

July 14, 2020

DWM BUSINESS CONTINUITY AND RESPONSE

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GLOBAL DIRECTOR OF SALES
PLANT & PERSONNEL SAFETY

Honeywell



SAFETY MOMENT

Get your safety information from a reputable source

✓ Establish your safety protocols

✓ Maintain Social Distancing

✓ Wash Your Hands Often

✓ Wear a face mask

✓ Do not leave home if you show symptoms

✓ Take the time to self care



The screenshot shows the CDC website page for Coronavirus Disease 2019 (COVID-19). The page title is "Symptoms of Coronavirus". The main content area is titled "What you need to know" and includes a list of bullet points: "Anyone can have mild to severe symptoms.", "Older adults and people who have severe underlying medical conditions like heart or lung disease or diabetes seem to be at higher risk for developing more serious complications from COVID-19 illness." Below this, there is a section titled "Watch for symptoms" which states: "People with COVID-19 have had a wide range of symptoms reported - ranging from mild symptoms to severe illness. Symptoms may appear 2-14 days after exposure to the virus. People with these symptoms may have COVID-19:" followed by a list of symptoms: Cough, Shortness of breath or difficulty breathing, Fever, Chills, Muscle pain, and Sore throat. The left sidebar contains a navigation menu with items like Testing, Prevent Getting Sick, If You Are Sick, Daily Life & Coping, People Who Need Extra Precautions, Pets & Other Animals, Travel, Frequently Asked Questions, Cases, Data, & Surveillance, and Communities, Schools & Workplaces.



The screenshot shows the World Health Organization website page for Coronavirus disease (COVID-19) advice for the public. The page title is "Coronavirus disease (COVID-19) advice for the public". The main content area features a "COVID-19 Response Fund" section with a "Donate" button. Below this, there is a "Coronavirus disease 2019" section with a dropdown menu for "Advice for public" and a "Situation reports" link. To the right, there are four blue buttons: "When and how to use masks", "Myth-busters", "Getting workplace ready", and "Advocacy". At the bottom right, there is a note: "These materials are regularly updated based on new scientific findings as the epidemic evolves. Last updated 29 April 2020". The top navigation bar includes links for Health Topics, Countries, Newsroom, Emergencies, Data, and About Us.

PRESENTATION OVERVIEW

- 1. Introduction -**
Plant & Personnel Safety
- 2. Secure Managed Site Entry**
- 3. On Site Workforce Safety & Comp**
- 4. Remote Collaboration**

**HAS LIFE GOTTEN A
LITTLE MORE
COMPLEX THESE
LAST FEW MONTHS?**

**“NEW NORMAL” IS
NOW THE TERM TO
DESCRIBE OUR
FUTURE IN THESE
UNPRECEDENTED
TIMES**

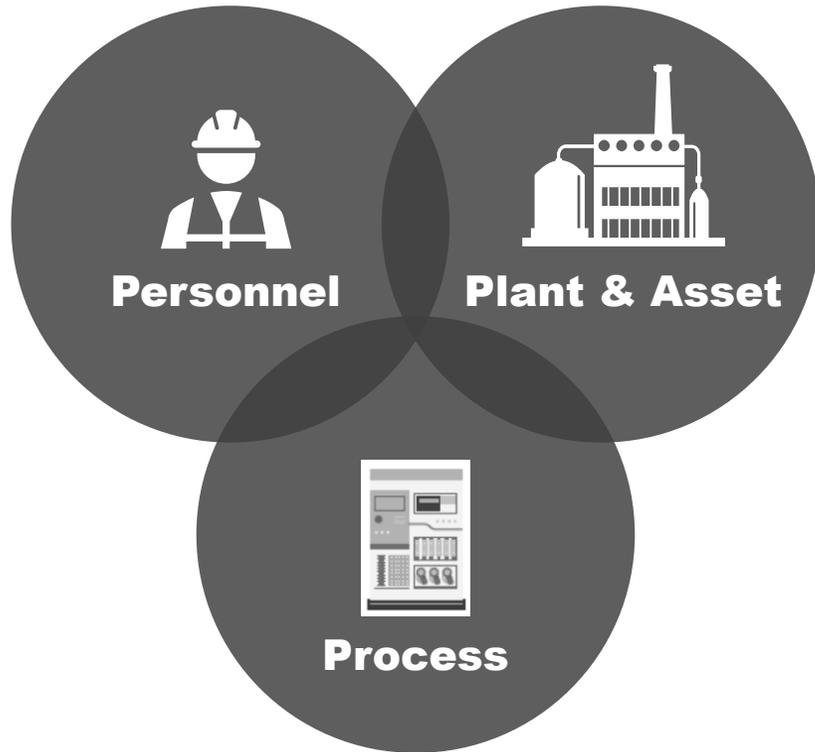


A REALITY CHECK

- “New Normal” likely to persist as a global challenge well into the future
- Preventive measures causing plant level disruptions
 - Limited workforce on site
 - Restricted workforce movement on site
 - Various risks leading to unavailability of workforce
- Current safeguards are limited to manual process and checks requiring extra time, personnel and efforts
- Remote working, collaboration between team and operating with less workforce on site is new normal.

