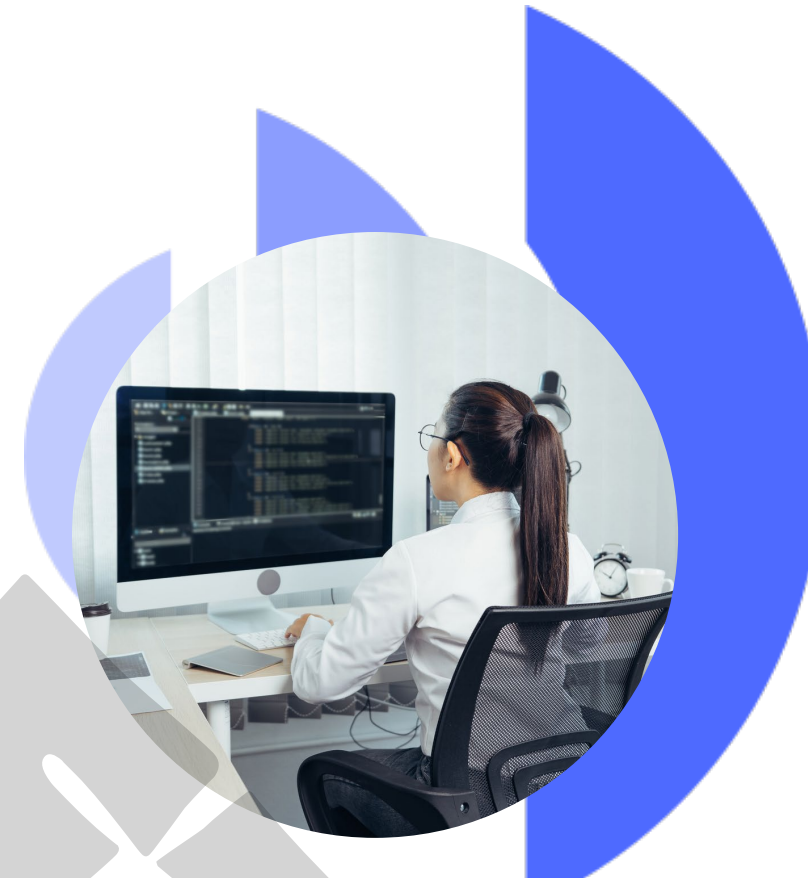
LACK of ACCESS & INFRASTRUCTURE

lack of resources.



DATA COLLECTION & SHARING

collecting and sharing sensitive personal data.
safeguarding data



SKILLS & TRAINING

retooling,
reskilling.



