

# **BEST PRACTICE 2021-2022**

## **BEST PRACTICE 1**

### **TITLE OF THE PRACTICE:**

### **BIOMETRIC ATTENDANCE SYSTEM FOR FACULTY MEMBERS AND SUPPORTING STAFF THROUGH FACE DETECTION AND RECOGNITION**

### **AIMS & OBJECTIVES OF THE PRACTICE:**

The faculty and support staff serve as the backbone of an educational institution, providing vital support for its success. One effective strategy for promoting academic achievement among students is to prioritize the regular attendance of faculty members in their classes. When instructors are present, students are more likely to attend class, and their active participation facilitates a two-way exchange of knowledge between teacher and student.

### **THE CONTEXT:**

Facial recognition technology is an increasingly relevant tool for authentication purposes, particularly when it comes to employee attendance. A face recognition-based attendance system is a process that utilizes advanced monitoring and computer technologies to recognize faculty members and supporting staff based on their facial biometrics.

By implementing this system, the attendance of employees can be more accurately and efficiently recorded, and it eliminates the need for manual processes. The high definition monitoring used in the system provides precise identification of individuals, leading to a higher level of accuracy.

Furthermore, this technology can help to prevent fraudulent attendance records and improve overall security. However, it is important to ensure that any privacy concerns are addressed and that the system is compliant with data protection regulations.

Overall, implementing a face recognition-based attendance system offers an effective solution for recording faculty and staff attendance and could enhance the efficiency and accuracy of attendance tracking for faculty members and supporting staff.

### **IMPORTANCE:**

Maintaining proper attendance is essential to ensure the efficient running of an institution. Therefore, it is crucial to have proper monitoring systems in place to facilitate the task of marking attendance for faculty and supporting staff. Manual methods, such as maintaining an Excel sheet, can lead to data inaccuracies, making it difficult to manage the workforce efficiently without modern-day technology for employee attendance.

Online Attendance Management systems that utilize biometric technology provide several benefits, including:

- no fuss in workflow management,
- a paperless work environment,
- real-time tracking, and reliable data.

By implementing this system, institutions can:

- enhance productivity,
- maintain company culture, and

- provide personalized and flexible options for employees.

Moreover, online attendance management is cost-effective and provides easy access to reports, making integration simple.

Overall, online attendance management systems that utilize biometric technology provide a reliable and efficient way to track employee attendance, improving workforce management and enhancing productivity.

## THE PRACTICE:

With the significant benefits of modern technology for faculty and supporting staff attendance, higher educational institutions can now evaluate attendance management systems directly from online apps. Our institution has adopted an "Online Attendance Management App" called "COSEC APTA," which effectively tracks working hours, leave requests, punch-in, and punch-out times for our staff and faculty.

By utilizing this app, our institution has improved attendance tracking efficiency, reduced paperwork, and saved time generating accurate results from employees' attendance. The app also provides individual login IDs and passwords, ensuring security and allowing us to monitor attendance in real-time.

Incorporating the "COSEC APTA" attendance management app has enhanced our institution's productivity by simplifying workflow management and providing personalized and flexible options for our employees. Additionally, the app is cost-effective, and it offers easy access to detailed reports and seamless integration with other digital systems.

In summary, by using the "COSEC APTA" attendance management app, our institution has seen tremendous benefits, improving attendance tracking and enhancing workforce management, ultimately leading to a more efficient and productive institution.

## EVIDENCE OF SUCCESS:

The implementation of an attendance management system has helped us overcome challenges such as time theft, absenteeism, and inaccurate clock outs, allowing us to focus on achieving our organization's vision and mission.

Moreover, the system provides us with real-time data on employee attendance, allowing us to take proactive measures to ensure that staff and faculty are meeting their attendance obligations.

By minimizing attendance-related issues, we can now improve workforce management and streamline administrative tasks, ultimately allowing us to allocate more resources towards fulfilling our mission and vision. Additionally, the attendance management system is providing us with valuable insights into employee attendance trends, which can be used to inform future decisions and improve overall efficiency.

Overall, the implementation of this attendance management system is for us a practical solution to the challenges that HEIs face when it comes to attendance tracking. By effectively managing employee attendance, institutions can focus on achieving their organizational goals and making their vision a reality.

## PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED:

### **Error Rate :**

While biometric machines are generally reliable, they are not foolproof and can sometimes make errors. Typically, biometric devices can produce two types of errors: False Rejection Rate (FRR) and False Acceptance Rate (FAR). FRR occurs when a biometric device rejects an authorized individual, and FAR occurs when it accepts an unauthorized individual..

### **Scanning Difficulty :**

Certain biometric modalities, such as fingerprint, iris scan, or facial recognition, may encounter scanning difficulties. This can occur due to various factors, including sweaty fingers, eyelashes obstructing the iris, glasses or contact lenses, partially closed eyelids, and reflections from the cornea. For example, if a person has sweaty fingers, the biometric scanner may not be able to accurately capture their fingerprint. Similarly, if a person is wearing glasses or contact lenses, it may be difficult for the iris scanner to capture their iris accurately. Facial recognition systems may encounter difficulties if a person's face is partially obscured by hair, clothing, or accessories.