NEED: An effective layer of protection

PLANT AND PERSONNEL SAFETY

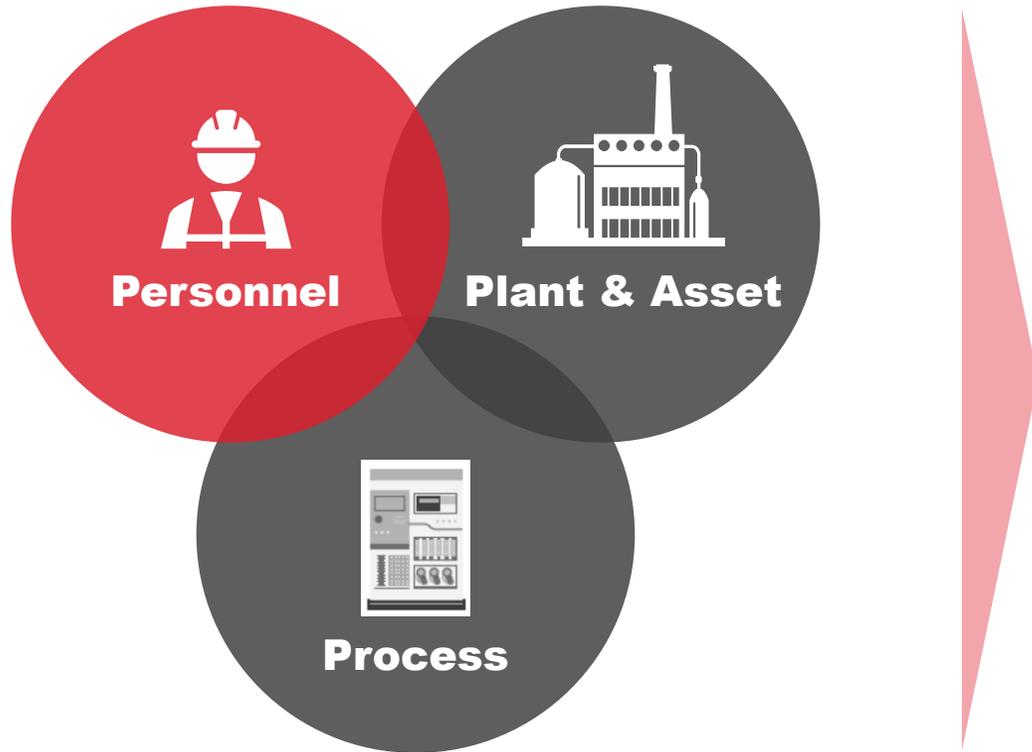


PLANT AND PERSONNEL SAFETY
Integrated Safety & Security

- Wholistic approach to Safety covering Plant, Assets, Process & Personnel
- Integrated Portfolio of Safety & Security Systems delivering enhanced Safety & Compliance monitoring
- Leverage's digitization & Latest technologies
- Reduces Risk and Impact of Incidents
- Manage Incidents with Confidence.