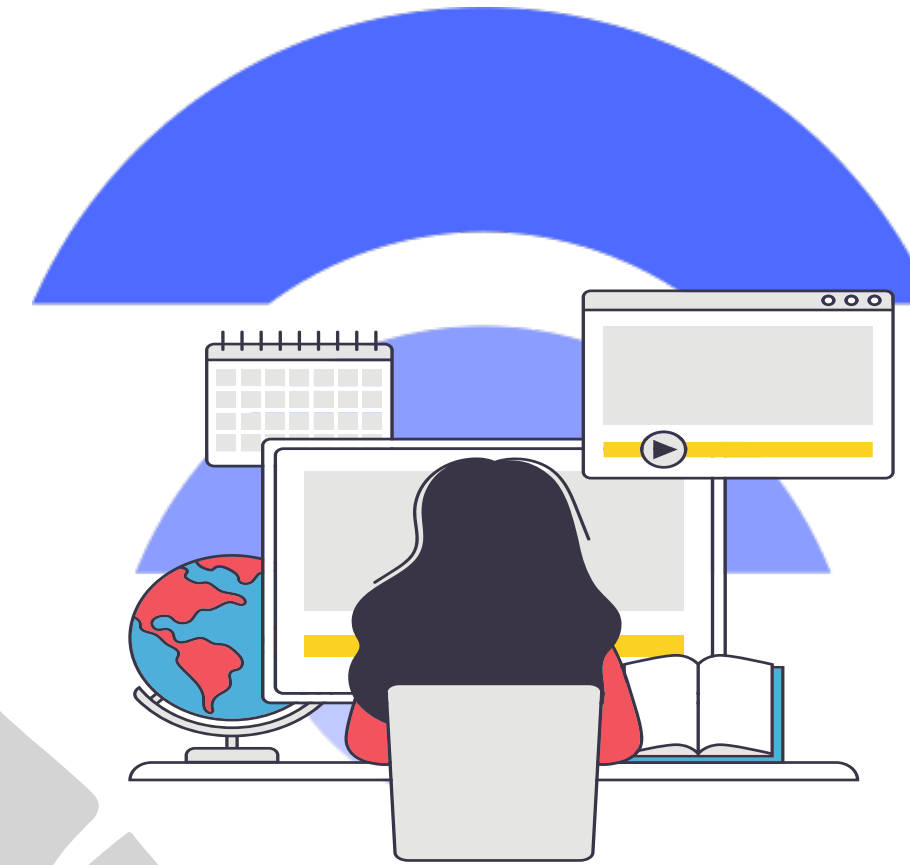
ETHICAL CONSIDERTATIONS

ensure fairness,
transparency &
accountability.

PRIVACY CONCERNS ON AI IN EDUCATION

Data Security Measures

With the increasing use of AI in education, there are concerns about the security and privacy of student data. It is important to ensure robust data security measures to protect sensitive information from unauthorized access or breaches.



Informed Consent

Obtaining informed consent from students and parents regarding the collection and use of their data is vital. Transparency about data use and providing students and parents with control over their data can help address privacy concerns.



Key Components of Data Privacy Laws

Legal Framework, Consent, Data Collection, Data Protection

1 Legal Framework

The data privacy laws in the Philippines are primarily governed by the Data Privacy Act of 2012, which establishes the legal framework for the protection of personal information.

2 Consent


Obtaining explicit consent from individuals before collecting and processing their personal data is a fundamental requirement under data privacy laws.

3 Data Collection

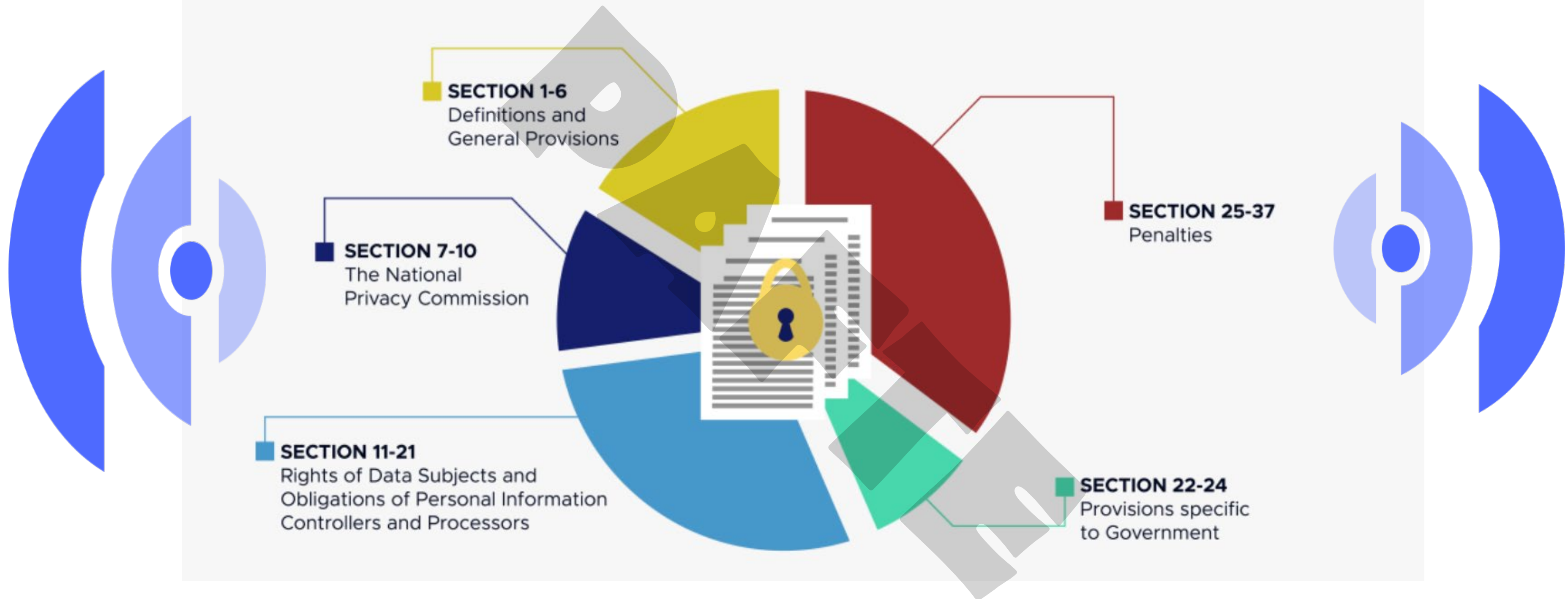
Data privacy laws regulate the collection of personal information and mandate the implementation of security measures to protect the data from unauthorized access or disclosure.

