

## The Advantages of Mobile Applications and Credentials

by Nick Ealy

**When Steve Jobs debuted the iPhone in January 2007, we couldn't have anticipated how much of an impact the smartphone would have on society. It has completely revolutionized the way we work and connect with others.**

As the door and hardware industry continues to be at the forefront of security and proactively address COVID-19 concerns, the era of physical credentials is giving way to a secure and touch-free option: mobile credentials. Mobile credentials provide people with access to secured spaces that are convenient for the user and cost-effective for the building owners/managers.

### Two Platforms

Access control systems are either cloud-based or server-based.

Cloud-based services are usually online all the time and can allow openings to be controlled in two ways: remotely through a mobile app or locally with users unlocking doors using their smartphones as a credential.

In the remote scenario, the communication path starts with the administrator's phone equipped with an app. The command chain goes from the phone to the cellular/WiFi network, to the dedicated cloud space, to a local network, to a wireless hub and then to the locking device.

"The chain of communication may sound complex," explains James Stokes, Director of Corporate Training at Hager Companies. "But in reality, it happens in a matter of a few seconds."

Examples include admitting an outside service provider that arrives on-site when there is no staff available to admit them, or a new employee who does not yet have their permanent credential.

Additionally, the mobile app can give business administrators full control of users' access rights and can be managed from anywhere at any time. With cellular or WiFi service, openings can be remotely managed and monitored from anywhere in the world.

Cloud-based systems also provide the option of using smartphones as credentials. Instead of a card or fob, the phone is presented to the locking device or reader to gain access. In this setting, the phone app communicates with the locking device or reader, which transmits that data to the locally installed wireless hub that stores the access rights. If access is allowed, a signal is sent to the locking device to unlock. Similar to the remote scenario, this process is quick with minimal disruption to the user.

Once the transaction has been completed, the local wireless hub will communicate with the cloud to upload the audit record for future use while simultaneously downloading any access right changes.

Even in the case of communication failure between the hub and the cloud, the hub has users and access rights stored to ensure normal service is maintained. When communication is resumed, audits, activities and any other changes will be uploaded.

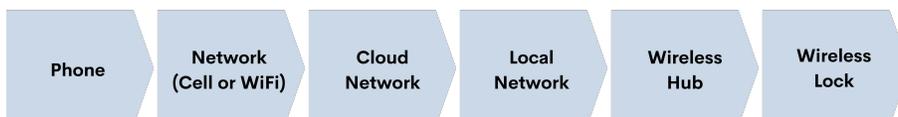
In the server-based world, building administrators can use mobile apps and credentials in a variety of ways without requiring all locking devices to be wired or wireless.

This can result in huge savings in capital infrastructure costs. Mobile credentials can be used with wired, wireless, and offline battery-operated locking devices – all managed under one software system.

Wired locking devices are typically readers on high-traffic entrances to buildings. Because they are not constrained by battery life, the readers' Bluetooth is constantly powered and a valid mobile credential can activate the door from up to 30 feet away.

Wireless locking devices are generally battery operated. They require the mobile credential be held close to the reader to activate the Bluetooth lock to read access rights.

Offline locking devices are battery operated and also need a credential held close to the reader to activate.



tion. They serve as an advocate for the mentee whenever the opportunity presents itself and are always seeking opportunities for increased visibility and deeper understanding. In many cases, playing devil's advocate to help the mentee think through important decisions, strategies or application.

Example: If Alex saw something on a project he was working on individually that could be used as a learning tool, he would do something very difficult. He would stop, call down to me and say "Son, grab your notebook and come down here. I have something you have got to see." Some of the most challenging projects I worked on were the ones Alex pulled me into. He did not give me the answers; rather, he empowered me to think, and challenged me to understand and not be intimidated at the chance of failure.

3. Regularly challenging you to be more. A mentor pushes you to hone and learn new skills while igniting a passion for your craft. They are willing to take you under their wing for the sole purpose of helping you stay motivated and discover your own identity and path. Mentors look for ways to make you successful; many times with the hope that you surpass their greatest accomplishments.

Example: Alex never spoke to me as if I was inferior. His expectation was clear—work hard, but more importantly work smart. Enjoy what you do, share your passion with others and ask a lot of questions—just not the same one twice.

No matter what position, role or title you hold, mentors are there. Seek out those special individuals who are willing to share and invest in your growth. Thank you to all the mentors in our industry that take the time to uphold the integrity of our profession, share the passion for our work and take the time to put someone else's success before your own. During the four years I spent with Alex before his passing, I did not realize how much of an impact he had, not only on my career but my life as a whole. Our relationship was more than a close working relationship that later evolved into a rock solid friendship built on trust and respect for each other. I am grateful to have had Alex Graham as my mentor, guiding me.

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