Improve safety and secure plant, people and environment

LEVERAGING PERSONNEL SAFETY PORTFOLIO

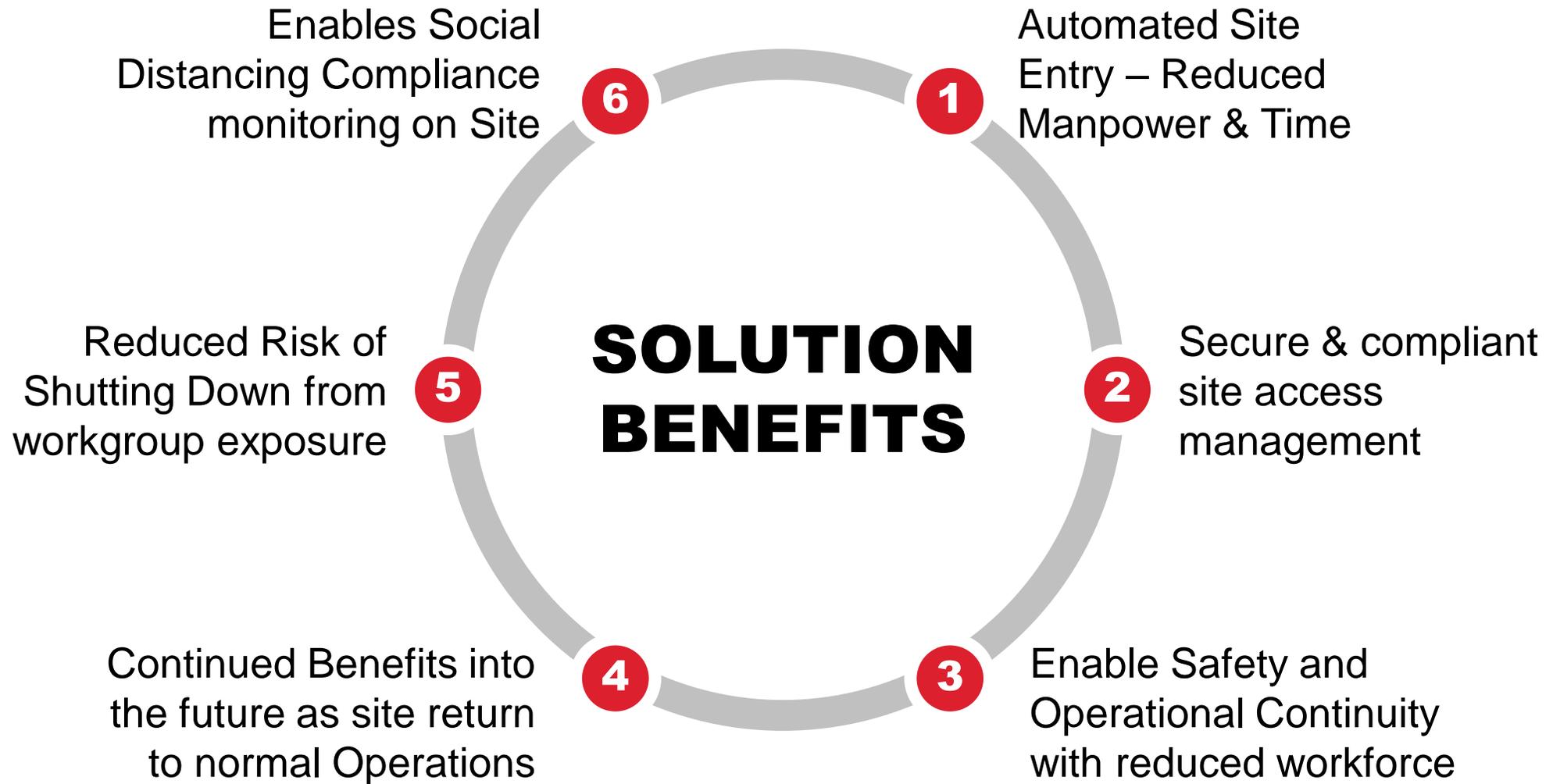


PLANT AND PERSONNEL SAFETY
Integrated Safety & Security

DWM Business Continuity and Response Solutions

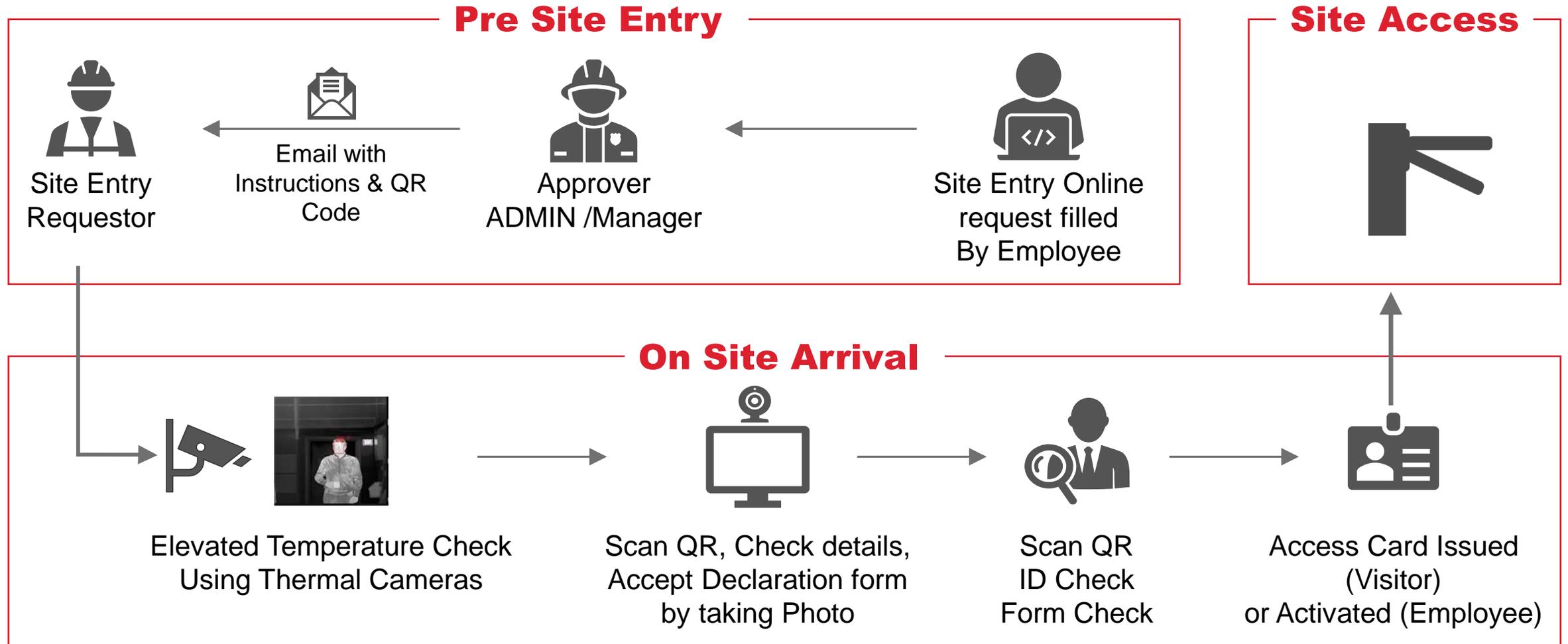
- Automated Site Entry
- On Site Workforce Safety & Compliance
- Remote Collaboration

