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The Future of Attendance Recording System is Omnichannel, Multi-modal

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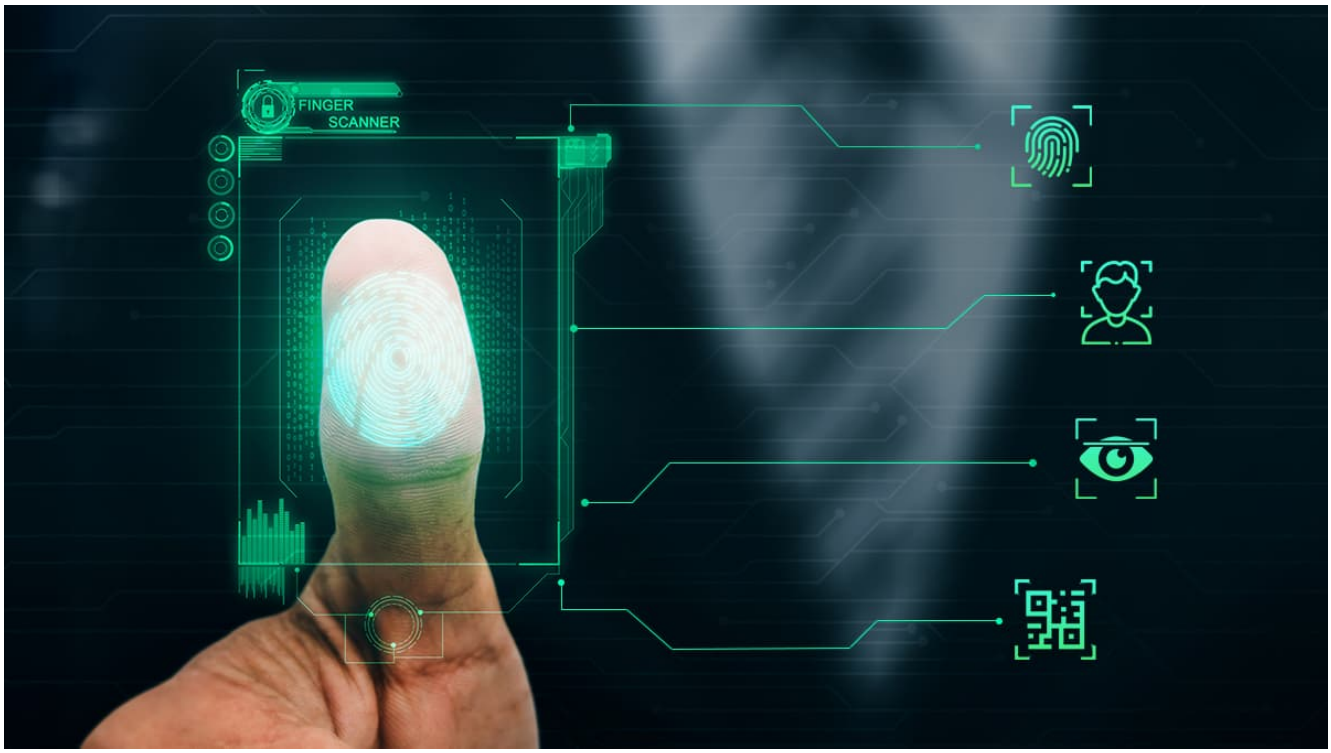


I have faced this glitch on sundry occasions. And I can imagine you are in the same boat when you walk into your office and unexpectedly discover that sleek digital device going kaput while you do the ritual check-in activity. When the attendance is not recorded, the employees and the office administration scramble for other options. True, **digital transformation** at workplaces has made paper-based attendance records obsolete. But no paperless solution is foolproof unless it is omnichannel and multi-modal. An integrated, multi-modal system can melt the worries as it fuses biometric, **facial recognition** and QR code-based employee or visitor authentication.

Understanding How It Works

An integrated, multi-modal Attendance Recording system represents an advanced and technologically sophisticated method of tracking attendance. It combines multiple

biometrics and technologies into one seamless system. This powerful system utilizes various modalities like facial recognition, fingerprint scanning, voice recognition, and iris scanning to uniquely identify individuals and record their attendance. By relying on multiple biometrics, this system ensures an unparalleled level of accuracy and security, making it virtually impossible to deceive or bypass. It's like having a combination lock, where each biometric acts as a unique number in the combination, providing an unbreakable system that requires all necessary components to unlock.

Counting The Benefits

Enhanced Accuracy:

In recent years, biometric technologies have made significant strides in accuracy and reliability. In a study conducted by the National Institute of Standards and Technology (NIST), facial recognition algorithms achieved an accuracy rate of over 99 percent. As a result, employees cannot mistakenly mark attendance for one another, eliminating time theft and increasing productivity.

