

Access Control Technology Trends Presentation

2021

By: N.Bearman (EvTrack)

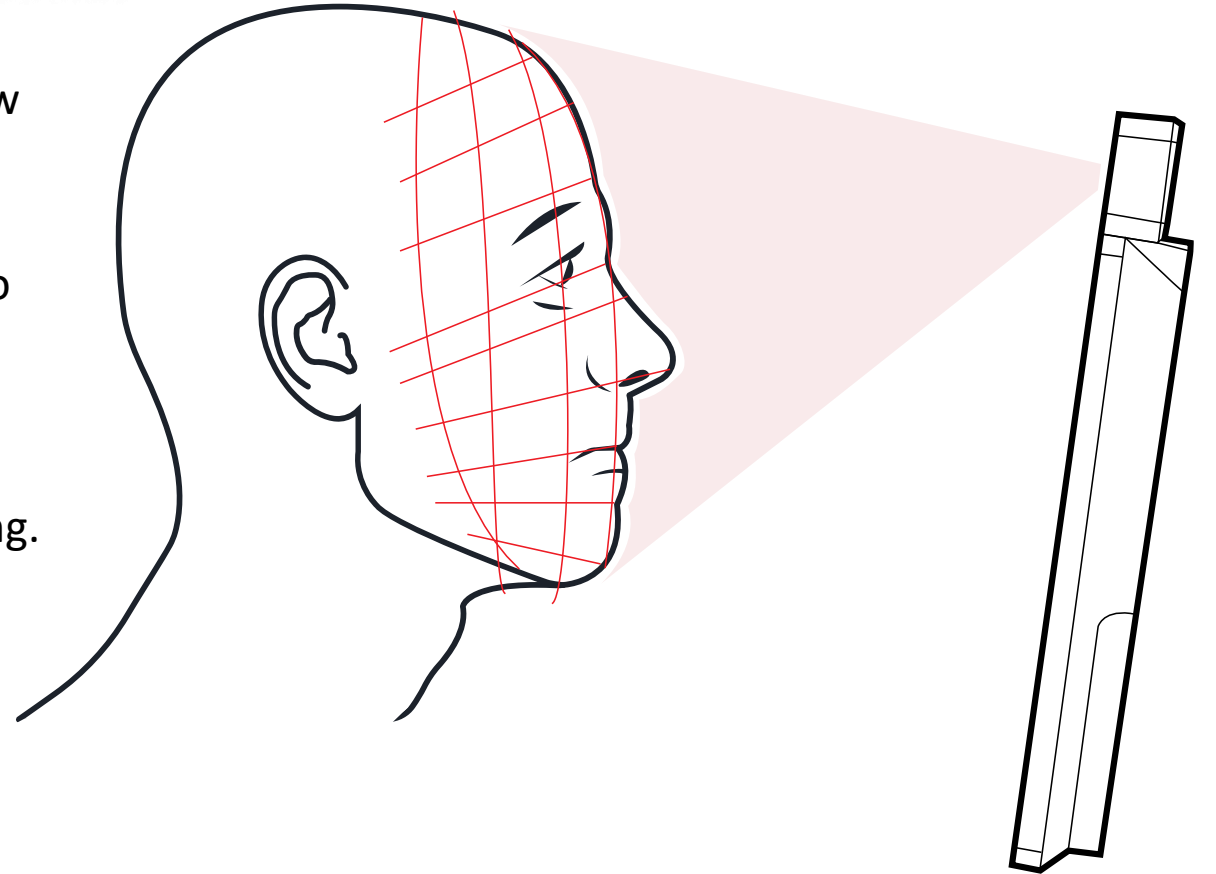


ACCESS CONTROL TRENDS

TREND01

INCREASE IN USE OF FACIAL RECOGNITION BIOMETRIC READERS

- **Driven By A Demand For Contactless Access Control Post COVID.**
- Has Become Affordable with Face Readers Now Costing btw US\$350 & US\$1000. Used to cost US\$3000 ~ US\$1000.
- **Pros** = High Speed Transactions allowing fast entry/exit into or out of a site, Low Cost, Contactless Technology.
- **Negatives** = Concerns around data privacy by some individuals & organisations. Some readers prone to spoofing.
- **It is acceptable for general access control use but should not be used for high security access control such as data centre access control. Instead a combination of credentials should be used such as Face + Card.**



