



STREAMLINE WORKFLOWS, IMPROVE PRODUCTIVITY.

Honeywell Forge Performance+ for Distribution Centers

Workforce Intelligence

November 30, 2023

ACCELERATE EXECUTION, ENHANCE OPERATIONS.

Workforce Intelligence is a connected workforce solution design for **maintenance, operations, and distribution center teams** that leverages data from your existing systems and devices to deliver **real-time insights, streamlined workflows, and boosts in visibility, quality, and productivity.**



OPERATIONAL CHALLENGES



INCREASING COMPLEXITY

Manual, legacy process consistently fall short of growing customer demands



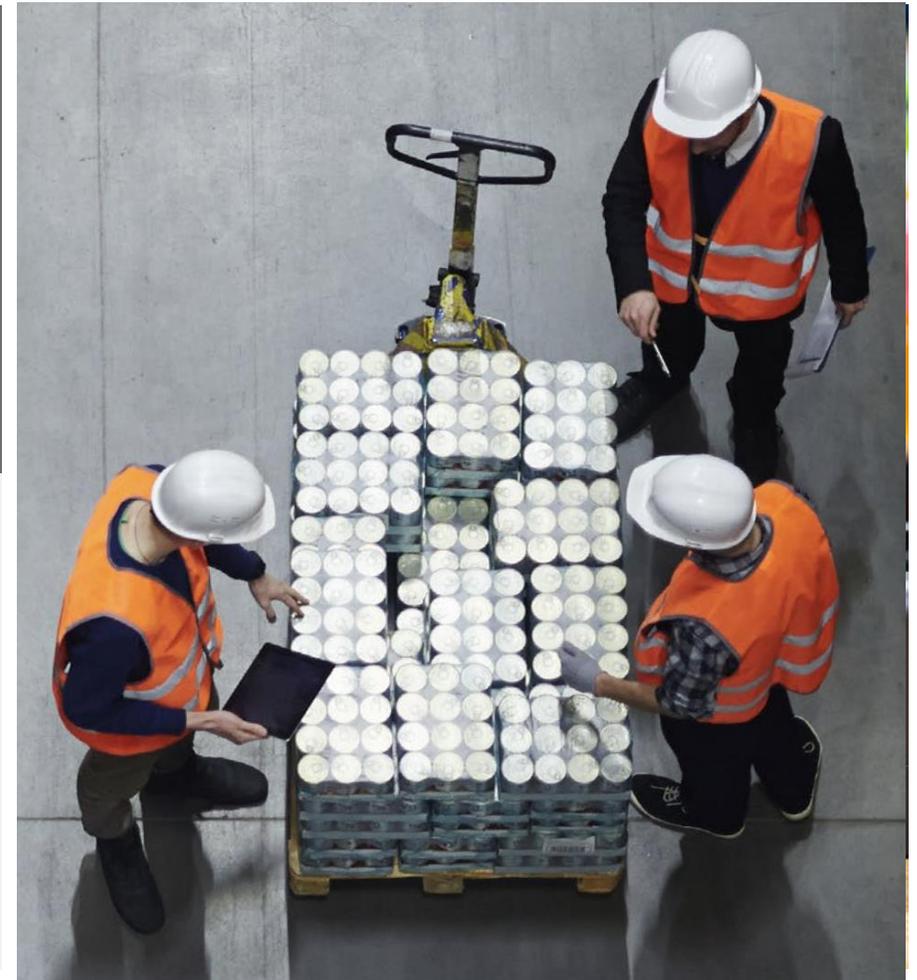
LIMITED VISIBILITY

Siloed systems, data, and communication make it hard to operationalize insights



DIGITAL NATIVES

Attracting and retaining a tech-savvy workforce demands intuitive technologies and growth opportunities



¹Source: Micro-Fulfillment Strategies for the Future of Omnichannel Retail | Emerging Technologies for MFC Automation