Enhancing Personnel Safety, Enabling Business Continuity

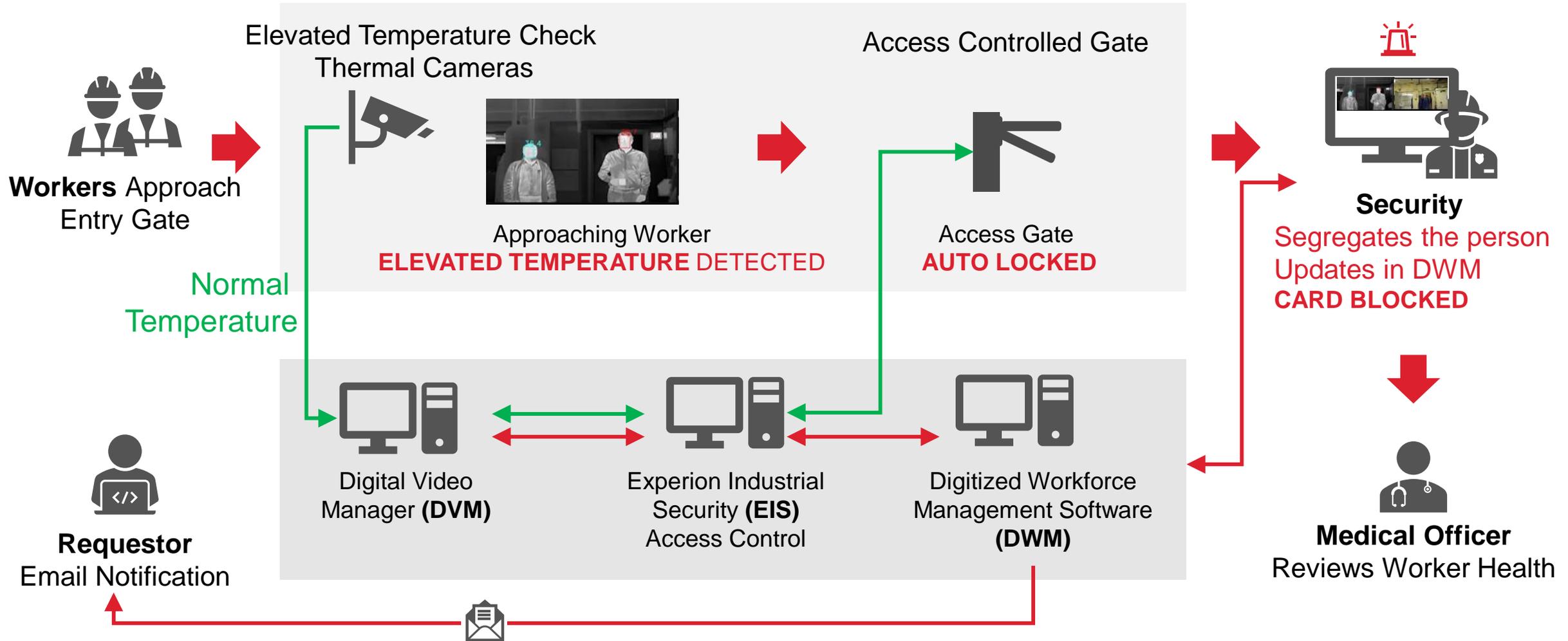


Enhance workforce safety & business continuity

ENTRY MANAGEMENT – VISITOR/EMPLOYEE (RTW)



ENTRY MANAGEMENT – REGULAR GATES



KEY FUNCTIONS – DWM ENTRY MANAGEMENT SYSTEM

Fully Auditable

- Inclusive of person who registers, approver, visitor and host



Self Service Kiosk Option

- Use of QR code to enter Visitor ID
- Prompts to complete Entry Declaration
- Fast Processing & Digitization



Tag Board

- Count of all workers on site continuously
- Total site attendance continuously updated



Auto Deactivation of Card

- Not on site for more than N days, card is automatically deactivated



Additional Access Requests

- Additional **areas** access requests approved by area managers



Reporting

- Expected Arrivals on Site for Day
- Time on site of at risk personnel



Fast, Automated , Digitized Process with Enhanced Functionality

SCALABILITY TO WORKFORCE MANAGEMENT

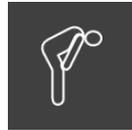
Comprehensive Workforce Management



Visitor
Management



Mustering



Fatigue / Exposure
Management



KPI Dash
Boards



SAP ,HRMS,
LMS Integration



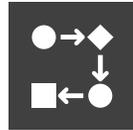
Time &
Attendance



Compliance
Management



Contractor
Management



Process
Workflows &
Rule Engine

Experion Industrial Security

WHY THE NEED OF THERMAL IMAGING CAMERA

- Elevated body temperature testing is an important means of detecting at risk personnel
- Thermal imaging enables rapid, non-contact elevated temperature measurement
- Thermal imaging cameras support real-time detection and elevated temperature alarms
- The test data is recorded and can be traced.