4 Data Protection

Data privacy laws require organizations to implement measures to ensure the security and confidentiality of personal information, including encryption, access controls, and regular data backups.



THE STRUCTURE OF THE DATA PRIVACY ACT



DATA SUBJECT RIGHTS



RIGHT TO BE INFORMED



RIGHT TO DAMAGES



RIGHT TO ACCESS



RIGHT TO FILE A COMPLAINT



RIGHT TO OBJECT



RIGHT TO RECTIFY



RIGHT TO ERASURE OR BLOCKING



RIGHT TO DATA PORTABILITY



Legislation and Regulations

Legal Framework for Student Data Privacy

1 Data Privacy Act of 2012

The Data Privacy Act of 2012 establishes the legal framework for data privacy protection in the Philippines.

2 Department of Education Guidelines

The Department of Education has issued guidelines to ensure compliance with data privacy regulations in educational institutions.

Data Privacy Council Education Sector
Advisory No. 2020-1
Data Privacy and Online Learning

3 Personal Information Controller

Educational institutions must designate a Personal Information Controller responsible for managing and protecting student data.

4 Consent and Disclosure

Clear consent must be obtained from students or their guardians for the collection and disclosure of their personal information.



Impacts of Data Breaches and Non-Compliance

Financial Loss, Reputational Damage, Legal Consequences

Financial Loss


Data breaches can result in significant financial loss for organizations, including costs associated with remediation, legal actions, and compensation to affected individuals.

Reputational Damage

Data breaches and non-compliance with data privacy laws can ruin the reputation and trust of organizations, leading to customer attrition and loss of business opportunities.

Legal Consequences

Non-compliance with data privacy laws can result in penalties, fines, and legal actions against organizations, potentially leading to severe financial and operational implications.



HOW TO PROTECT STUDENT DATA PRIVACY WHEN USING AI TOOLS:

Awareness of Data Collection

- Understand the type of data collected by AI tools.
- Be compliant with privacy laws and regulations.

Minimize Data Collection

- Collect only necessary data for AI functionality.
- Reduces the risk of unintended data use.

Data Encryption

- Encrypt collected data to enhance unauthorized access prevention.

Secure Data Storage

- Store data on secure servers with strong protections.

Limited Data Sharing

- Share data only with authorized individuals.
- Restrict access to those with legitimate needs.

Timely Data Deletion

- Delete data when it's no longer essential for AI function.

BEST PRACTICES

Ensuring Privacy Compliance

1 Consent and Transparency

Obtaining informed consent from students and parents, providing clear information on data usage and storage.

