

# Implementing an EdTech Management Information System (MIS) for Enhanced Educational Outcomes

## Company Background

Bachpan EdTech is an online learning platform offering a wide range of courses, from K-8 to professional development programs. The company faced challenges in organizing, monitoring, and analyzing data to improve learning outcomes and operational efficiency.

## Objective of MIS Implementation

The goal of implementing an MIS for EdTech was to centralize and streamline data for students, teachers, and managers to:

1. Track students' performance in exams and courses.
2. Monitor and analyze teachers' performance across different batches.
3. Allow managers to access data on teachers, student progress, and course performance to make data-driven decisions.

## Challenges Before MIS Implementation

1. **Disconnected Data Systems:** Students' academic records, teachers' performance data, and managerial oversight were in separate systems, causing inefficiencies.
2. **Manual Reporting:** Compiling performance reports and tracking data across multiple platforms was time-consuming and prone to errors.
3. **Limited Student Insights:** Teachers lacked real-time access to student performance, hindering timely interventions.
4. **Managerial Oversight:** Managers lacked insights into teacher performance, batch outcomes, and overall academic quality.

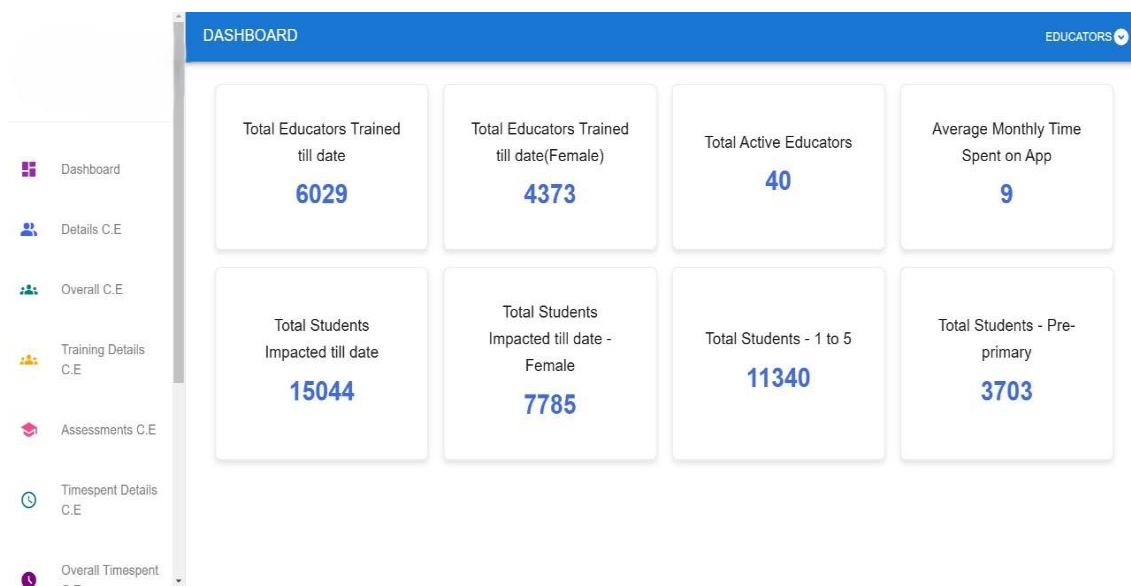
## Solution Overview

EdTech partnered with an EdTech-focused software development firm to design a tailored MIS. Key features included:

1. **Centralized Student Database:** Comprehensive records of student profiles, exam scores, attendance, and feedback.
2. **Teacher Performance Module:** Real-time data on each teacher's performance across batches, including student feedback and batch outcomes.
3. **Manager Dashboard:** A centralized dashboard providing managers insights into teacher performance, batch details, and learning outcomes.
4. **Automated Reporting:** Simplified report generation for students, teachers, and managers on key metrics.
5. **Communication Module:** Seamless communication between students, teachers, and managers.

## Implementation Process

1. **Needs Analysis:** Conducted interviews with teachers, students, and managers to understand data requirements and pain points.
2. **System Design:** Developed an MIS architecture to support multiple user roles and ensure data access only to authorized users.
3. **Data Migration:** Transferred data from various legacy systems into a centralized database, ensuring accuracy and security.
4. **User Training:** Trained students, teachers, and managers on how to use the new system.
5. **Feedback and Optimization:** Collected feedback from users during the pilot phase to optimize the interface and improve the user experience.



## Key Features of the Bachpan EdTech MIS

### 1. For Students

- **Exam and Course Tracking:** Access to a comprehensive view of all exam scores, attendance, and course completion statuses.
- **Progress Analytics:** Visual representations of progress over time, highlighting strengths and areas for improvement.
- **Feedback and Queries:** Students can leave feedback for courses and communicate directly with teachers through a messaging feature.