TREND02

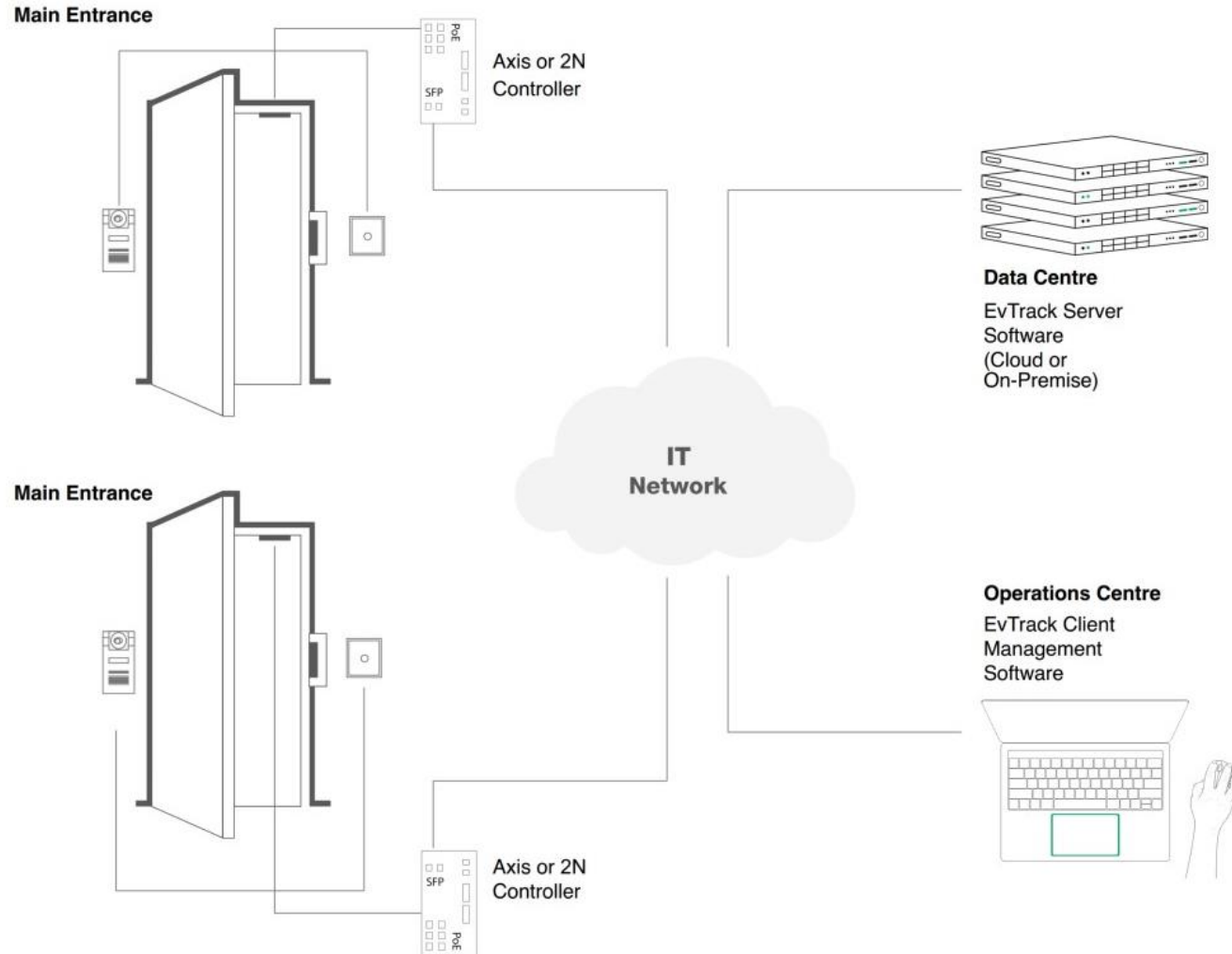
ACCESS CONTROL SYSTEMS MOVE TO THE CLOUD

- **Customers are now demanding security systems which can be remotely accessed, managed from anywhere & provide central control.**
- A system may also now need to consist of access control readers which are spread over a large geographic area but need to be connected to the same server to provide access through a user's common credential.
- **Corporates are also creating smaller satellite offices which require maybe only one or two readers per site.**
- Applications for Cloud Access Control include remote utility sites such as base stations, data centres, water/electricity distribution, retail stores and distribution centres.
- **Note of Caution: Most government sites and conservative corporates still prefer onsite. But the cloud trend is growing.**



