

# COVID-19 Response: Go Big on Safety (Customer and Employee Safety Initiatives)

April 2020



# Go Big on Safety

PwC is building an emerging portfolio of products and services focused on **helping consumers and employees feel safer and more secure** in the spaces where they interact. New sanitization techniques and procedures need to balance **brand, efficacy, operations and cost** and leverage new technologies to improve efficiency and reporting.

## HIGHLIGHTS INCLUDE:

Insights on **contactless journeys** for customers and travellers through hotels, casinos, retail shops and restaurant spaces

Employee journeys **from the back office to the front line**, and helping them make **empowered choices for safety and security** of themselves and the customers

User friendly tools that:

- Track **employee contacts** while providing a engagement channel to stay in touch
- **Systematizes the sanitization process and procedures across locations** and the reporting of status via a dashboard.

New products that integrate IOT capabilities in innovative ways to **make sanitization safer and more efficient** for the future



PwC is helping clients in consumer-driven industries identify and deploy new strategies to make customers feel safe and secure

## Problem Statement:

Consumer-driven industries are reeling from the effects of COVID-19. The future will depend on the ability for all players to **instill confidence** that their **procedures prevent them from risk of contagion in order for customers to feel safe and secure in the new post-covid social environment**

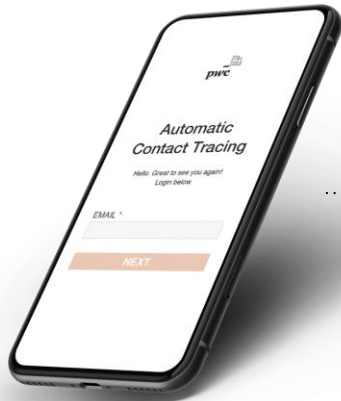
## Strategic Objectives:

- Need to comfort customers** that your company is focused on making spaces safer
- Need to start now** as sustainable solutions will require lead time to scale
- Need to be thinking long-term** as more cost-effective disinfection treatments may be necessary past Covid-19

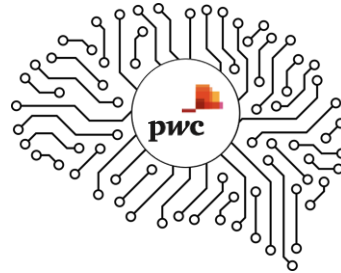
## How PwC Can Help:

- 1** Contact traceability and employee check-ins
- 2** Identifying new technologies and develop new **disinfecting strategies**
- 3** Cleaning and Employee Safety **monitoring and reporting**
- 4** Designing **innovative products** such as a robot with a UV disinfecting light

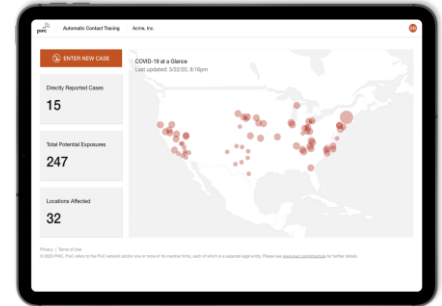
# 1 How automated contact tracing works



Anonymized AdID  
contact tracing



AdID links to  
employees only to  
determine potential  
exposure



## Mobile SDK integration

Our technology is available for delivery through either a standalone mobile app or integrated into client's enterprise mobile app and enables signal contact tracing.

## Back-end tech

Associations between signals observed by anonymized phones enables proximity tracing between employees

## Automatic Contact Tracing portal

Authorized users input name of impacted employee; ACT instantly provides a list of potentially at-risk colleagues.

# 1 Connect with your employees anywhere, anytime



## Pinpoint employee work modes

Understand where your people are working—remotely, from an office, in another location—in seconds not days, and identify those not able to work at all.

## View your people's status daily

Utilize the administrator's aggregated dashboard to learn more about check-ins by city and business unit, along with information regarding effectiveness and resource needs.

## Identify workforce effectiveness

Quickly spot daily and trending insights to determine how much of your workforce can work productively by metro area and/or business unit, and deploy resources where they're needed.

## Realize blockers and impediments

Learn about productivity and technology blockers to drive decision making around technology deployments, HR policy changes, and priority work reassignment.

## 2

# Sanitization strategy needs to balance tradeoffs in brand perception, cost, and operational impacts

## Strategic Considerations:

### Brand perception

- Will perception of cleanliness drive consumer/traveller selection?
- Does customer perception or expectation drive frequency of cleaning/disinfection?
- Is saying that the space is clean enough? Does there need to be documented proof (or other indicator like scent)?
- How does frontline staff communicate disinfection activities?

### Operations

- What procedures are necessary if a consumer showing symptoms is identified and removed from the space?
- Is staffing and equipment available under pre-Covid norms? Are there union agreements in place?
- Will regulatory hurdles (e.g., FDA approvals, FAA approvals for airlines) be able to approve technologies in a timely manner?
- How is speed balanced with safety and efficacy?

### Cost

- How does the company balance effectiveness of technology versus costs?
- Are technologies able to reduce labor costs associated with disinfecting and cleaning?
- Will employees or cleaning suppliers need new training?
- Will cleaning be required in non-consumer spaces (e.g., employee only spaces)?