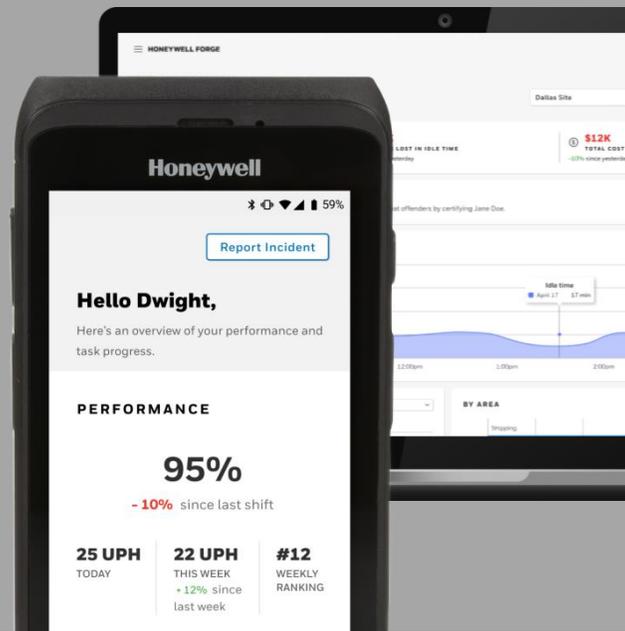
SOLUTION

WORKFORCE INTELLIGENCE

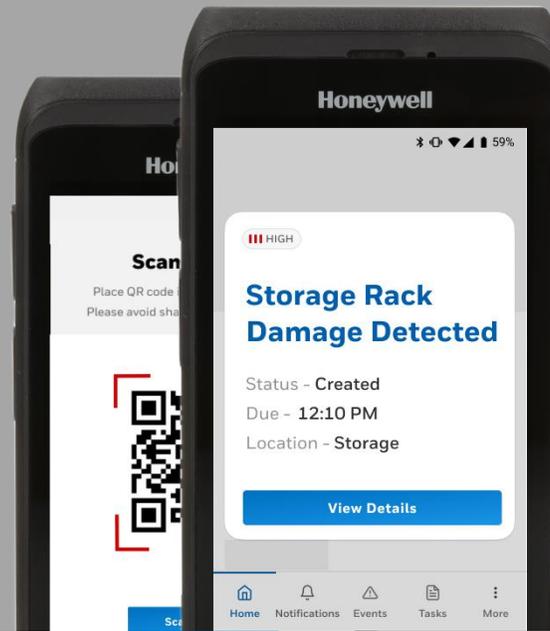
**ACCELERATE
EXECUTION,
ENHANCE
OPERATIONS.**

Workforce Intelligence leverages data from your existing system to deliver insights, help you react to the unplanned, and execute workflows with ease.

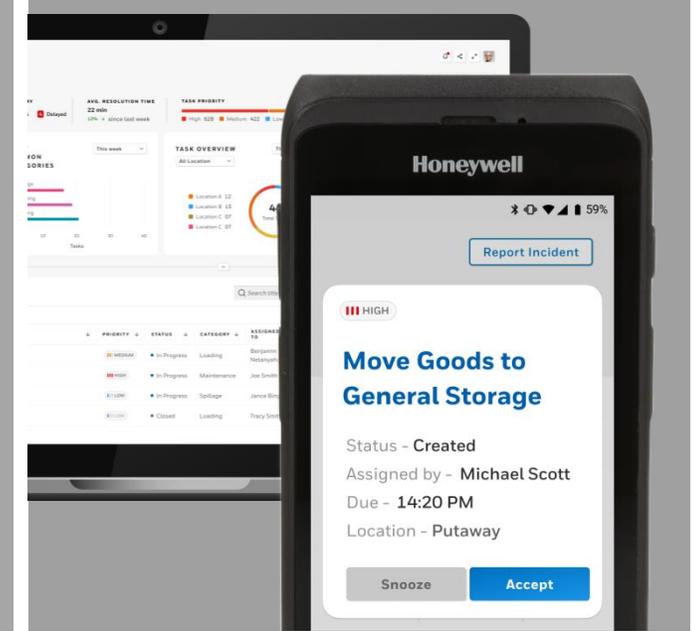
WORKFORCE INSIGHTS



INCIDENT RESPONSE



SMART TASKS



SOLUTION OVERVIEW

WHAT?