2 Secure Data Storage

Implementing robust security measures, including encryption and restricted access, for safe data storage.

3 Data Minimization

Collecting only necessary data, minimizing risks associated with storing excessive student information.

4 Regular Audits and Evaluations

Conducting periodic audits and assessments to ensure ongoing compliance and identify potential vulnerabilities.

HOW TO PROTECT STUDENT DATA PRIVACY WHEN USING AI TOOLS:

Parental Consent

- Obtain parental consent for sensitive data collection.
- Especially for medical or financial information.

Student Education

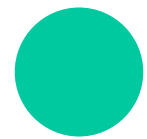
- Educate students about data privacy.
- Have discussions, provide resources, and share privacy policies.

Continuous Monitoring

- Regularly supervise AI tool usage.
- Ensure privacy protection and address any issues promptly.



HOW CAN AI BE USED RESPONSIBLY BY TEACHERS





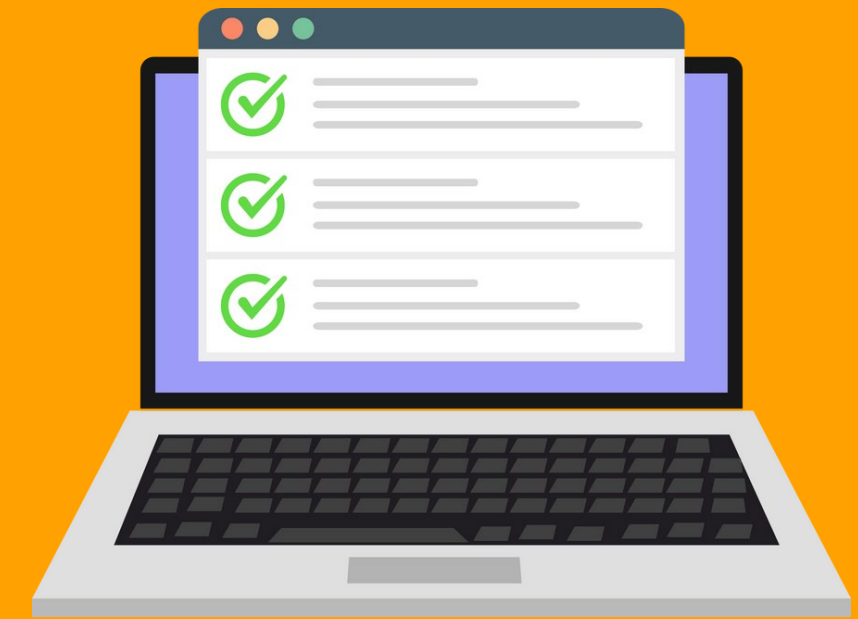
AI can be used to
automate administrative
tasks



AI can be used to create
personalized learning
experiences for students



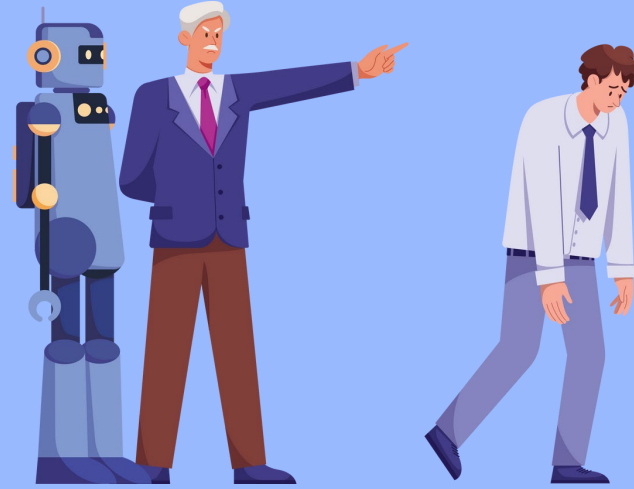
Involve students in the
design and development of
AI tools.