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Serial No	User Name	No of Assessments Completed	Assessment 1 - Baseline(Old)	Assessment 1 - Endline(Old)
1	Ranjit Barik	0	NA	NA
2	Damayanti Das	0	NA	NA
3	Rajesh prathari	0	NA	NA
4	Priyanka Sahoo	0	NA	NA
5	Iaxmi priya jena	0	NA	NA
6	Jayanti Pratihary	0	NA	NA

## 2. For Teachers

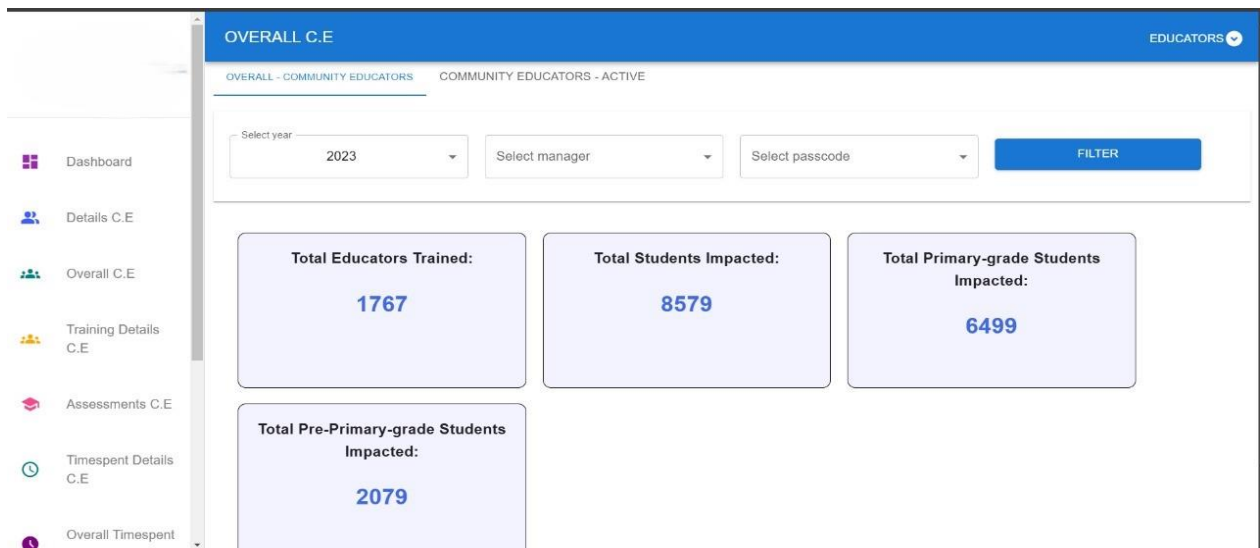
- **Batch Performance Dashboard:** Allows teachers to view detailed performance metrics for each batch, including student scores, attendance, and participation levels.
- **Individual Student Insights:** Teachers can track individual student performance and identify those needing additional support.
- **Automated Grading and Reporting:** Reduces time spent on grading and generating reports, allowing teachers to focus more on student engagement.
- **Resource Sharing:** Teachers can share study materials, resources, and notes with specific batches or students.

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Serial No	User Name	No of Topics Completed	No of Modules Completed	Avg Baseline % of Completed Modules	Avg Endline % of Completed Modules
1	swetapadma jena	0	0	0	0
2	Amita priyadarsini sethy	0	0	0	0
3	Debasmita Mallik	0	0	0	0
4	Gouranga	0	0	0	0
5	Ituna Behera	0	0	0	0
6	LaxmiPriya behera	0	0	0	0

## 3. For Managers

- **Teacher Oversight:** Managers can view the number of teachers under their supervision, monitor teacher performance, and view feedback from students.

- **Batch Analytics:** Managers have insights into the performance of different batches and courses, enabling them to identify which teachers and batches are excelling or need improvement.
- **Reporting and Analysis:** Automated generation of monthly reports on student performance, teacher efficiency, and course popularity.
- **Managerial Communication:** Managers can communicate with teachers to offer guidance, share feedback, and coordinate across departments.



### Outcomes and Benefits

1. **Enhanced Student Learning Outcomes:** Access to real-time data allowed teachers to make timely interventions, improving overall student performance by 15%.
2. **Improved Teacher Efficiency:** Teachers saved time through automated grading and reporting, leading to a 20% increase in instructional time.
3. **Data-Driven Decision-Making for Managers:** Managers could make strategic decisions based on accurate data, improving batch quality and teacher performance.
4. **Student Satisfaction and Engagement:** With better access to exam results and feedback channels, student satisfaction scores increased by 25%.
5. **Reduced Administrative Work:** Automated reports minimized manual data entry and report generation, freeing up resources for other tasks.

### Challenges Faced During Implementation

- **Resistance to Change:** Initial resistance from teachers and managers who were accustomed to previous systems.
- **Data Accuracy and Migration:** Ensuring data accuracy during migration from different legacy systems required rigorous validation.

- **System Training and Adoption:** Training sessions had to be extended to ensure that all users were comfortable with the new MIS.

### **Conclusion**

The MIS implementation at Bachpan EdTech proved transformational, centralizing data and fostering a culture of data-driven learning and management. Teachers, students, and managers benefited from enhanced transparency and access to actionable insights, driving better educational outcomes and operational efficiency.