The Rise of the Smartphone: A Secure and Convenient Future for Access Control

By Jay Jason Bartlett, Cozaint Corp

For its employees, clients, and guests, physical security has always been a top concern for businesses of any size. Specifically, access control systems are essential to protecting these individuals and their belongings. In its original form, access control was authorized using physical keys or keycards. But with the proliferation of smartphones and their connection with safe digital technologies like Google Wallet and Apple Wallet, things continue to shift very quickly.

Let's examine the growing significance of smartphone-based access control, emphasizing its advantages, security benefits, and the role that Google Wallet and Apple Wallet integration play.

The Development of Access Control

There is a long history of physical access restriction. Restricting access to authorized individuals is the same objective regardless of the type of locking system used, from basic wooden locks and keys to advanced computerized technology. Keycards or fobs with embedded chips that interacted with readers at entrance points were the mainstay of early electronic systems.

Compared to physical keys, these systems provided better security, but they required replacement or reprogramming because they were easily lost or stolen.

A big change has occurred with the introduction of mobile credentials kept on smartphones. Users can now use their phone to gain secure access to a restricted area, making actual tokens unnecessary resulting in streamlined access control for businesses.

Personal behaviors have already taught us that misplacing or losing an access card or key fob is like dropping a penny on the ground. However, one would put on a search party if their smartphone was misplaced or stolen. Furthermore, giving someone your access card is a more beneficial idea than allowing them to use your smartphone to enter a building.

The Importance of Integrating Google Wallet and Apple Wallet

There are several security benefits for both the business and the user when integrating smartphone access control with digital wallets like Apple Wallet and Google Wallet. Without listing them all, the most important may be the usage of the secure enclave of the users cellphone, which protects critical data and is impenetrable. The ease of use to the end user is an added bonus, where the overall procedure is made to be simple to use, providing fast access by simply unlocking their phone and holding it close to the reader.

.For the business, real-time monitoring of user behavior may reveal important information about how buildings are used and identify any security risks. Advanced features like geofencing, where access is only allowed while the user is within a certain location, are made possible by smartphone-based access control. It is also possible to impose time-based access limitations, which would only permit admission during designated hours. Overall, these features are among the most important of creating better audit trails.

Smartphones' Power as Credentials

As credentials for access control, smartphones have many benefits, convenience is perhaps the biggest advantage. To gain rapid access, users need only unlock their phone and place it close to the scanner. The smartphone has also offered a more cost-effective method of credential by doing away with the requirement for real tokens while making it easy to add, remove, or change user access. The majority of access control systems available in today's marketplace have a smooth integration process with current smartphone technology, which reduces deployment expenses.

The use of smartphones for access control is transforming physical security. By utilizing current technology, people can enter restricted places with a single tap of their phone and do away with keycards and fobs. Multi-factor authentication and lost phone protocols are important security issues that are integral to this entire solution set. An additional layer of protection is provided by the integration of Google Wallet and Apple Wallet, which allow tamper-proof storage and encrypted communication. In addition to being convenient, this technology provides advantages including improved security features and real-time monitoring. Access control will likely become more mobile in the future due to improvements in biometrics and security procedures as well as anticipated broader use.

Jay Bartlett has been in the computer industry for over four decades and in the storage management since 2000. A serial entrepreneur, Jay has founded software and hardware companies and has managed many technical teams to deliver innovative solutions to the market. As the CEO of Cozaint, Jay is driving intelligent surveillance solutions to the physical security market.