# 2

## There are multiple technologies that can prevent spread of Covid-19 that can be integrated into the sanitizing strategy

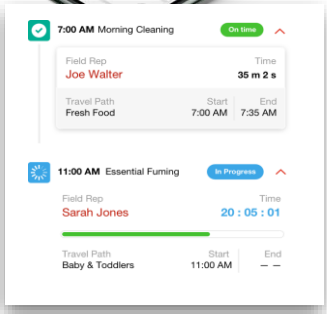
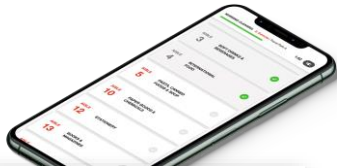


Technology	Manual Disinfection	Fogging Treatment	UV Light Treatment	Photo Electrochemical Oxidation (PECO) Technology
Description	Spray or wipe that cleans and disinfects surfaces; kills 99.9% of viruses and bacteria, including cold and flu viruses	Provides photocatalytic coatings on all surfaces; making surfaces self-cleaning	Produces electromagnetic energy that can destroy the ability of microorganisms to reproduce by causing photochemical reactions in nucleic acids	Air purification treatment that safely destroys volatile organic compounds (VOC's), bacteria, mold, viruses, and allergens in the air
Pros	<ul style="list-style-type: none"> <li>Can disinfect hard to reach places</li> <li>Ability to quickly disinfect areas</li> </ul>	<ul style="list-style-type: none"> <li>Reduced labor versus touching all surfaces</li> <li>Lower investment</li> </ul>	<ul style="list-style-type: none"> <li>Reduced labor costs</li> <li>Does not require labor to deploy</li> </ul>	<ul style="list-style-type: none"> <li>Eliminates pollutants at microscopic scale</li> <li>Does not require labor to deploy</li> </ul>
Cons	<ul style="list-style-type: none"> <li>Requires labor to deploy</li> <li>Requires frequent restocking to maintain available supply</li> </ul>	<ul style="list-style-type: none"> <li>Leaves residue</li> <li>Ongoing costs remain (mineral/chemical solutions)</li> </ul>	<ul style="list-style-type: none"> <li>High initial investment</li> <li>Takes time for thorough disinfecting</li> </ul>	<ul style="list-style-type: none"> <li>More research is needed to prove effectiveness</li> <li>High initial investment</li> <li>Takes time for thorough air purification</li> </ul>

# 3

## Digital apps can be used to track consumer travel paths and report progress to management and potentially the customer

### PwC Location Cleaning Cloud and Mobile App



Operate every location consistently with optimized cleaning tasks, tracking, traceability and audits



Automate cleaning travel paths, actions and outcomes with an integrated platform an in intuitive user experience for field personnel



Captured activities in real time at the point of cleaning with built in analytics to highlight exceptions, issues or hot spots



Optimize your digital toolkit for each location with tailored action plans based on location profiles and other attributes



Extend the platform to provide additional features by leveraging flexible configurations and our platform ecosystem



Enable operations teams to focus on consumers and associates - not just the extensive cleaning workstreams



Data collected by the solution is readily available & consumable through intuitive analytics for HQ, portal/communities and through APIs for pre-approved public transparency and communications



# 3

## The value of the app comes directly in rebuilding trust in your consumer experiences

### Cleaning Path #3

*Mist Aisle 13 & take air quality test*

Associate temp last taken at 1:00pm



### Associate, Guest and Shopper Safety

Drive standards and guidelines to calibrate employee safety and customer safety

Track compliance with real time activity from the field

Designed to minimize common human errors and drive safety at scale across the network

### Network-wide Efficiency

Standardized travel paths: scanning, sensor collection and image capture

Dynamic travel path allocation based on real-time parameters or issues

Seamless coordination between supervisors and field representatives

### Tracking and Transparency

Provide transparency to customers to win their confidence and trust though cultivated data & analytics

Easy, transparent communication with customers on safety measures through wide variety of comms channels (email, website, apps, etc.)

Reassure employees by providing transparency to safety processes

4

Long-term strategies will result in combining technologies to make more cost effective disinfecting techniques

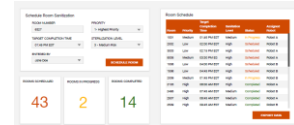
### Overview of automated hotel room sanitization



Portable UV lights that can be remotely controlled leverage IOT technology



Robot technology similar to that already being deployed for hotel room/concierge services



Mobile dashboards that monitor and report progress

# 4

New policies and procedures will be required to ensure safety of staff and guests



Robot vacuums hallway corridors, stopping at each door to sanitize the handle.



Robot sanitizes in-room high-touch surfaces such as light switches, door handles, remote controls, nightstands, and bathroom surfaces.



Robots and staff co-work: while a robot is disinfecting one room, staff completes cleaning in another.

Safe operation is ensured by continuous monitoring of the environment for people. If people are detected, robot disables the UV light broadcast until it is safe to resume. This enables the Brain Corp sanitization robot to work safely around guests and employees.

## We recommend your organization take the following steps to maintain operational stability

- 1) **Evaluate what your organization is currently doing** to address disinfection across all consumer touchpoints and ensure the right process and applications are being leveraged
- 1) Execute **near-term actions** to secure technologies, renegotiate vendor agreements, and redefine disinfection policies and procedures - and communicate to customers
- 1) Develop a **medium-term plan** to bring back consumer confidence and prioritize workforce capabilities that will enable your new disinfection strategy
- 1) Develop a **long-term plan** to ensure sustainable growth and maintenance; identify the most cost-effective approach for all disinfection touchpoints that will help sustain consumer confidence

Our team is available to support and guide you through these decision and planning efforts.  
**More detailed research, analysis, and direct access to providers are available upon request.**

# Thank you!

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