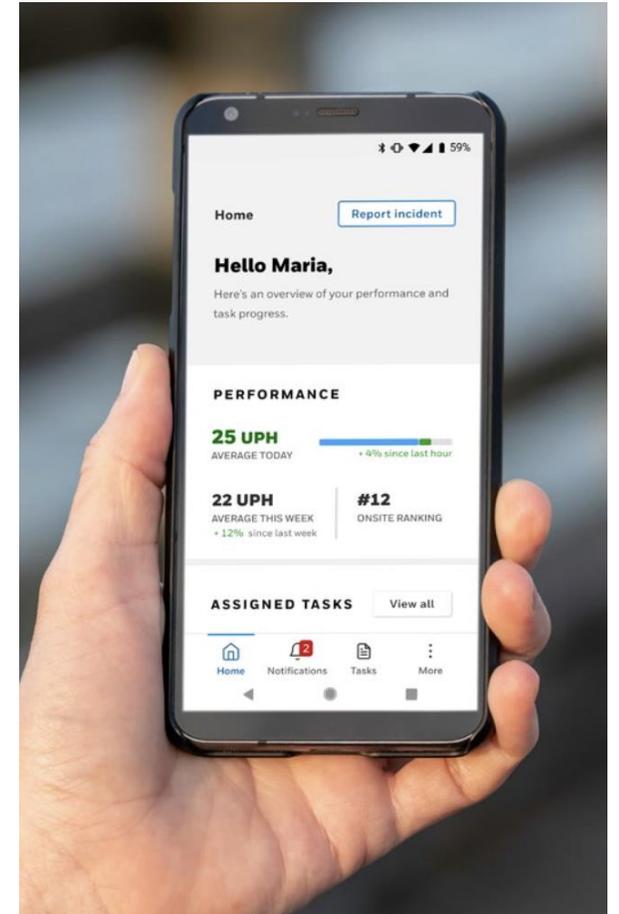
Workforce Intelligence is a connected workforce solution designed to streamline workflows and improve productivity for warehouse, operations, and maintenance teams.

WHO?

- **WH&DC:** Operators, Supervisors, and Associates within Floor Operations, Loading Dock, Value-Added Services, and Quality Control.
- **Maintenance:** Technicians, Supervisors, Engineers, and Manager for facility and equipment inspections, work instructions, and service requests.

WHY?

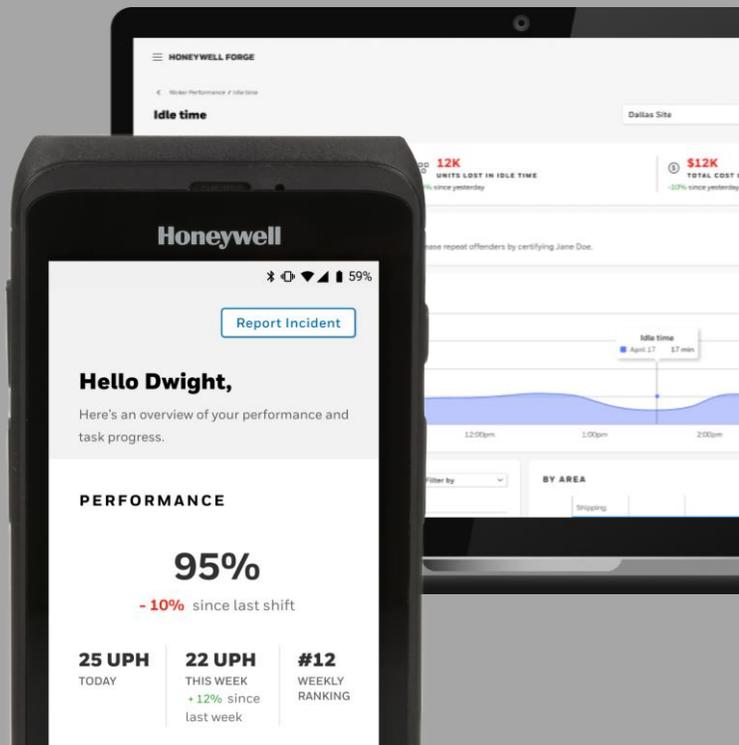
- **Boost Team Efficiency:** Respond and position team members where they are needed most.
- **Streamline Workflows:** Prioritize and assign all device and system-generated tasks.
- **Improve Line-of-Site:** Give field team members operational visibility on-the-go.