TREND02

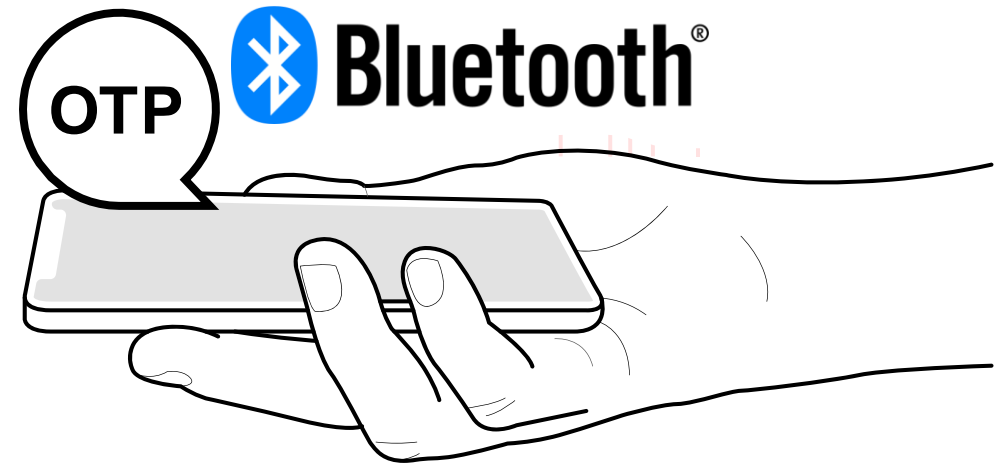
ACCESS CONTROL SYSTEMS - MOVE TO THE CLOUD



TREND03

INCREASED USE OF MOBILE PHONE ACCESS CONTROL CREDENTIALS

- **Mobile phone credentials in terms of physical access control into or out of a building is normally for short-term access such as by Airbnb, visitors, delivery people or contractors.**
- Credential types include Bluetooth tokens, QR Codes and One Time Pins. All have pros and cons in terms of use cases.
- **Bluetooth** access systems require a compatible reader + a phone with a compatible application + the necessary token.
- **One-time-pins (OTPs)** are internationally recognised, easy to transmit but generally require contact with a surface keypad.
- **The QR Code** is the ideal middle ground. It is easy to transmit, is contactless and can link to other data that may need to be verified such as a face, ID or license disk.



TREND04

POPULARITY OF 'EDGE' ACCESS CONTROL IP HARDWARE

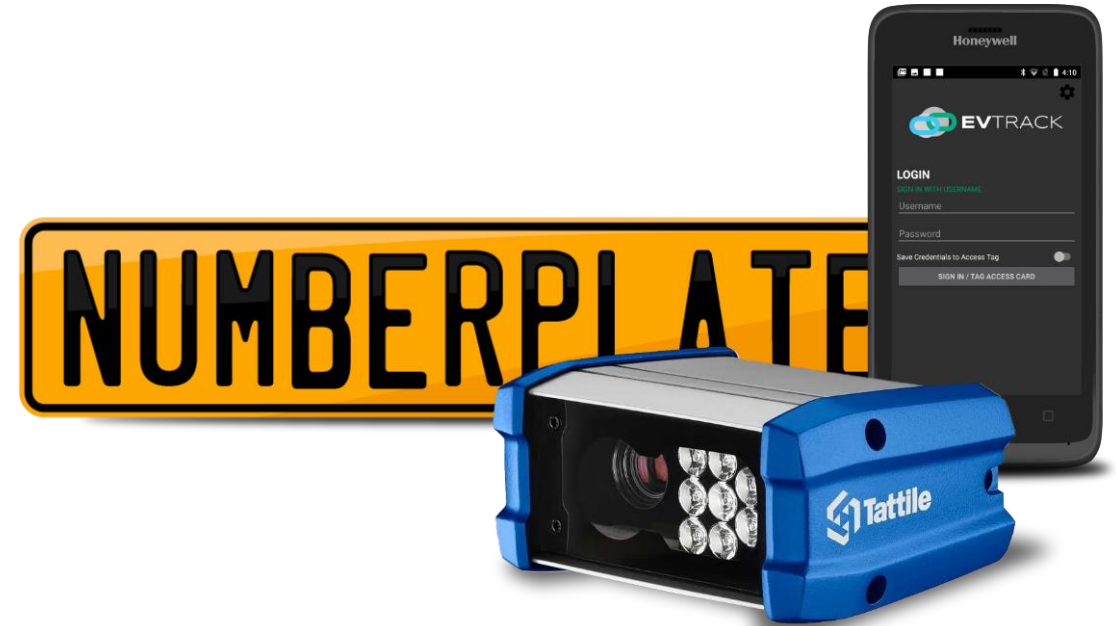
- The past five years has seen a major increase in the move by manufacturers to access control readers where the controller & access control credentials are stored **on the edge** (i.e on the device).
- This is set to increase in the coming years where security system administrators demand remote control of devices without having to go to a site to configure or maintain a device.
- Use of such hardware also increases the 'survivability of the access control system' if the internet is down as a local credential record is kept on the device and because it has it's controller (brain) it can continue operating without a connection to the server.
- Many of these can be **PoE powered** reducing cable complexities and allowing IT departments or IT contractors to maintain systems.
- There is a move away from legacy multi-door centralised controllers.



