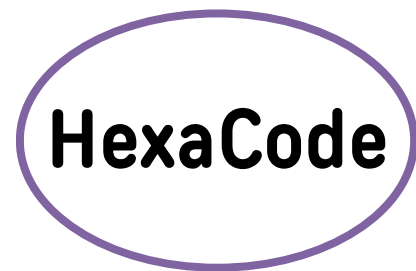


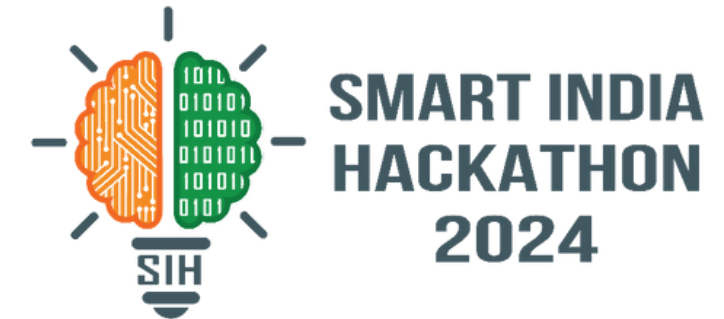
## FacultyFolio

- Problem Statement ID – SIH1613
- Problem Statement Title- Automated System for Career Advancements of the Faculties of Higher Education
- Theme- Smart Education
- PS Category- Software
- Team ID-
- Team Name (Registered on portal):HexaCode





# FACULTY MANAGEMENT SYSTEM



## Solution Description

**FACULTY PERFORMANCE MANAGEMENT SYSTEM:** We have designed an advanced web portal that integrates machine learning, data visualization, and secure cloud computing to optimize faculty performance tracking and appraisal. This system provides a seamless and efficient platform for faculty to manage and improve their professional activities.

The portal features:

1. **Faculty Dashboards** for tracking attendance, research submissions, and performance metrics.
2. **Student Review Interface** enabling real-time feedback collection.
3. **Admin Dashboards** with leaderboards, appraisal management, and performance monitoring.
4. **AI-Driven Performance Scoring** calculating comprehensive faculty scores using weighted metrics.

## USP



### Google Scholar Sync:

Automated tracking for accurate publication records.



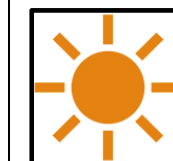
### AI Insights:

Personalized recommendations for faculty improvement.



### Dynamic Leaderboards:

Real-time rankings to drive competition.



### Appraisal Forecasting:

Predictive analytics for appraisal and promotion insights.



