princeton IDENTITY

CREATING A HEALTHIER AND MORE CONVENIENT FUTURE WORKPLACE;
Touchless Biometric Solutions Hold the Key
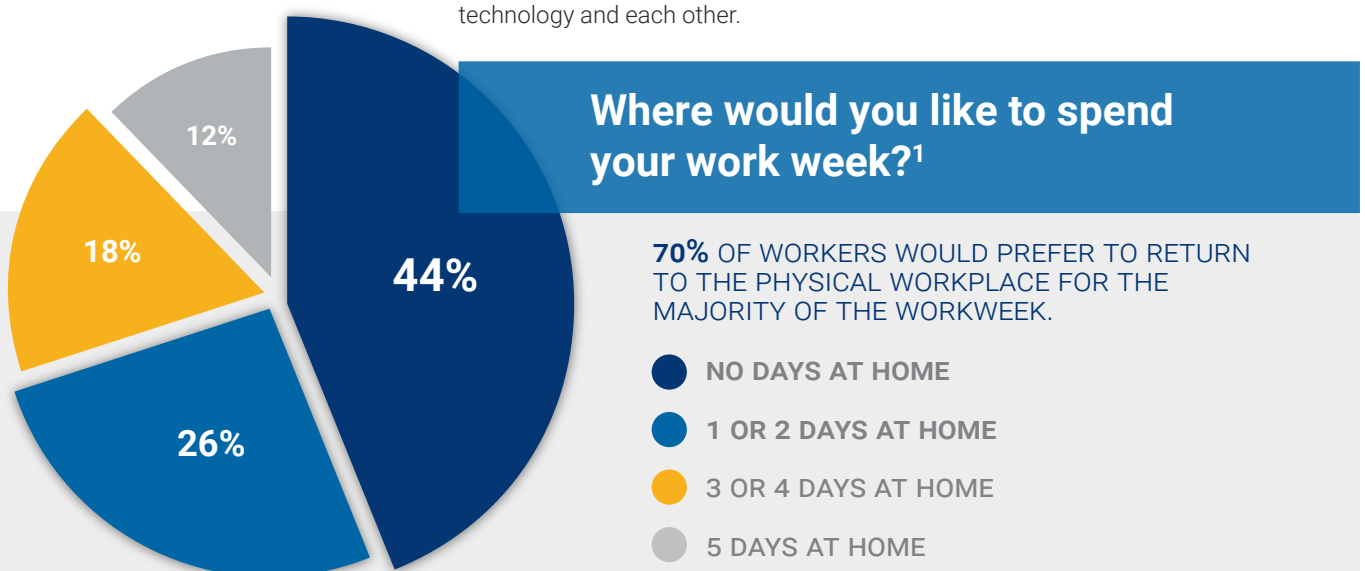
RE-ENVISIONING THE WORKPLACE

EMPLOYEES EXPECT EMPLOYERS TO DO THEIR PART TO MAKE THE WORKPLACE A HEALTHY AND SAFE EXPERIENCE.

Tens of millions of Americans began working from home when the COVID-19 pandemic arrived. Most hope to return to their workplaces soon; 70% of office workers report that they'd prefer to spend the majority of their workweek in the office.[1] They miss the face-to-face interactions with colleagues, the opportunities to socialize, collaborate, and communicate in-person. These aspects of the job give employees a sense of purpose and belonging, and for many, make work feel less like "work."

Essential workers have not had the option to work from home. For many of them, reporting to work on-site has been a daily source of stress as they endure workplace environments with insufficient precautions.