Comparison	Forehead / ear thermometer	Thermal imaging camera
Temperature measurement method	Super close-range temperature measurement	Contactless remote temperature measurement
Temperature measurement distance	1-3cm	Above 1m
Temperature measurement speed	1-5 seconds	Real time
Temperature display	LED display	Video screen display
Temperature measurement data	Temporary only / no storage	Records temperature measurement data and video
Temperature measurement efficiency	12 people /min	60 people / min
Manpower needs	Manual operation	On-duty processing of alarms only
High-intensity work ability	Unknown	24x7 continuous operation
Coping with the environment	Scattered temperature measurement requirements	Areas with a large number of people in a short period of time

Thermal imaging camera: accurate and efficient

THERMAL IMAGING CAMERAS

- Elevated Skin Temperature measurement
- Accuracy within 0.3 °C with black body
- Dual thermal and HD visible cameras -Thermal cameras - High 640x512 and low 384x288 resolution options
- Heat measurement up to 5m away
- Up to 100 measurements per minute
- Can be used with Video system compliant with NDAA 2019 Section 899”
- Very reliable thermal facial detection analytics (ignores face masks and glasses) for temp measurement
- Standalone deployment or Integrated with DVM



Thermal Camera



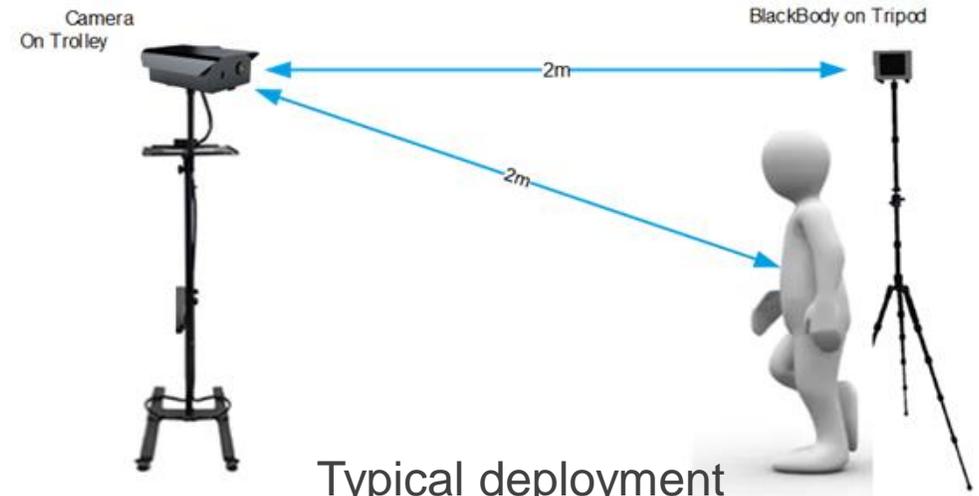
Blackbody



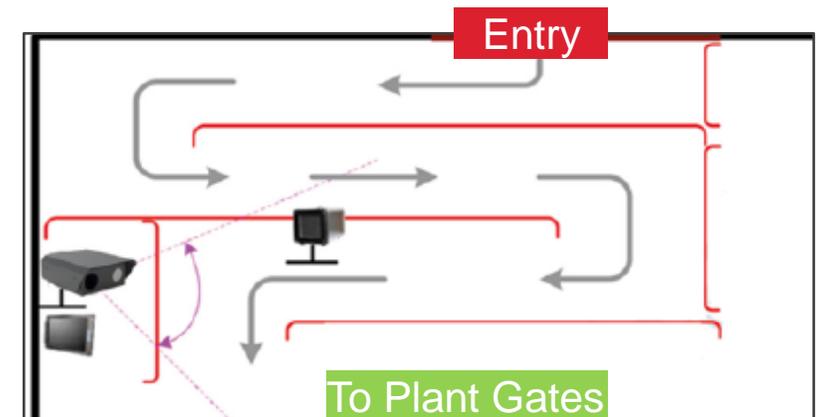
Thermal Screen Captures

ELEVATED TEMPERATURE MEASURING CAMERA

- Used indoors or outdoors in a sheltered area such as a portacabin/shed
- Quick installation with mounting kits/trolleys
- Reduces the time at gate required for manual scan with temperature gun
- Alert when a person with an elevated temperature is detected
- EIS Access integration via DVM – lock access-controlled gates on detecting of elevated temperature person approaching it



Typical deployment
Trolley, Tripod mounts



VIDEO ANALYTICS INTEGRATION WITH DVM

Social Distancing Violation's

- Crowd Detection
- Queue Monitoring



Safety Monitoring

- Scheduled Detection of people in defined Zone (E.g. Lone worker in Night, Restricted Areas movements)
- Server based analytics can be used with existing cameras with DVM



RTLS SOCIAL DISTANCING MANAGEMENT



Control of Social Distancing via RTLS for contact tracing:

- Accuracy of +/- 2 to 3 meters (Required)
- Focused in high occupancy / movement areas
- Non cellular based solution
- Real time social distancing violation alarm enabling immediate action
- **Scalable:**
 - Automated mustering
 - Productivity tracking
 - Unauthorized area movement tracking

Social Distancing & Contact Tracing Capabilities

HONEYWELL ACCESS CONTROL – RULES

ZONE CONTROL RULES

(Maximum Or Minimum Count of People in Zone)

- **Maximum People in Zone**

Checks the number of cardholders present in a zone and alarm if the maximum threshold exceeds.