TREND05

USE OF NUMBERPLATE RECOGNITION FOR VEHICLE ACCESS CONTROL

- **Automated Numberplate Recognition (ANPR) has drastically dropped in price and is now available with numberplate recognition happening on-the-device itself i.e in terms of license plate recognition (LPR) processing.**
- It is the ideal solution for hi-speed vehicular access in order to reduce the amount of time spent by the visitor, tenant or resident outside an entrance gate which obviously reduces the risk of being target at that point.
- **However some concerns do existing because the numberplate can be cloned.**
- For sites without physical cameras, numberplate access control can also be done by handheld device.



TREND06

USE OF ACCESS CONTROL DATA ANALYTICS

- **Access control systems now harness the data which is captured to provide trends which can guide management on operational sites issues or to pick up access control problems. These include:**
- Users granted access by day (Foot Count)
- **Number of visitors enrolled**
- Access Denied Events Versus Approved Events
- **Most Used Access Control Points**
- Most popular Host/Resident
- **Most popular Visitor**
- The most used Access Control Credential



TREND07

REDUCTION IN PHYSICAL CONTACT

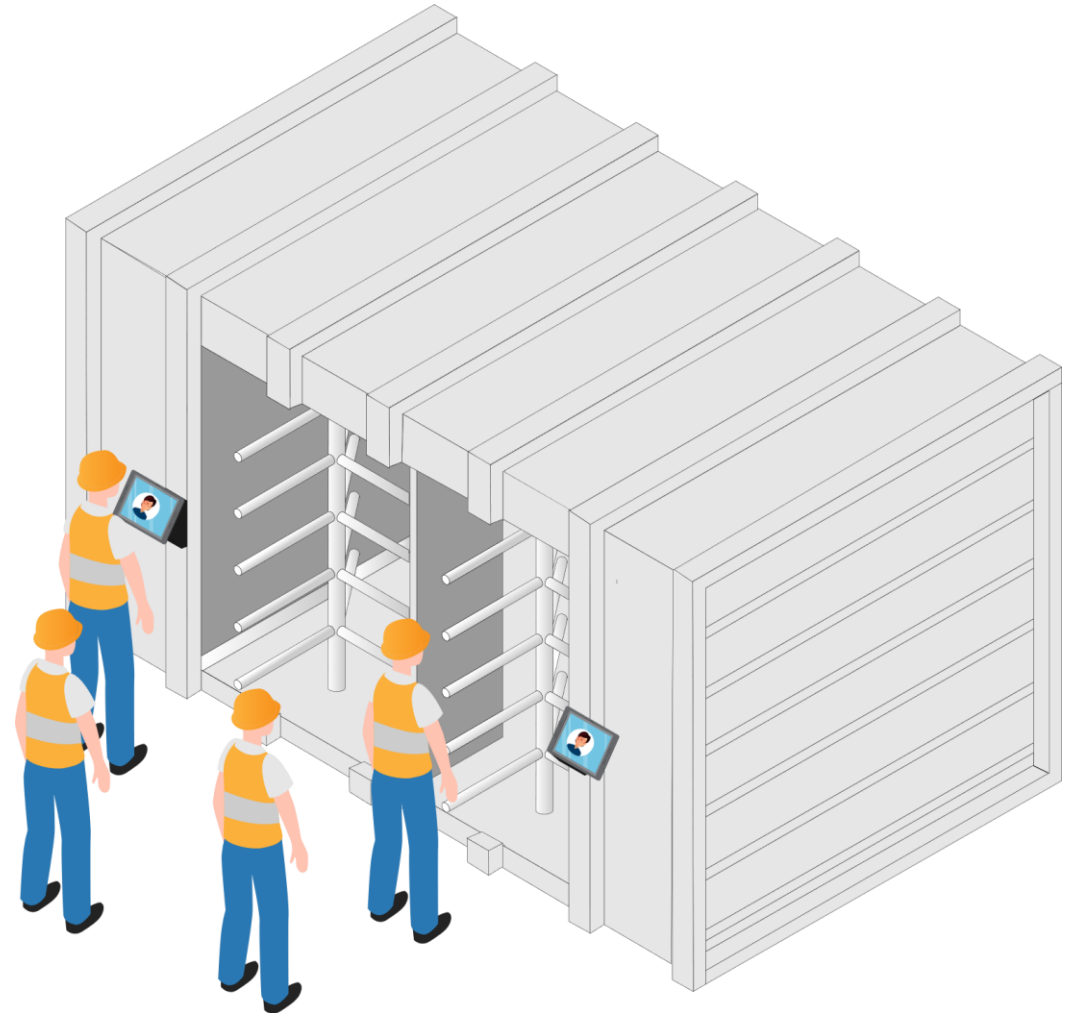
- **Post COVID, individuals are hesitant to use physical access control systems which require contact with a surface which may increase the risk of spreading an infectious disease. This could include your old traditional access control fingerprint reader, a keypad or even a standard door handle.**
- New system designers need to be aware of this and design based on a minimal or no touch technology basis.
- **Older sites will require upgrades which will include the installation of automated door openers, motorised sliding doors, proximity hand wave buttons and upgrading of existing reader technology. Some sites may even go back to RFID card as a form of credential.**



TREND08

WATCH ON LABOR COSTS & INCREASE IN AUTOMATION

- **Post COVID & the economic impact it has created everyone wants to cut costs and this includes labour and as example security guarding.**
- Access Control & Security Automation is therefore gaining in popularity. Corporates, organisations and service centres are installing access control devices & intercoms which can replace guards and allow communication to remote sites from a central location.