Employees expect employers to do their part to make the workplace a healthy and safe experience. This includes adhering to CDC recommendations that include limiting employee exposure to shared equipment and high-touch surfaces. While empirical studies show that virus transmission is most likely to occur through the air, it is possible to contract the virus through surfaces. Corporate management must be mindful of this and take appropriate precautions. In fact, **the CDC recommends that surfaces and objects in public spaces be cleaned and disinfected before each use.**[2]
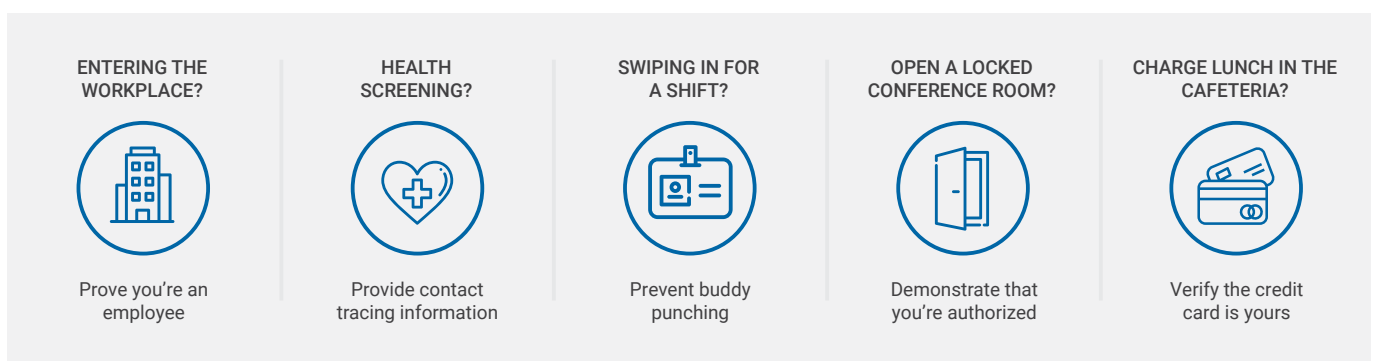
That's a big ask. While it's not unreasonable for employers to ban handshakes, reduce the use of shared equipment like laptops and office supplies, and install plexiglass barriers in open areas, there are countless other places where employees encounter high-touch surfaces. Doors, elevator buttons, vending machines — the coronavirus can live on all of them. Fortunately, biometric identity management solutions provide an easy-to-implement, reliable, secure, and cost-effective method for eliminating many of these touchpoints. In addition, they transform the modern workplace into a convenient and accessible environment, where workers can more freely interact with technology and each other.

Where would you like to spend your work week?[1]

70% OF WORKERS WOULD PREFER TO RETURN TO THE PHYSICAL WORKPLACE FOR THE MAJORITY OF THE WORKWEEK.

- ● NO DAYS AT HOME
- ● 1 OR 2 DAYS AT HOME
- ● 3 OR 4 DAYS AT HOME
- ● 5 DAYS AT HOME

[1] Gensler Research Institute, U.S. Work from Home Survey 2020, [2] https://www.cdc.gov/coronavirus/2019-ncov/faq.html,

WHY BIOMETRICS?

WITHIN THE OFFICE, MANY HIGH-TOUCH SURFACES EXIST WHERE EMPLOYEES VERIFY THEIR IDENTITY TO TECHNOLOGY SYSTEMS. **TOUCHLESS BIOMETRICS CAN STREAMLINE THESE PROCESSES.**

ENTERING THE WORKPLACE?	HEALTH SCREENING?	SWIPING IN FOR A SHIFT?	OPEN A LOCKED CONFERENCE ROOM?	CHARGE LUNCH IN THE CAFETERIA?
Prove you're an employee	Provide contact tracing information	Prevent buddy punching	Demonstrate that you're authorized	Verify the credit card is yours

We identify ourselves to technology in many ways. Whatever the method, most interactions require touching something — for example, a door, card, fob, pinpad, screen, or stylus.

Biometrics are an easier and faster way for employees to engage with these systems, and touchless biometrics — especially those that use the iris and face — are ideal for today's reimagined workplace.

Biometric identity solutions work by matching a physical attribute that's unique to each subject to a stored, digitized, and encrypted version. Touchless iris and facial readers can quickly and accurately identify employees and, when integrated with any number of systems, enhance operational efficiencies along with workplace safety. Iris scanning is more than ten times more accurate than fingerprint scanning, producing a false match only once in 1-2 million incidents.[3]

Touchless biometric systems enable safe entrance to buildings, hallways, and rooms. They can simplify employee temperature screening and improve time and attendance reporting accuracy. When installed at point-of-sale locations, like lunchrooms and breakroom vending machines, they make purchases possible with a simple glance to the reader. Within the workplace, opportunities abound for biometric solutions to deliver on the CDC's recommendation to reduce employees' exposure to high-touch surfaces.

Iris and face biometrics offer unique, touchless convenience.