Reduce chances of Social Distancing violations due to over occupancy.

- **Minimum People in Zone**

Checks minimum number of people in zone and alarms if count goes less than minimum required

Eg: control /emergency room if the last person tries to leave the control room.

Optimizes Safety when working with reduced workforce on site

- **Time in zone**

Alerts if a user spends more than defined time in zone.

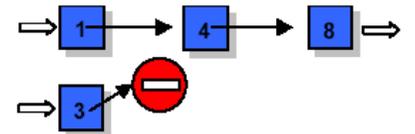
Reduced contact chances.



PATH CONTROL

- Force a cardholder to follow a FIXED path to a destination

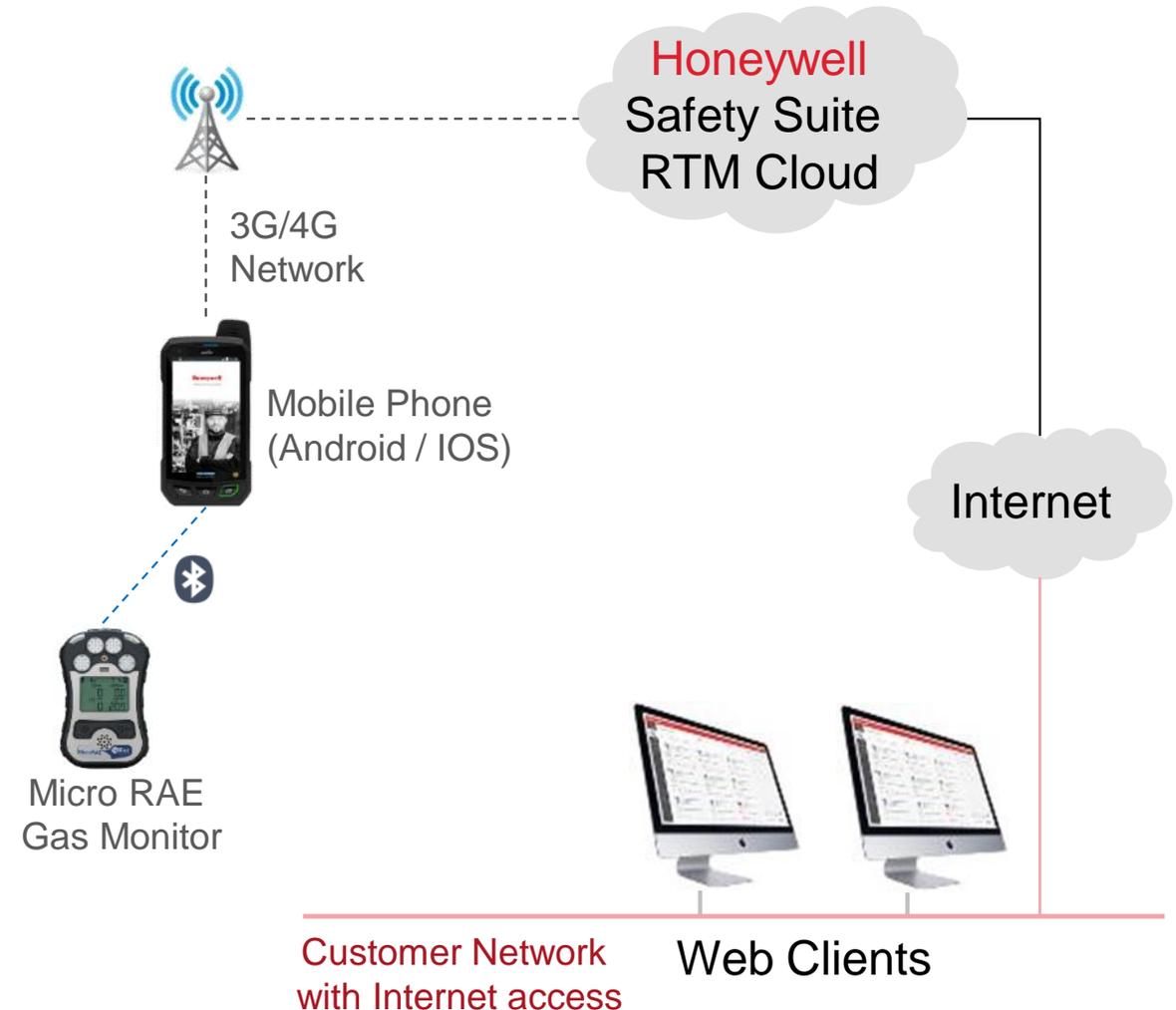
- The cardholder has to go to Reception Gate for elevated temperature scan then access other gates, access denied if he approaches other gate directly.



