

## “ONLINE CONSTRUCTION RESOURCE PLANNING AND TRACKING PLATFORM”

**Prof. Kokare S. A.\*<sup>1</sup>, Prof. Shah S. N.<sup>2</sup>, Vijay Khalate<sup>3</sup>, Siddhant Pore<sup>4</sup>, Pranali Jadhav<sup>5</sup>**

<sup>(3,4,5)</sup>BE Student and <sup>(1,2)</sup>Prof. of Department of Computer Engineering, SSPM's Sharad Chandra Pawar College of Engineering and Technology, Someshwar Nagar, Baramati-412306 Savitri bai Phule Pune University, Pune.

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**\*Corresponding Author: Prof. Kokare S. A.**

Prof. of Department of Computer Engineering, SSPM's Sharad Chandra Pawar College of Engineering and Technology, Someshwar Nagar, Baramati-412306 Savitri bai Phule Pune University, Pune.

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### ABSTRACT

The construction industry faces significant challenges in project monitoring, communication, documentation, and progress tracking. Traditional method soft enrelyon manual paperwork, phone calls, and messaging applications, leading to poor documentation, data loss, and inefficient coordination. This paper presents an Online Construction Resource Planning and Tracking Platform that enables real-time monitoring of construction activities through a centralized web-based system. Supervisors can upload construction siteimages along with descriptive notes, while administrator scan remotely access and monitor project progress through a secure dashboard. The system is developed using PHP, MySQL, HTML, and CSS. It improves communication, enhances transparency, reduces paper work, and provides reliable project documentation for construction organizations.

**KEYWORDS:** Construction Management, Project Monitoring, Web Application, Resource Planning, PHP, MySQL, Role-Based. Access Control, Construction Tracking, Image Upload, Project Documentation.

### INTRODUCTION

The construction industry play savitalrolein infrastructure development and economic growth. Effective communication, resource management, and project monitoring are essential for successful project completion. Traditional construction management methods often relyon phone calls, handwritten reports, and messaging applications, resultingin communication gaps, data loss,

and reduced transparency.

The proposed Online Construction Resource Planning and Tracking Platform provides a centralized web-based solution for monitoring construction activities. Site supervisors can upload real-time images and descriptive notes,

While administrators can remotely monitor project progress through a secure dashboard. The system enhances transparency, improves communication, and ensures reliable documentation of construction activities.

## **MATERIALS AND METHODS**

### **Materials**

#### **Hardware Requirements**

Processor: Intel Core i3 or above

RAM: 4GB or above    Storage: 20GB free space    Internet Connection    Camera for image capture

#### **Network access Software Requirements**

PHP MySQL HTML CSS

Apache Server

XAMPP

JavaScript Web Browser

#### **Methods User Authentication**

Secure login functionality for administrators and supervisors using username and password validation.

#### **Image Upload**

Supervisors upload real-time construction site images through the web interface.

#### **Note Processing**

Construction activity descriptions are added along with uploaded images.

#### **Database Storage**

All records are securely stored in the MySQL database.

#### **Dashboard Monitoring**

Administrators access uploaded records and monitor project activities remotely.

#### **System Evaluation**

The system is evaluated based on performance, security, reliability, and usability.

### RESULTS AND DISCUSSION

The proposed system was tested using multiple construction project updates and image uploads. Supervisors successfully uploaded construction site images and descriptive notes through the web dashboard.

The administrator dashboard effectively displayed uploaded records and enabled remote monitoring of project activities. The platform improved communication between field staff and management teams while reducing manual paperwork.

The system demonstrated:

Reliable data storage

Secure role-based access control

Efficient project monitoring

Improved transparency

Better documentation management **Sample Test Results**

TestID	TestCase	Status
TC01	UserLogin	Pass
TC02	ImageUpload	Pass
TC03	NoteUpload	Pass
TC04	DatabaseStorage	Pass
TC05	DashboardAccess	Pass
TC06	AdminMonitoring	Pass
TC07	SessionHandling	Pass

The results confirm that the proposed platform successfully meets the requirements of construction project monitoring and management.

### CONCLUSION

This paper presented an Online Construction Resource Planning and Tracking Platform for efficient monitoring and management of construction activities. The platform uses PHP, MySQL, HTML, and CSS technologies to provide centralized construction monitoring and secured data management.

The system enables supervisors to upload real-time construction updates

and allows administrators to monitor project activities remotely through a web dashboard. The platform improves communication, enhances transparency, reduces paperwork, and provides reliable documentation. Future enhancements such as mobile applications, AI-based analytics, and cloud integration can further improve the effectiveness of the system.

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