BIOMETRIC	DESCRIPTION	TOUCHLESS
FINGERPRINT	pattern of ridges on a fingertip	✖
PALM VEIN	pattern of blood vessel patterns in palm detected with infrared light	✔
FACE	relationship between eyes, nose, lips, cheeks and other facial landmarks	✔
IRIS	unique, random patterns within the colored portion of the eye	✔

[3] https://www.explainthatstuff.com/how-iris-scans-work.html

WHERE BIOMETRICS ADD VALUE

We all realize that the "new normal" will look different from the old normal, even after the pandemic. Changes in work patterns, technological innovations, and employee expectations will forever shift how the workplace operates. In many ways, companies will need to be more accommodating to employees, as in allowing for greater flex time and offering more liberal work-from-home policies. Conversely, there will be more rigid standards to ensure employee health and safety, such as implementing enhanced cleaning procedures and requiring all ill employees to stay home without exception.

HERE ARE FEW WAYS THAT BIOMETRIC IDENTITY SOLUTIONS WILL PLAY A ROLE IN THIS NEW NORMAL.

1

Employee Convenience and Safety

Employers need to demonstrate to their employees that they are serious about providing a safe work environment, but **management must balance safety protocols with keeping the workplace welcoming and accessible.** Employees will appreciate biometric solutions that are convenient to use, protect their privacy, and allow for free movement and routine activities to occur in a touchless manner. Their implementation makes a clear statement that management cares about their welfare and the quality of their daily in-office experience.

2

Regulatory Requirements

Processes must evolve with the changing regulatory landscape. **Property managers need efficient, automated methods to track employee compliance with new regulations.** Linking biometric-driven access control systems to reporting tools or time-and-attendance systems can track personnel flow within a building or campus environment without extra "paperwork" for employees. Occupancy tracking validates new capacity measures to ensure employee safety and can be used to enforce conference room or factory floor social distancing. In addition, reporting measures from integrated systems offer a reference point for contact tracing, should the need arise.

3

Leveraging Smart Buildings

New pandemic era patterns will persist, to some extent, in the post-pandemic world, leading to potential reductions in operating expenses. On-site occupancy rates may shift, allowing for space consolidation and open space for new tenants. Hybrid work schedules might allow for efficient redeployment of security and janitorial staff. Heat and lighting requirements may be reduced. **Accurate data on daily occupancy, work schedules, and traffic patterns are necessary** to make these adjustments. Touchless biometric identity solutions can provide them.

SPECIFIC APPLICATIONS

Touchless Access Control

There are many solutions now offering touchless access control. Some cards and fobs can be waved in front of readers and presented through clothing. Bluetooth readers sense credentials in users' phones. Some systems let users unlock doors by pushing a button in a mobile app. While superior to traditional touch solutions, none offer the frictionless experience of a touchless biometric reader.

With biometrics, there's nothing for employees to lose, forget, or share with others. Their credentials are with them all the time and can never be copied or faked. Human resources will never again be bothered with replacing a misplaced access card or worry that borrowed or stolen credentials are being used by unauthorized personnel. And employees will no longer encounter the hassle of finding themselves inadvertently locked out.

Biometric readers can be installed indoors and outdoors, anywhere a standard access control reader would be. Employees do not need to carry or present any sort of physical credential. A glance at the reader will open any door for which they have permission.
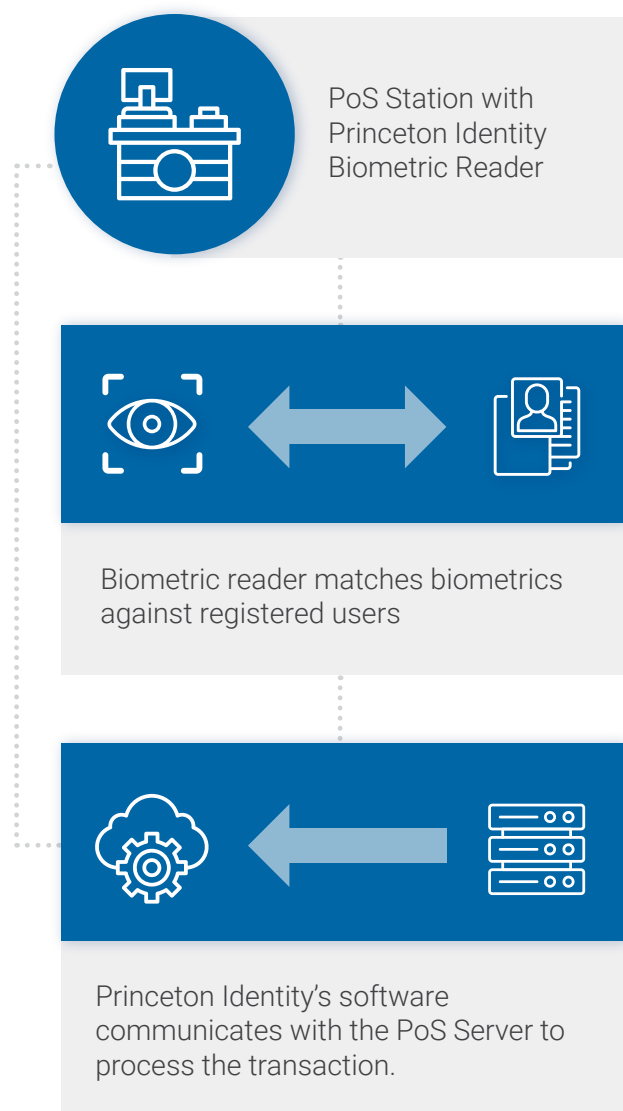
Time and Attendance