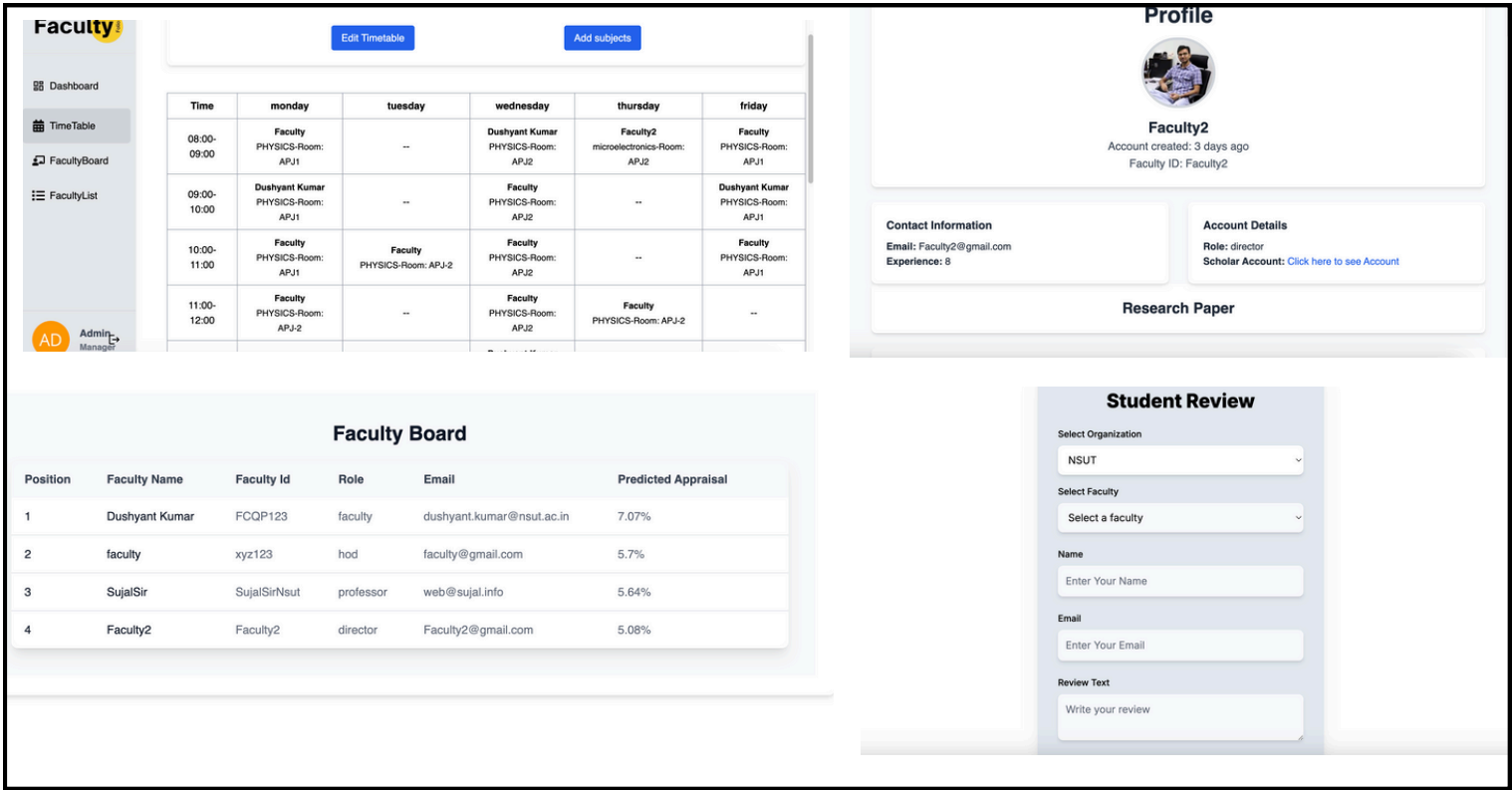