Eradicating Buddy Punching:

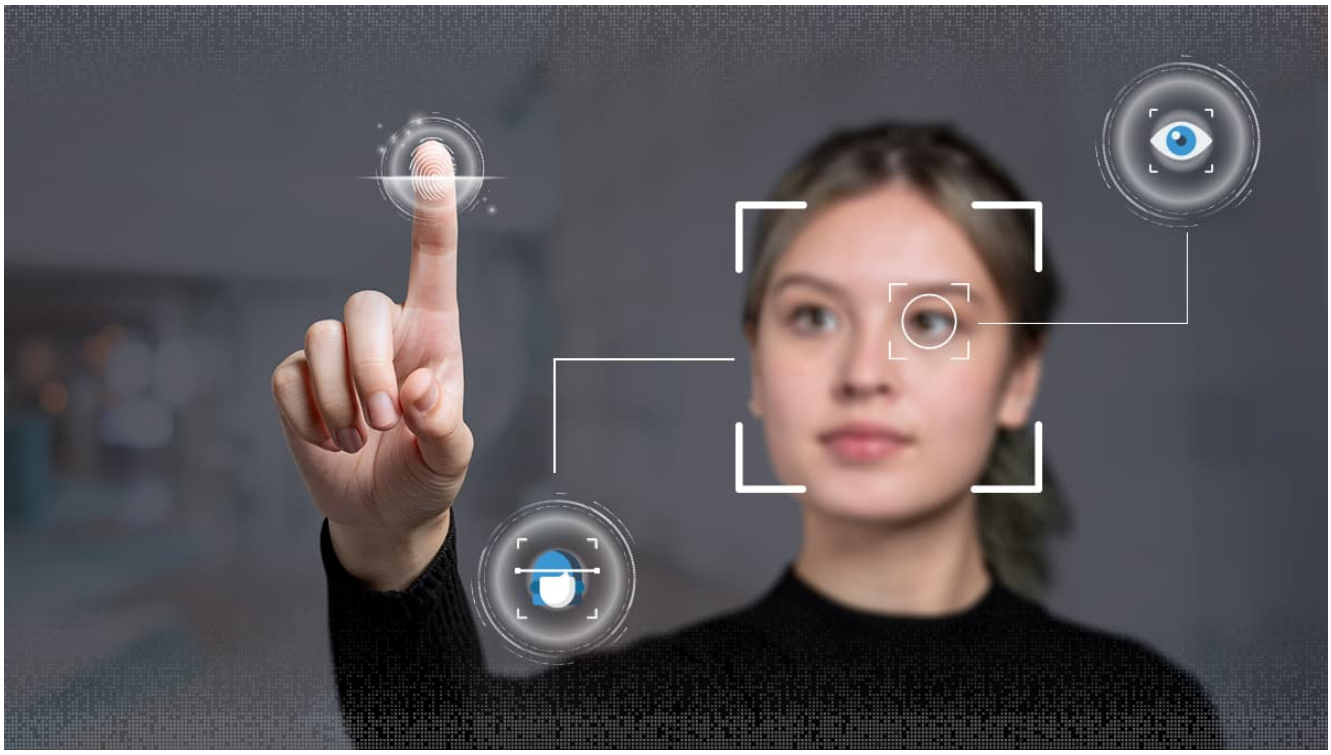
Conventional attendance systems have long been plagued by buddy punching. Approximately 75 percent of U.S. businesses suffer losses as a result of buddy punching, according to the American Payroll Association. With the Integrated, Multi-Modal Attendance Recording system, each employee's biometric data is required for clocking in and out.

Cost Savings:

Implementing cutting-edge technology may seem expensive at first, but the long-term benefits are far greater. According to a study published by the Society for Human Resource Management (SHRM), the average organization loses around 2.5% of its payroll to time theft. The use of multi-modal attendance recording systems can significantly reduce or eliminate time theft.

Beneficial for Public Offices:

Government offices can greatly benefit from this omnichannel attendance system since it can improve security and accountability. It is essential to have a foolproof attendance recording system if sensitive information and classified areas are involved. A Multi-Modal Integrated System not only verifies employees' identities but also provides real-time data during emergencies for immediate action.



CSM Taps IoT for Omnichannel Attendance Tracking

The **Internet of Things (IoT)** has emerged as a transformative force, revolutionizing the way attendance is recorded and tracked. IoT-driven systems leverage interconnected devices and sensors to create a web of real-time data capture. The network of IoT devices ensures comprehensive coverage, eradicating the limitations of traditional attendance methods and reducing manual errors.

CSM Technologies has developed a QR-code-based multi-modal attendance recording system. The system is equipped with a QR code scanner, camera, display board and a finger scanner. During check-in, any employee or visitor can scan the QR code on the device scanner or scan the finger on the finger scanner. The scan information is validated, and thereafter, the validated status is shown on display and audio play. The system stores the captured data locally and periodically synchronizes the log with the server. This ensures that the system can keep track of all visitors and employees as they check in and out of the building securely and efficiently. The use of a QR code and finger scanner also adds layer of security, as only authorized individuals can access the building.

This omnichannel solution melts the worries stemming from a single source employee or visitor authentication system. Say, for instance, if an exclusive biometric attendance log-in system develops glitches or turns inoperative, the organization has to revert to manual methods to record attendance. Here, a multi-modal system ensures that the loop is unbroken

and the check-in process remains hassle-free.

Think of a world where every second matters, where every second is accounted for, and every worker is empowered with a tangible sense of responsibility. When an omnichannel attendance system touches any workplace, it empowers every worker and elevates the employee experience.



AUTHOR:

Jayajit Dash

Senior Manager- Corporate Communications (Marketing)

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