- **This automation often removes the weak point of human guarding, improves the customer or tenant experience and speeds up access control processing.**
- Pre-registration of employees, contractors & visitors is however an important aspect that needs to be implemented to reduce bottle-necks.



TREND09

QR CODE POPULARITY

- The **QR Code** has become super popular in all aspects of life from smart phone payment to business cards to digital datasheets.
- Access control is not excluded & as discussed earlier is ideally suited as a credential for physical entry systems.
- For those that are concerned about security issues such as cloning, some systems have rolling digital QR code functionality. In addition use limits and expiry dates could also be set.
- QR codes do NOT require contact with a reader, can be carried on a phone or printed on a piece of paper and can be read by an optical QR code device or by an appropriate IP Camera.
- It is also the ideal technology for temporary access control applications such as construction sites, conferences or events.



TREND10

IMPORTANCE OF DATA PRIVACY

- **Most governments have introduced some form of legislation governing the storage, use and access to personnel data.**
- This has become a hot topic in the access control world especially in applications where visitor data is captured.
- **System operators need to ensure that the data captured is used for the intended purpose, not sold to a 3rd party, stored securely and there is an access control policy in place in terms of who has access to the data and when it can be accessed.**
- Organisations also need to select access control systems which have secure data transmission between hardware & software.
- **In addition, one needs to have in place admin user rights, system audit logging and a firm access to information policy.**



WHAT IS EvTrack

VISITOR MANAGEMENT & ACCESS CONTROL SOLUTION



EvTrack is software eco system for visitor registration, physical access control & health/safety compliance.

It has been designed to provide organisations, mixed use developments, residential estates and remote sites with a robust tool for controlling access control.

It also provides an audit tool for replacing the traditional paper registration book that is common place at most sites.

EvTrack is an open architecture solution which allows different hardware to co-exist on the same platform.

THANK YOU
FROM EvTrack