More Value with Your Honeywell Access Control System

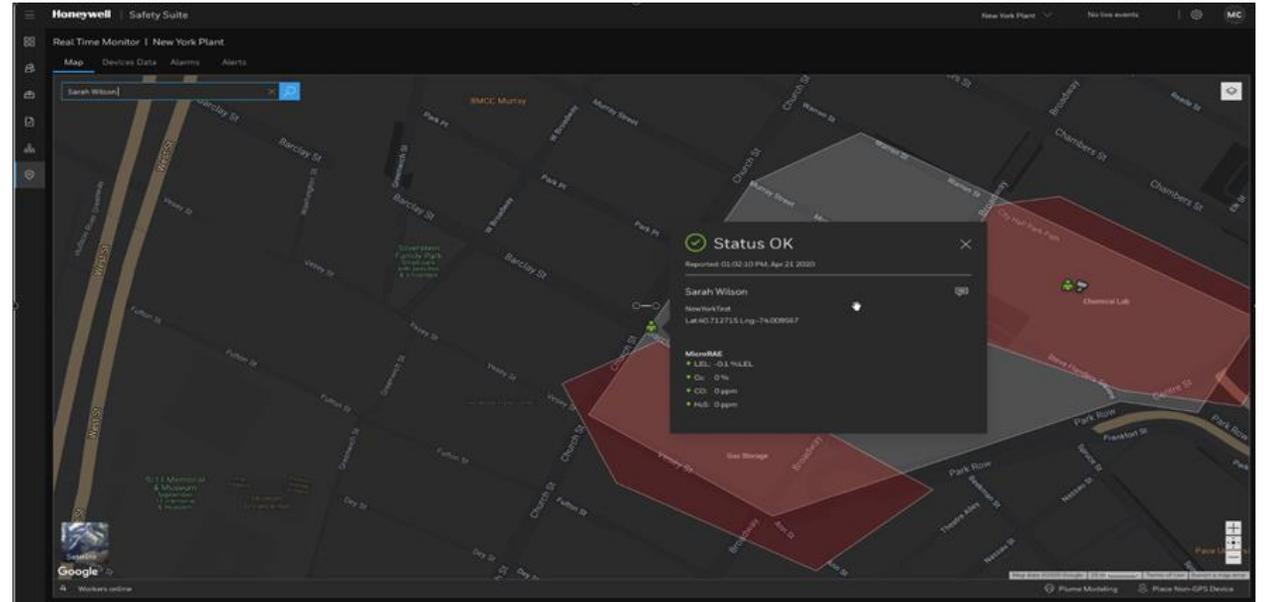
LONE WORKER SAFETY MONITORING

- More chances of lone worker incidents as sites operate with low headcount
- Safety of this workforce is critical
- **Quick Deployment Solution**
- Safety Suite Real Time Monitoring
 - Cloud and On-Premise Versions
- Real time location & Alarms
 - Gas Exposure Alarms (Upto 4 Gases)
 - Man Down Alarm
 - Panic Alarm



LONE WORKER SAFETY MONITORING

- System Dashboard
- Real-time Instrument Readings
- Map-View for Worker Location
- On-Screen Alarms/ Alerts
- SMS Communication
- Multiple Sites/ Areas
- Incident Playback
- Automated Notifications via Email & SMS
- Reporting for Data Analytics



Real time location of worker and his status,
Optimizes rescue time in case of incident
More safety for worker in field.

REMOTE SITE MONITORING & COLLABORATION

Secure Remote Access to On Site Camera

- Enables collaboration between on & off-site teams,
- Remote support in case of Incidents

DVM Mobile Client

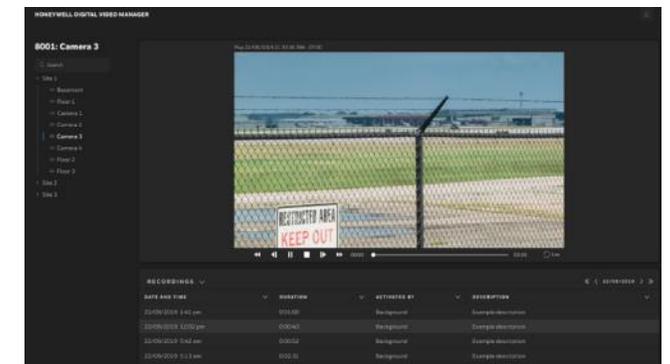
- Secure access to DVM cameras via App
 - iOS version, Android (Available soon)
- Access to live and recorded video



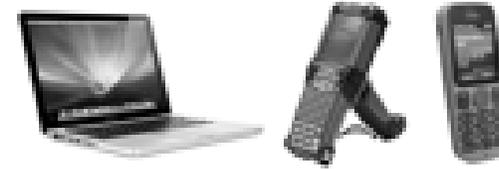
DVM Web Client

(Under final development stages)

- Zero Install, browser agnostic web view to DVM
- Display a single camera, navigation capability, review recordings



INTELLIGENT WEARABLES



Video Assist

Video Library of Procedures

- Knowledge Transfer
- Cloud base
- Local access

Expert on Call

Expert advice

- Real time collaboration
- Increase speed of work
- Operating expenses
- Job compliance
- Reduce meantime to repair

Inspections Rounds

Digital Workflow Solution

- Reduce manual efforts Increase job compliance
- Increase reliability

Docu Assist

Digital Repository of Documents

- Reduce manual efforts Increase job compliance
- Increase reliability

EXPERT ON CALL

What is it?

