# REMOTE OPERATIONS CENTERS

#### Honeywell

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#### The Need for Remote Collaboration, Optimization and Operation

Today, industrial organizations require new thinking to operate effectively in an increasingly complex and distributed environment. They must find ways to integrate multiple processes with multiple levels of information to achieve a connected facility.



## **INTRODUCTION.**

In industries such as oil & gas and mining & minerals, multiple production facilities are often geographically spread out over vast distances. Renewable energy also depends upon highly distributed resources found in remote locations. To coordinate operations, it is necessary to ensure the availability of real-time information across multiple sites.

- Connect the enterprise and production levels
- Enhance operational data management
- Make operational data available to the enterprise
- Turn data into meaningful insights



## DEMAND FOR INCREASED DIGITIZATION.

In the current business climate, operating companies must adhere to strict safety and security standards and environmental regulations while optimizing production amid fierce global competition. Digital technology and collaborative strategies can optimize performance, enable remote monitoring and preventive analysis to improve efficiency, increase safety, and enhance cybersecurity.

- Integrate operational and information technologies —
- Analyze real-time data to drive smarter decisions \_
- Implement solutions to improve asset reliability \_\_\_\_
- Reduce operational and maintenance costs \_\_\_\_
- Achieve higher Return on Investment (ROI) \_\_\_\_
- Mitigate cyber risks —

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### TRANSFORM YOUR INDUSTRIAL ORGANIZATION.

The implementation of a remote collaboration, optimization and operations strategy can transform your industrial business. For example, it may involve the creation of an operations hub where experts from various disciplines can access information, troubleshoot and optimize production facilities all from a single site or linked locations. With the support of on-site staff, these experts can also implement control system and software upgrades and perform remote asset maintenance.

- Boost business and operational performance
- Improve alertness and identify potential danger
- Improve the health and well-being of employees
- Minimize distractions and increase safety
- Manage and mitigate abnormal situations



## ADVANCE TO REMOTE OPERATIONS.

The primary function of a Remote Operations Center is to safely and effectively control and/ or support an industrial operation from a remote location. They are purpose-built facilities where experts can operate and manage industrial sites from a distant, convenient center to enhance operator performance, reduce errors and increase efficiency, and improve business agility and response time—thereby improving business performance.

- Monitor and manage remote facilities such as wind farms, oil & gas installations, pipelines, mines, etc.
- Leverage human strengths to enhance operator performance
- Consolidate operations where your experts are
- Utilize advanced analytics and digital twins to analyze issues and provide guidance to site-based teams
- Reduce the number of site visits and limit onsite personnel



#### HONEYWELL'S COMPREHENSIVE APPROACH.

As a leading global automation supplier, Honeywell offers a remote collaboration, optimization and operations solution delivering superior business results by utilizing gamechanging technology, procedures and empowered people. This solution helps eliminate the time, distance and organizational constraints that plague traditional operational approaches.

- Relies on a long-term program approach
- Aligns with the customer's business objectives
- Establishes an integrated technology environment
- Focuses on people and process
- Employs operator-centric and human factors designs



## SOLUTIONS TO DRIVE PERFORMANCE.

When it comes to implementing a remote operations capability, Honeywell's Experion® solutions enable operators to easily monitor and control production at geographically dispersed facilities. Experion's robust HMI provides a detailed situational view to detect and correct incipient process upsets before they occur, and its Distributed System Architecture (DSA) allows multiple systems to operate as one within a single site, region or global enterprise.

- Experion PKS Orion
- Experion Orion Console
- Experion SCADA (on-site) or Experion
  Elevate (hosted by Honeywell)
- ControlEdge RTUs and PLCs



- Automated Procedures
- Virtualization
- Experion PKS IT Hive
- Backup Control Center
- Collaboration Station

#### **TECHNOLOGY FOR GREATER INTELLIGENCE.**

Honeywell Forge is a key enabler of remote operations, providing real-time insights, visual analytics and actionable recommendations for intelligent operations and profitability. Enterprise data and performance management solutions integrate insights across various asset models with process models concurrently to provide a holistic view of the operational situation at any given moment.

- Asset Performance Management
- Process Advisor
- Inspection Rounds
- Control Performance Analytics
- Alarm Management
- Operations Management
- Intelligent Wearables
- Digital Twins



#### **PLATFORM FOR SEAMLESS INTEGRATION.**

Honeywell offers the industry's broadest portfolio of integrated products, applications and services covering the entire scope of requirements for implementing a remote collaboration, optimization and operations platform. The essential requirements for integrated intelligent operations begin with components which are already in common practice, such as integrated control and safety systems.











## **STRATEGIES TO MITIGATE RISK.**

Reduced staffing on-site is a growing requirement for many industrial organizations. Nowhere is this more prevalent than in the control center building. To meet this challenge, Honeywell provides solutions to securely support the control center from any remote location connected to the corporate intranet helping to maintain business continuity.

- Experion Augmented Remote Operations (ARO) ensures essential remote connectivity via the corporate business network
- Managed Security Services (MSS) enables service delivery, troubleshooting or remote support from Honeywell and/or remote customer employees
- Remote monitoring and control helps to maintain secure, uninterrupted operations under reduced staffing conditions





## CONSULTING TO LEAP FORWARD.

You're not alone in moving to remote operations. Honeywell is your partner—providing consulting services to support this critical leap forward. The services can identify the return on investment from remote operations technology, improve your operator performance and situational awareness, and help you design a remote operations center for smart decision making.

- Remote Operations Readiness Review
- Operator Role Complexity Analysis
- Remote Operations Center Design
- Remote Operations HMI Design



#### **LESSONS FROM MAJOR END-USERS.**

Around the world, major industrial end-users are transforming their business results through the use of Honeywell's remote operations technology and centralized collaboration centers. This solution helps manage critical assets and improve the safety of employees with less downtime and more production availability.

- A leading crude oil and natural gas producer centralized operations at 18 of its 26 offshore platforms, with all operating and production procedures fully automated and synchronized for greater production flexibility and increased efficiency
- A major manufacturer of primary and fabricated aluminum deployed a standardized process control infrastructure across multiple refineries, helping to reduce raw material consumption, lower environmental emissions and achieve a sustained competitive advantage
- One of the world's largest copper producers implemented a remote operations center to connect operating sites to essential facilities, creating a collaborative environment that drives production improvement
- A key global energy company employed remote well monitoring technology, which facilitated better decision-making so experts can take the right action at the right time to solve problems and improve well performance





As a global automation leader, Honeywell can help you plan your technology roadmap and stay current with the latest solutions. Our turnkey project capabilities deliver the successful outcomes you need.

To learn more about Honeywell Remote Operations Solutions, visit <u>www.honeywellprocess.com</u> or contact the Honeywell account manager in your country/region.