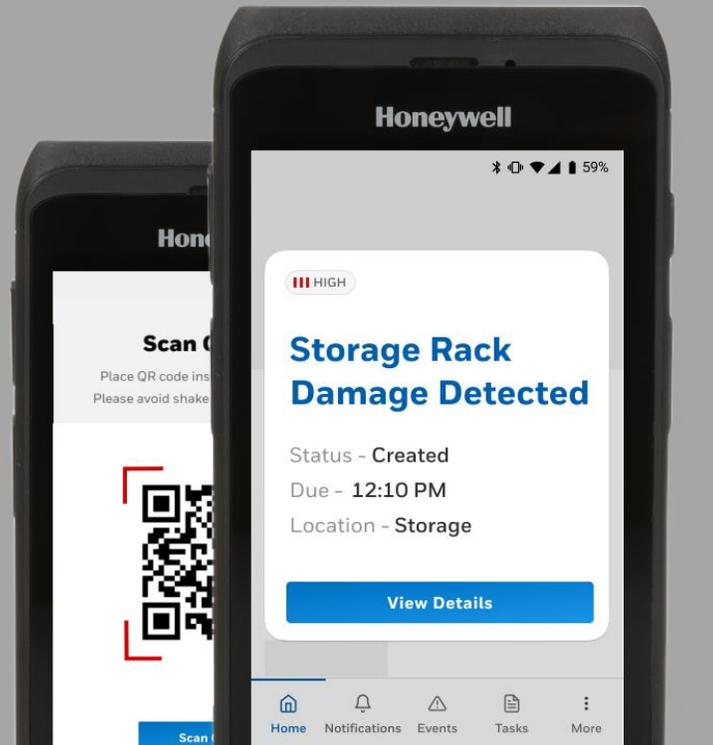
FEATURES

WORKFORCE INTELLIGENCE

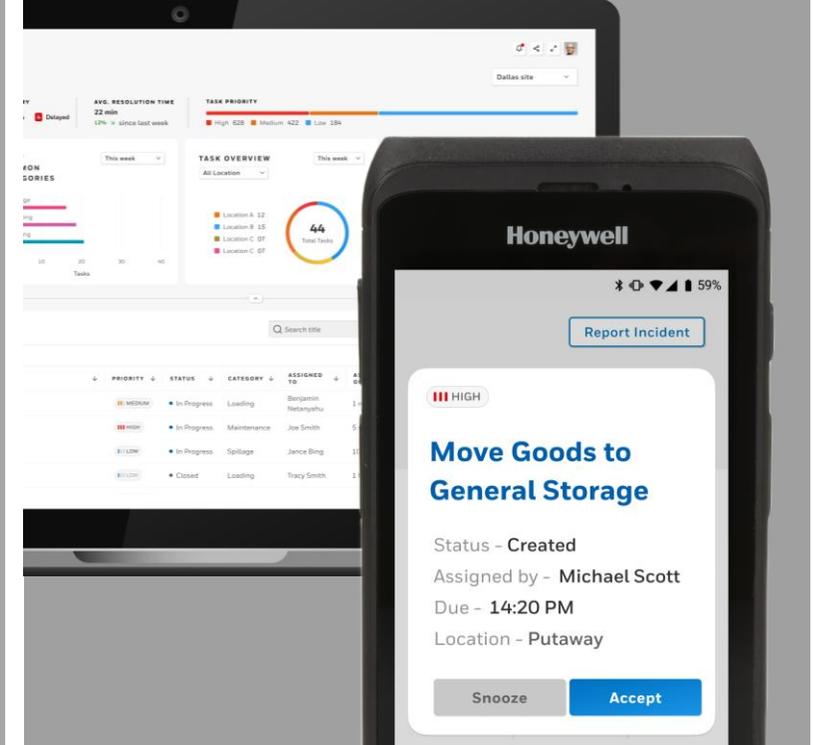
WORKFORCE INSIGHTS



INCIDENT RESPONSE



SMART TASKS

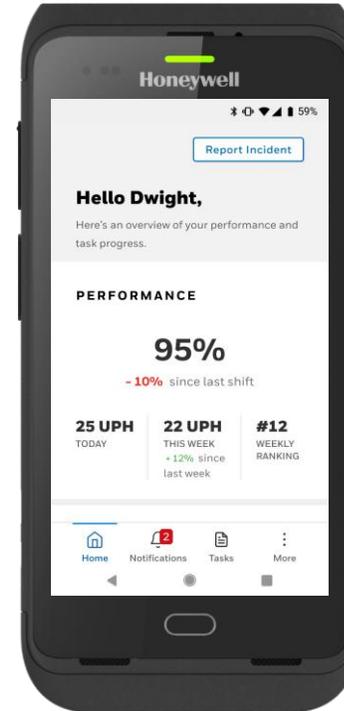
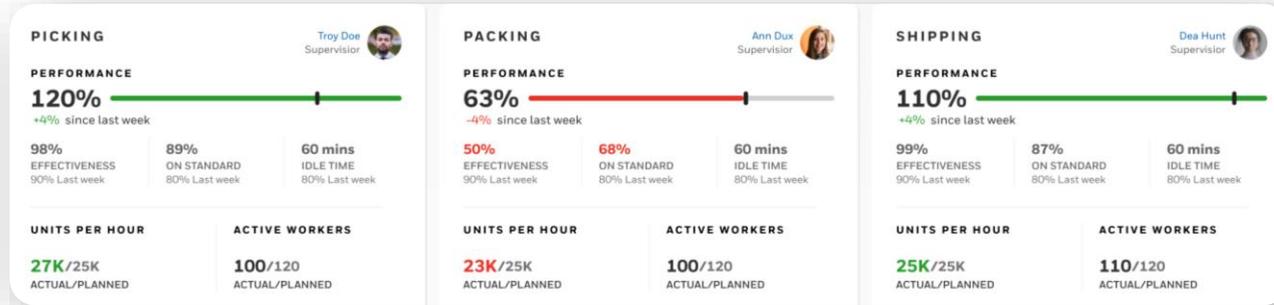


WORKFORCE INSIGHTS

MONITOR PERFORMANCE ACROSS SITES, INDIVISUALS, AND SYSTEMS ON WEB AND MOBILE

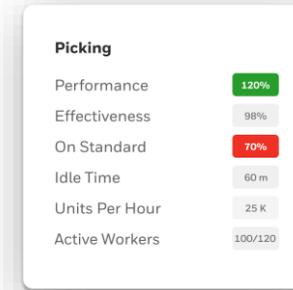
WORKFORCE PERFORMANCE

View performance and how it measures vs the plan for sites, areas, and individuals..