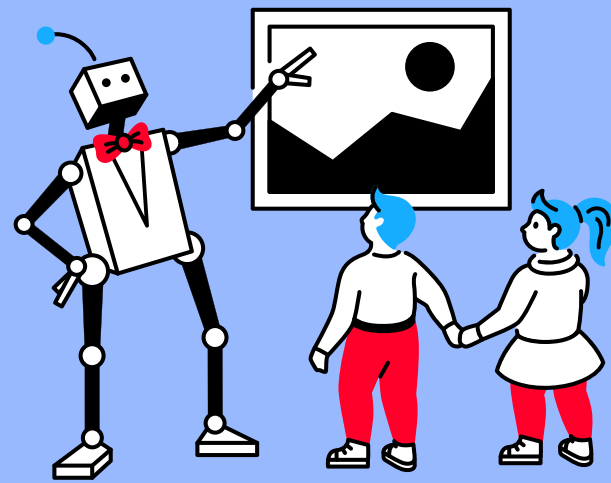
AI can be used to provide
feedback to students.



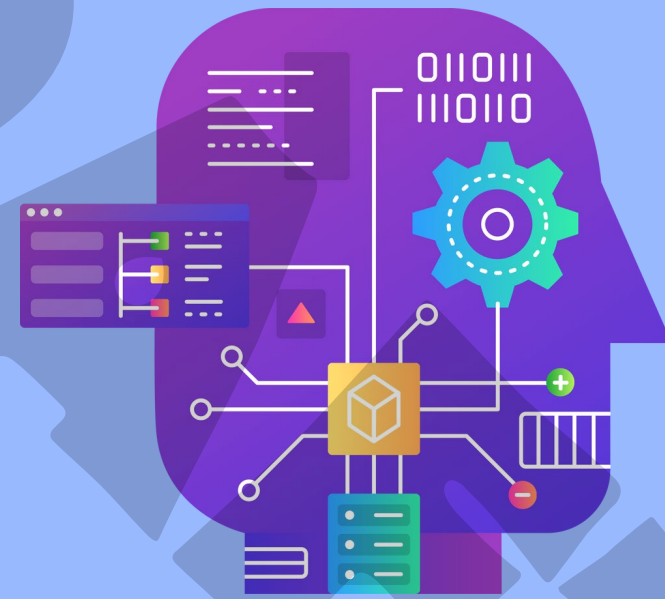
AI has the potential to
revolutionize and personalize
education



Ensure that AI tools are used to supplement, not replace, teachers



Be transparent about the use of AI in the classroom.



Use AI tools in a way that is fair and equitable.



Protect student data privacy.



Educate teachers about AI.

Finding Common Ground: Balancing AI and Data Privacy

1 Ethical Considerations

To strike a balance between AI and data privacy, ethical considerations must be prioritized. It is essential to use AI responsibly, ensuring fairness, transparency, and accountability in data collection, analysis, and decision-making processes.