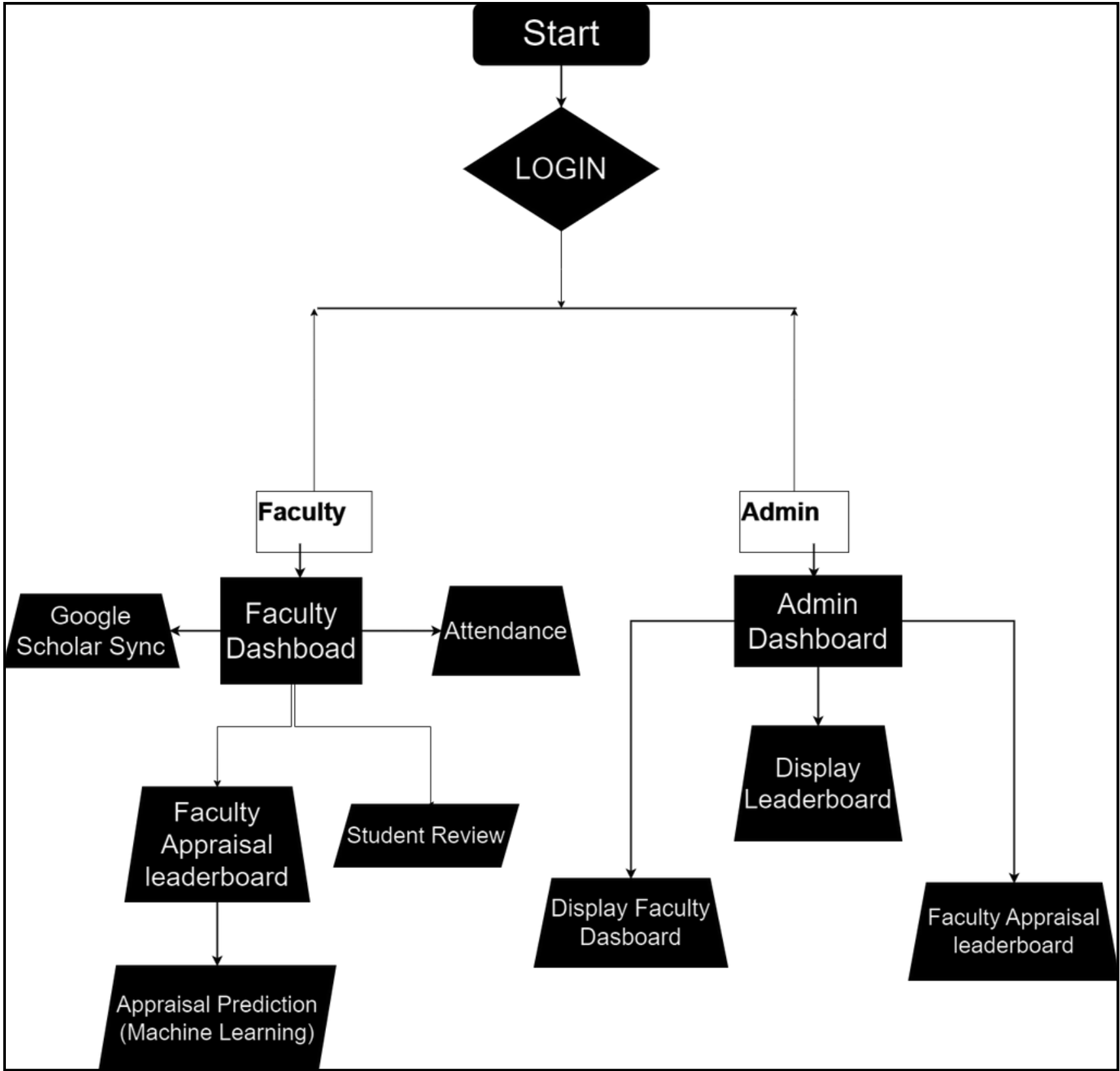
### Top-Tier Security:

Unbreakable session management and anti-DDoS protection.



### Student Engagement Interface:

A dedicated review page for students to provide feedback, improving faculty evaluation.



## Market Demand:

75% of institutions lack effective faculty management systems.

## Cost & Revenue Efficiency:

60% admin cost reduction, with a scalable subscription model projected for growth.

## Potential Challenges:

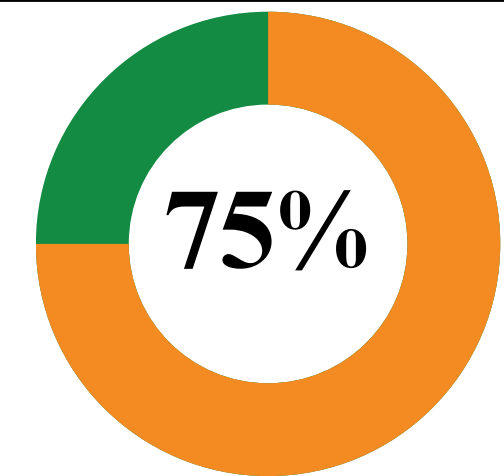
- Resistance to change
- Data security concerns
- Expansion to non-educational sectors

## Mitigation Strategies:

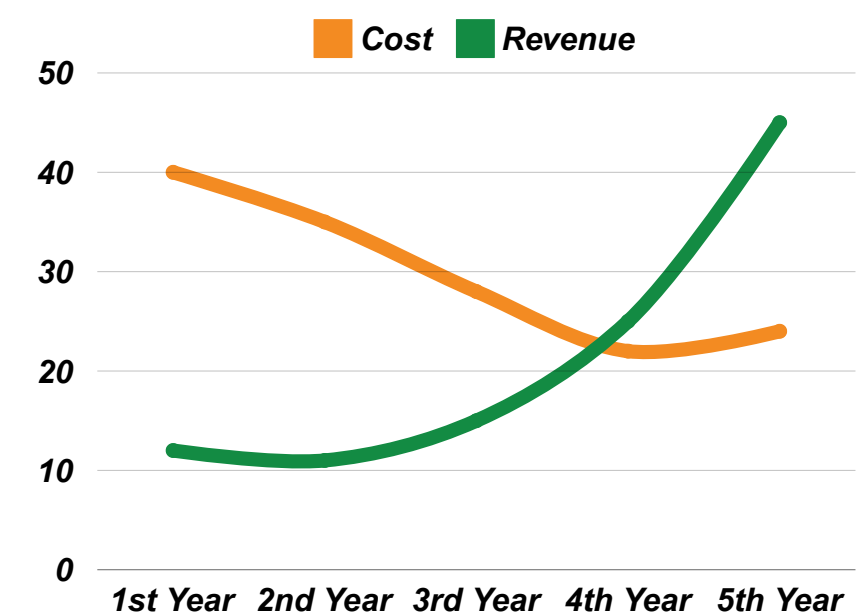
User Training to ease transition

Military-Grade Security with encryption and anti-DDoS

Modular Design for broader applications



60% admin cost reduction



## Impact



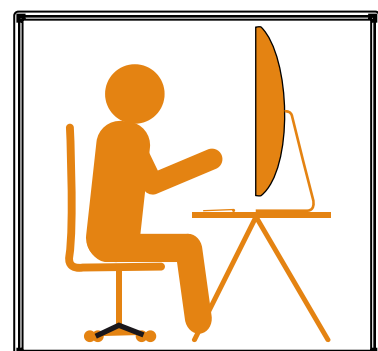
### Faculty:

- Fair Appraisals
- Growth
- Less Admin Work



### Students:

- Improved Learning
- Better Engagement

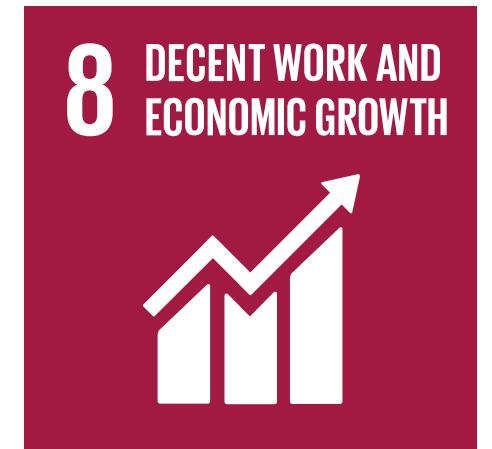


### Administrator:

- Efficient Management
- Cost Savings

## Benefits

1. **Social:** Promotes transparency, equity, and a culture of growth within the institution.
2. **Economic:** Increases productivity, reduces costs, and improves faculty retention.
3. **Environmental:** Minimizes paper use and energy consumption through digital processes.





- Research on Faculty Evaluation and Performance Appraisal .

<https://files.eric.ed.gov/fulltext/ED367410.pdf#page=405>

- Research paper on linear regression algorithm used for machine learning with Limited Observation.

<https://icml.cc/2012/papers/433.pdf>

- Research paper on ridge regression algorithm also sought for machine learning.

[https://www.researchgate.net/publication/243779628\\_Ridge\\_Regression\\_in\\_Practice](https://www.researchgate.net/publication/243779628_Ridge_Regression_in_Practice)