

Work 4.0 – a term that describes remote work as it becomes ever more flexible. No fixed worksite, no fixed working hours. This is an assumption not just since the coronavirus pandemic and is an advantage both for employees and employers. “Coworking spaces” is a concept that lies between stationary work in an office and the same in a homeoffice, isolated from colleagues and social contacts. Sensitive data and expensive equipment certainly must be protected as far as possible. Biometric access control to coworking spaces can be an effective solution here as it offers a broad range of possibilities, from registration to settlement.

Use of palm vein scanners in coworking spaces

#biometrics

#palmveins

#accesscontrol

Biometric registration in coworking spaces

Coworking spaces are becoming increasingly popular and have formed a viable homeoffice substitute, and not just since the beginning of the coronavirus pandemic – of course with additional hygiene measures.

“Coworking” literally means “working next to each other” or “cooperating”. Coworking mostly takes place in what are termed coworking spaces. On top of that, nowadays it is possible to find modern worksites both in and far from huge metropolises, with regional options in rural areas available. Worksites located in light, friendly and spacious areas stand out thanks to their independence, flexibility and accessibility. It is often possible to choose between different price models, depending on when, how long and how often they need to use the space, as well as what technical conditions they need. One of the main ideas behind coworking is that experts from many various work fields can meet each other and so create synergy.

As a result, the use of coworking space is interesting for more than freelancers, as it also offers many advantages to companies. Employees no longer have to commute and, in contrast to a homeoffice, they are neither professionally nor socially isolated. Companies save the money generated through the use of the space, where a workplace for one employee may cost between €600 and €1000 per month, while the same for an employee in a coworking space costs between €220 and €250 per month.

Regulating from admittance to invoice

How can biometrics help make coworking spaces even more convenient for operators and users?

For the operators it is a unique feature to help them deal with their customers and offer them a variety of services thanks to the fact that biometric identification and registration in the system take place only once, by scanning the palm veins.

From arrival and parking in the premises, to entry to a building, the opening of a laptop locker, choosing snacks from the vending machines, all the way to the invoicing, each and every procedure can be managed effectively. All this using only a small amount of hardware, which lowers the costs related to operators as well as the users. All of this countrywide. Once a user enters one of the coworking space operators in the database, they can easily and quickly register via their biometric palm veins in all of the other locations and, thanks to this, they can continue to work effectively all the time, such as during business trips. Verification through a mobile terminal is also possible, where double identification takes place via a **Template on Mobile Device**. When the user with their mobile phone approaches the entrance, the system recognizes them through the template that defines a particular customer, and then the person only has to go through the identification process using their palm veins.



This reduces the match time of the system significantly. It is achieved via Bluetooth Low Energy (BLE).

Contact-free access control using palm veins

The ManuScan Palm Vein Scanner can be installed in the same way as an ordinary light switch: in a standard flush-mounted box. Power is supplied via Ethernet (PoE). The scanners are connected to a top-hat rail capable Authentication Unit (AU) operated from a separate secured IT room, mounted in a 19" rack. It can be easily integrated with existing security infrastructures through all common hardware interfaces and ensures maximum system availability thanks to the in-built software and hardware backup systems.

In the case of positive authentication (by scanning the palm veins in connection with RFID and/or optionally entering a PIN code or even the previous verification via smartphone) a compatible signal is given to the existing access control and logging systems as feedback.

"In this way we can secure sensitive doors with palm vein scanners without having to replace the entire access control infrastructure," explains Dr. Alexander W. Lenhardt, CEO of iCOGNIZE GmbH

With the unique biometric "palm vein" feature, this system offers the user not only maximum security but also the highest level of convenience. The ManuScan Indoor palm vein scanner operates without the need for physical contact and in a non-invasive way, while its unique optical hand locating system ensures intuitive use and a high level of user acceptance.

Advantages of the ManuScan Indoor palm vein scanner from iCOGNIZE when used in coworking spaces

RGB-LED user guidance

- more reliable than an iris scanner
- FAR < 0.00008% (false acceptance rate)
- FRR < 0.01% (false rejection rate)
- sabotage detection (contact, shock)
- easy integration with existing systems
- in-built PIN code reader
- CE- and BSI-certified (components)

Advantages in use:

- PIN codes can be stolen or passed on, which cannot happen with the contactless biometric access systems by iCOGNIZE.
- Interaction of present techniques (locker systems / RFID entry control etc.) is possible through the variety of interfaces and demonstrably implemented through vast amount of projects.
- Maintenance only once per year.