**To mitigate these challenges**, biometric systems must be designed to account for such variables and minimize errors. This can be done through rigorous testing and calibration of the biometric devices, ensuring that they are optimized for the specific environment in which they will be used. Additionally, proper training of staff and faculty on how to use the biometric system can also help reduce errors and improve accuracy.

## BEST PRACTICE 2

### TITLE OF THE PRACTICE: **LEARNING MANAGEMENT SYSTEM (LMS)**

#### AIMS & OBJECTIVES OF THE PRACTICE:

- The main objective of an LMS is to manage the learning process.
- It is a system because it works in an automated, pre-determined way.
- An LMS makes course creation as simple and straightforward as possible.
- The CBCS Course can be managed through this system and the progress of the students can be tracked.

**THE CONTEXT:** An LMS is a platform for digital learning. Its key features can be found in the abbreviation. **L — Learning.** This type of software is designed for convenient learning anytime and anywhere. Learners can access an in-house knowledge base, take assessments, and complete practical assignments.

**M — Management.** Unlike file sharing services, a learning platform is not just a heap of files. It enables admins to manage user data and enrollments in courses, organize content into comprehensive training programs, and control how learners progress in training.

**S — System.** It's a computer system, to be precise, that processes various types of data and puts them in order. It collects statistics, runs reports, and automates grading, thus streamlining the entire training process.

The main function of an LMS should be that **one can easily deliver course content to your learners**, so it's essential to get an LMS that makes course creation as simple and straightforward as possible. A great LMS lets one drag, drop, and arrange content into place, making it easy to create courses.

User management: This feature allows one to add and edit users, assign them roles, and combine learners into groups and organizations.

Course management: The CBCS Course can be managed through this system.

Progress tracking: The students' progress can be tracked.

Content creation: The new content can be created by the faculty members.

## **IMPORTANCE:**

### **1. Organizes eLearning content in one location.**

Instead of having e-Learning content spread out over different hard drives and devices, user can store all of eLearning materials in one location. This reduces the risk of losing important data and makes it easier to create your eLearning course. Every member of eLearning team can also access the information using a cloud-based Learning Management System. This makes Learning Management Systems a natural fit for online collaboration.

### **2. Provides unlimited access to eLearning materials.**

Once one has uploaded eLearning course materials onto the LMS and publish them, audience has unlimited access to the information they need. Even those who are on the go can login to the eLearning platform via their smartphones and tablets, so that they don't have to wait until their next online training session to develop skills and perfect work-related tasks. This is one of the main reasons why a LMS is essential for global audiences in different time zones.

### **3. Easily tracks learner progress and performance.**

The best Learning Management System gives the ability to keep track of learner progress and ensure that they are meeting their performance milestones. For instance, if an online learner is not able to successfully complete an eLearning scenario, one can offer them supplemental resources to improve their performance or learning behaviors.

### **4. Reduces Learning and Development costs.**

A Learning Management System gives the power to completely do away with instructor travel costs, online training site rentals, and printed eLearning materials. Online learners can carry out all of their training online, which means that you can save a sizable sum on Learning and Development budget.

### **5. Reduces Learning and Development time.**

A Learning Management System can even reduce online training times, thanks to the fact that it gives online learners only the information they need in a direct and organized manner. Instead of having to sit through a lengthy half-hour online training course, online learners can simply click on the online modules they need and absorb the knowledge in a fraction of the time.

### **6. Quickly and conveniently expands eLearning courses.**

Learning Management System and make the necessary modifications without redoing your entire eLearning course. All of the content is in one location, which allows you to change only the master eLearning course and then deploy it to all of online learners.

### **8. Integrates social learning experiences.**

A Learning Management System makes it easy to integrate social learning into your eLearning strategy. Since the LMS is already online, you can include links to Facebook and Twitter pages, LinkedIn groups, and online forums that may be beneficial for the learners.

**THE PRACTICE:** An LMS is like your own online university, where you can upload, store, and create online courses for learners to access on PCs, laptops, tablets, or smartphones, in a browser, or via a mobile app. From courses, ebooks, and videos, you can build an entire corporate knowledge base or establish specialized learning paths for given positions or employee groups, like new hires or franchisees.

LMS is developed by the Vendor named TripleATech, and implemented through “Faculty login”.

## SETH ANANDRAM JAIPURIA COLLEGE LEARNING MANAGEMENT PORTAL

Student Login to  
view study material  
or giving exam quiz  
or to solve their  
queries

Teacher login for  
conducting exam  
or other activities

Administrator  
Login

Exam, Assignment,  
Quiz

Study Material  
offline

Online Study  
Material

Help (In form of Mail)

**EVIDENCE OF SUCCESS:** Everyone learns differently, so a good LMS should include **options to configure accessibility, display settings and evidencing methods to suit a wide range of courses, learning styles and accessibility needs.**

Now, Our LMS can be used

- For training, learning and assessment together.
- For counting work load of teachers.
- For tracking the progress of students.
- For counting allotted and taken classes of individual faculty members as well as whole department.

**PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED:**

- Lack of motivation and engagement
- Online security
- Incompatible content materials
- Unreliable internet connectivity