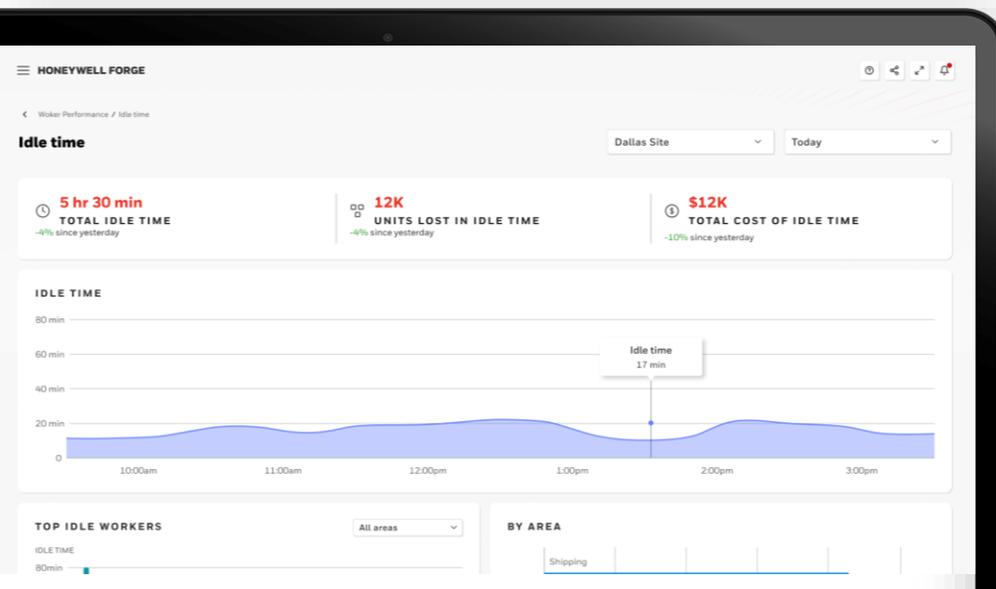


INSIGHTS ON-THE-GO

Review performance from your mobile device to quickly identify needs and react.



Trigger insights and alerts to your mobile device based on the parameters you define.

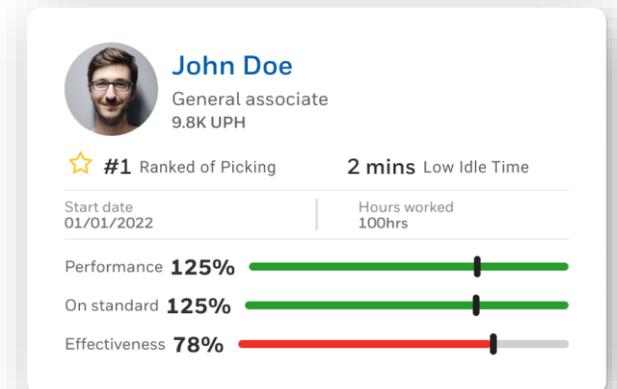


IDLE TIME DRILLDOWN

Monitor idle time throughout the shift and over time to gauge the right size of your team

WORKER PROFILE

Track individual productivity, match preferences to work, and identify training needs.