Working in high-security areas, including laboratories, data centers, and high-end manufacturing facilities requires time and attendance monitoring. Touchless biometric readers allow employees to avoid removing gloves and face masks or fumbling with ID cards. Biometric readers simplify access to labs and material supply cabinets using a simple and highly secure biometric glance toward a door or lock mechanism, thereby replacing keys, cards, and codes. Integration with time-and-attendance systems helps maintain record logs that meet regulatory reporting requirements.

Self-Serve Point-of-Sale (PoS)

As workers return to the office, traffic volume in breakrooms and cafeterias will naturally increase. Plexiglass barriers, individual food containers, and social distance markers are a first line of defense. Property managers must also consider touchless payment options beyond the current generation of self-serve PoS terminals that require touch for PIN entry or verification.

By aligning with strategic partners, biometric solutions can replace existing PoS terminals with self-serve touchless biometric readers. Employees glance at a terminal, and their purchase is charged to a financial account linked to their identity. Payment has never been faster or easier. There's no need to search for a credit card or unlock a phone to access a digital wallet. Payment lines move quickly, preventing back-ups at the register that can make social distancing difficult.

PoS Station with Princeton Identity Biometric Reader

Biometric reader matches biometrics against registered users

Princeton Identity's software communicates with the PoS Server to process the transaction.

SUMMARY

Long post-pandemic, investment in workplace safety will continue to pay dividends. Consider this amazing statistic: Over the previous five years in the United States, an average of 35.5 million cases of flu were reported each year. In 2020-2021[4], that number was reduced by more than 99%. Medical experts attribute this steep drop to the extreme health precautions that have become our new normal. **When we social distance, wear masks, resist touching common surfaces, and wash our hands frequently, we reduce the transmission of all germs that make us sick, not just the coronavirus. Moving forward, employers who take active steps to maintain a healthy workplace will see increases in overall productivity as far fewer employees miss work due to illness.**
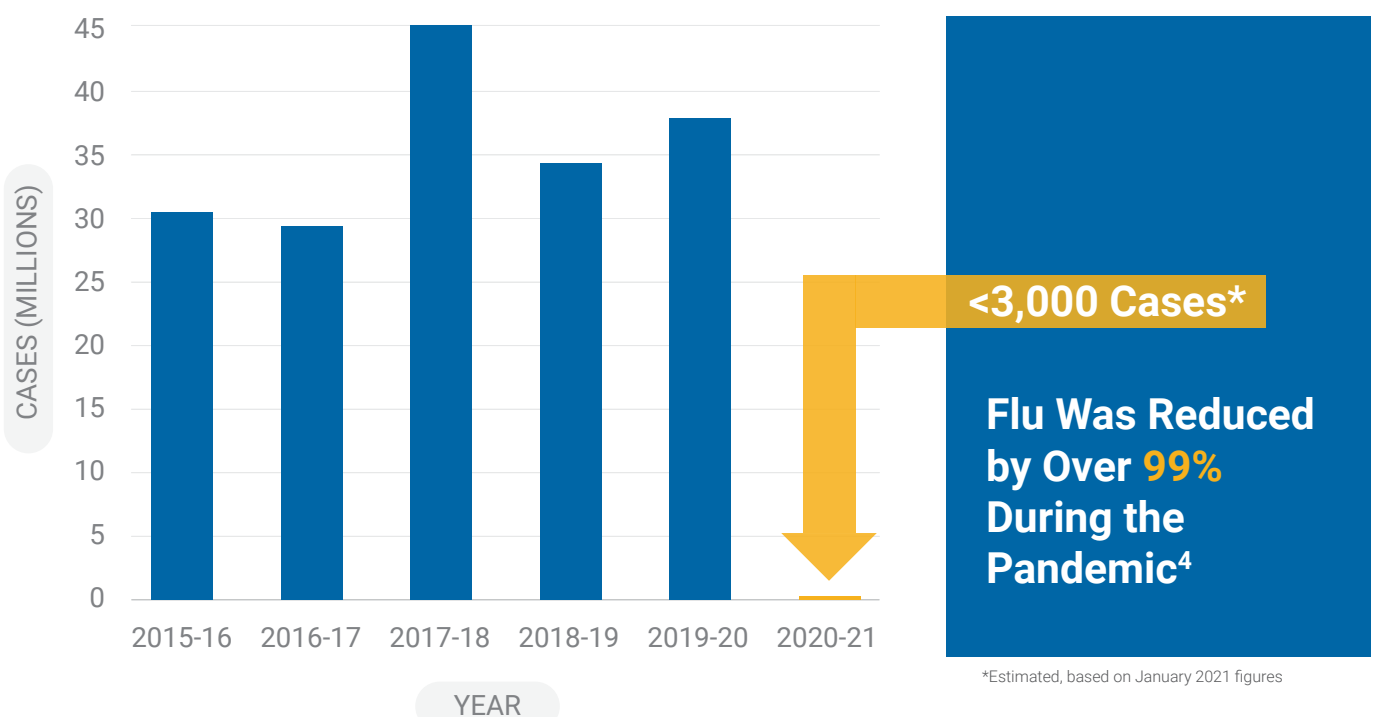
The pandemic has forever changed our relationship with the workplace and the dynamics between employees and employers. Essential workers who have continued to work on-site have united to demand safer working conditions.