The Intelligent Wearable Device configured with the Expert on Call application facilitating communication & remote collaboration to solve plant situations.



Benefits:

- Resolve mission-critical situations even when fewer experts are on on-site
- Real-time, on-demand collaboration
- Rapid issue resolution
- Audio/video call through PPE-compliant, hands free, and intrinsically safe wearable device
- Expert takes call from desktop or mobile phone to rapidly solve problems with audio, video, and image sharing.

Rapid Response through Remote Real-Time Collaboration

COMMAND AND CONTROL SUITE

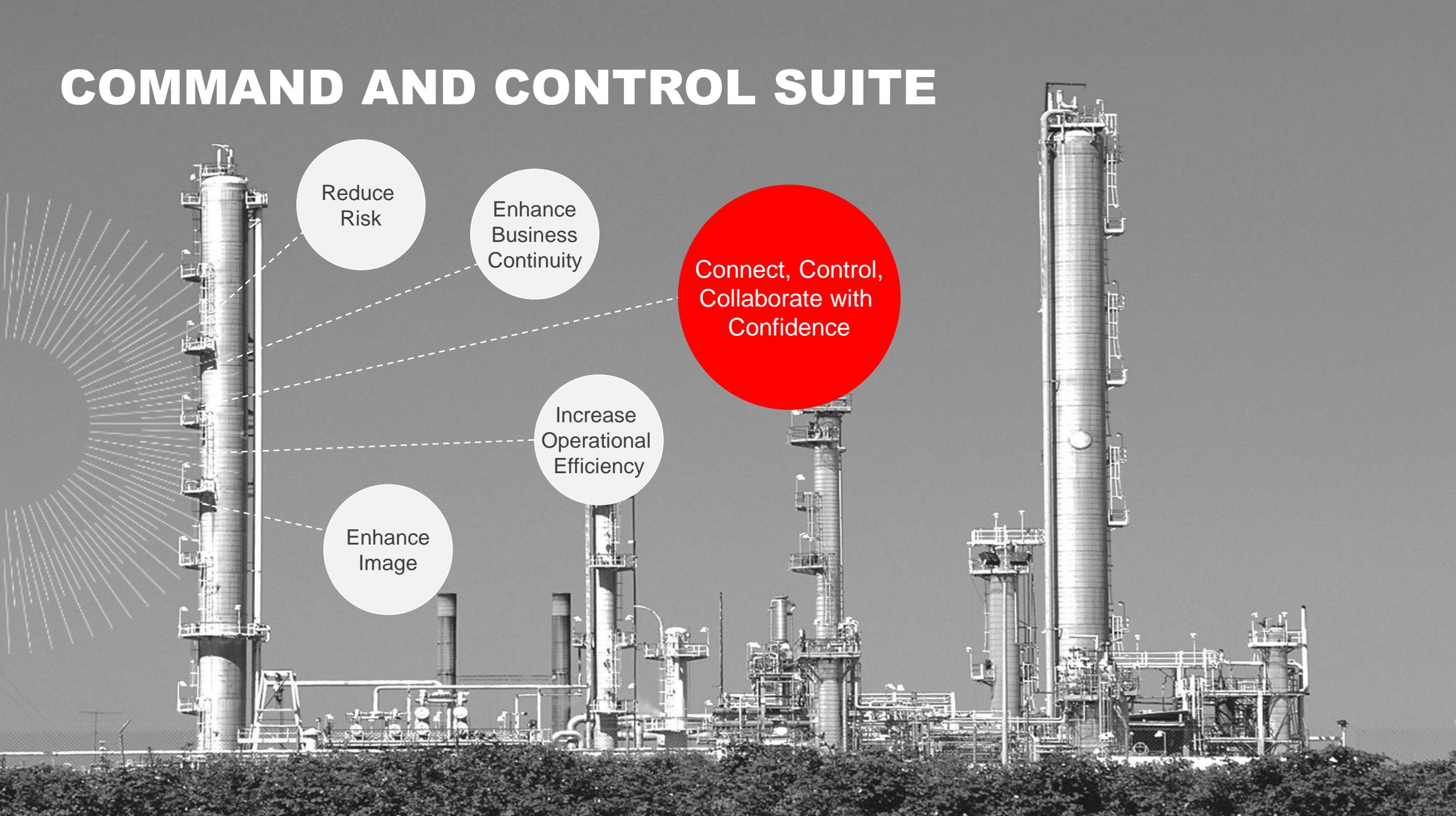
Reduce Risk

Enhance Business Continuity

Connect, Control, Collaborate with Confidence

Increase Operational Efficiency

Enhance Image



**THANK
YOU**

Honeywell