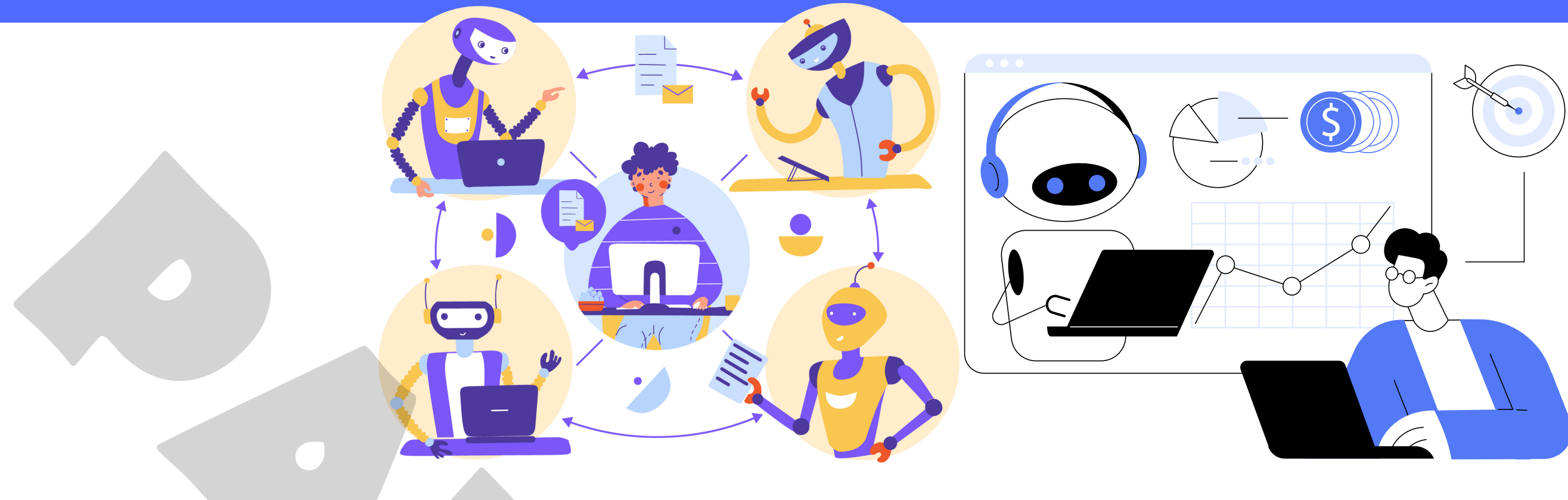
2 Collaboration and Communication

Collaboration between educational institutions, AI developers, policymakers, and stakeholders is crucial. Open communication and sharing best practices can help find common ground and develop guidelines for AI implementation while safeguarding data privacy.

3 Data Anonymization

Anonymizing student data can be an effective strategy to maintain privacy while utilizing AI. Removing identifiable information from datasets can minimize the risk of re-identification and protect students' privacy.

TAKEAWAYS



1 Importance of Data Privacy

Data privacy is crucial for safeguarding student and faculty information, maintaining trust, and compliance with regulations especially when AI is used.

2 Necessity of Robust Policies

Developing comprehensive AI policies and data privacy policies and practices to protect data subjects

3 Collaborative Efforts

Ensuring data privacy requires collaboration among educational institutions, policymakers, and all

Ensuring Data Privacy for a Safer Digital Society

Responsibility, Collaboration, Compliance, Education

1 Responsibility

Protecting data privacy is a shared responsibility among individuals, organizations, and regulatory authorities, requiring active efforts from all stakeholders.

2 Collaboration

Collaboration among different stakeholders, including government agencies, businesses, and individuals, is crucial for effectively addressing data privacy challenges in the digital society.

3 Compliance

Compliance with data privacy laws should be a priority for organizations to ensure the protection of personal information and maintain trust with their stakeholders.

4 Education

Raising awareness and providing education on data privacy rights, risks, and best practices is essential for empowering individuals and promoting a safer digital society.



Roles and Responsibilities

Ensuring Accountability

1 Data Protection Officer (DPO)

Appoint a dedicated DPO responsible for overseeing data protection initiatives and ensuring compliance with privacy laws.

2 Educational Institution


Clarify the responsibilities of educational institutions in safeguarding student data and fostering a culture of privacy.

3 Teachers and Staff

Highlight the role of teachers and staff in handling student data responsibly and following data protection policies.

4 Students and Guardians

Educate students and guardians about their rights and responsibilities regarding data privacy in the education sector.



Optimizing Learning Experiences


AI in education holds immense potential for enhancing learning outcomes and empowering students and educators.

Ethical Data Protection

By implementing best practices, institutions can ensure student data privacy and address ethical challenges.

Collaboration and Adaptation

Continued collaboration between educational institutions, policymakers, and AI developers is crucial for successful AI integration in education.





THANK YOU

FOR YOUR ATTENTION