Workers who have been able to work from home have proven they can perform remotely, negating management's

justifications for past policies that discouraged the practice. At the same time, most workers have a newfound appreciation for their physical workplace. Literally "going" to work at least several days a week provides needed social engagement, a sense of teamwork, fewer personal distractions, and a healthy separation between our work lives and personal lives. The hassles of commuting and wearing work-appropriate attire are a small price to pay for these benefits.

This equation leaves employees with greater power to extract accommodations from employers. They expect a safe workplace where they can focus on their jobs while not worrying about their health. Companies that fail to deliver will find themselves less competitive in retaining workers and attracting new ones.

Touchless, biometric technology offers a readily available solution to eliminate employees' exposure to countless high-touch surfaces within their facilities. Furthermore, it merges security, convenience, and personalization to create a seamless experience that will define the modern workplace — a place where employees will welcome the opportunity to work.

<3,000 Cases*

Flu Was Reduced by Over 99% During the Pandemic[4]

*Estimated, based on January 2021 figures

[4] https://www.usnews.com/news/health-news/articles/2021-01-15/what-happened-to-the-flu-this-year and https://www.cdc.gov/flu/about/burden/2019-2020.html

WHY PRINCETON IDENTITY

Multi-modal iris and face identification is the most secure, accurate, and convenient biometric screening method available, and no other company matches Princeton Identity's expertise. Princeton Identity is formerly a division of SRI International, the company that pioneered the first iris camera nearly three decades ago. **PI's patented technology is the brainchild of leading researchers in the field of iris biometrics**, whose groundbreaking work has led to physical security and access applications for government, commercial and mainstream markets.

With proven installations worldwide, PI offers system solutions for clients in security, transportation, airports, finance, healthcare, and other industries. It has an extensive list of technology partners. **The company's open API offers easy integration between its software and a wide range of security, human resources, point-of-sale, and facilities management solutions.**

HOW PI READERS WORK

The PI system is multi-modal, using both iris and face biometrics to identify registered users. In most instances, the system can identify subjects by their irises alone, eliminating the need to remove face masks. Dual-authentication with an access card is also possible.

A system administrator uses PI's biometric capture device to capture users' biometrics and store them securely in PI's IDS software. **Once enrolled, users need only to glance at a PI reader to be identified.**

Through PI's IDS software, administrators can manage biometric reader configure, monitor system activity, or check device status.