INCIDENT RESPONSE

RESPOND QUICKLY AND EFFICIENTLY TO INCIDENTS AND UNPLANNED EVENTS

REPORT THE UNPLANNED

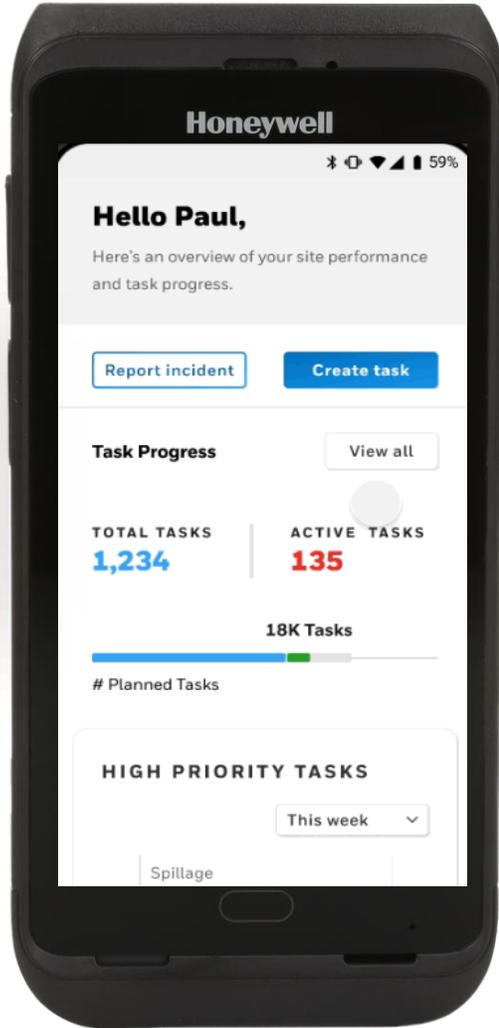
Empower workers and OT/IT systems to report incidents from the floor with pre-defined templates.

HIGH SAFETY INCIDENT

Jam Detected at Conveyor #14

Status – Created
Reported by – MHE System
Report Time – 08:34

[View Details](#)



VIEW ACTIVE ISSUES

Understand what's going on at your site in Real-time.

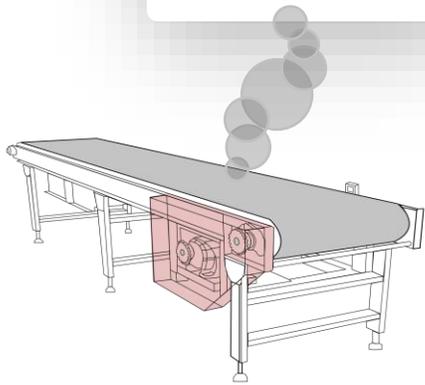
Get actionable insights from the trends which occur over time and have a measurable impact on your Operations.

EVENT NAME	TYPE	PRIORITY	STATUS	SAFETY ISSUE	IMPACTED AREA/ OPERATION	REPORT TIME	REPORT BY
Supervisor Needed at Pick Mod #04	Incident	High	Active	Yes	Picking Pick Mod #04	2 min ago	Dwight Schruete
Replace Bearings at Conveyor #14	Incident	High	Active	No	Picking Conveyor #402	30 min ago	Stanley Hudson
Oil spillage at Shipping hallway #23	Incident	Medium	Active	No	Shipping Hallway #23	1 hr ago	Dwight Schruete
Fork truck #141 battery leakage	Incident	High	Active	Yes	Sorting Fork #143	2 hr ago	Andy Bernard
Inventory Count Mismatch	Fault	Medium	Active	No	Picking Conveyor 2405	01:48 PM 23 April 2022	Pam Halpert
Worker shortage	Anomaly	Low	Active	No	Packing Conveyor 2405	01:00 PM 29 April 2022	Pam Halpert
Fork truck battery leakage	Incident	Medium	Closed	No	Picking	11:30 AM 19 April 2022	Creed Bratton
Oil spill in machine floor	Incident	Medium	Closed	Yes	Shipping	10:30 AM 19 April 2022	Phyllis Truck

EVENT TITLE / DESCRIPTION	REPORTED DATE	REPORTED BY	LOCATION	EVENT STATUS
Supervisor Needed at Shipping Lane 8	8:30 a.m. 19 March 2021	Dwight Schruete	Shipping Lane 8	Closed
Supervisor Needed at Pick Mod #07	3:30 a.m. 3 March 2021	Pam Halpert	Pick Mod #07	Closed

ASSIGN TASKS & RESOLVE

Reallocate your workforce to stay productive and address the most critical roadblocks preventing you from having your most productive shift ever

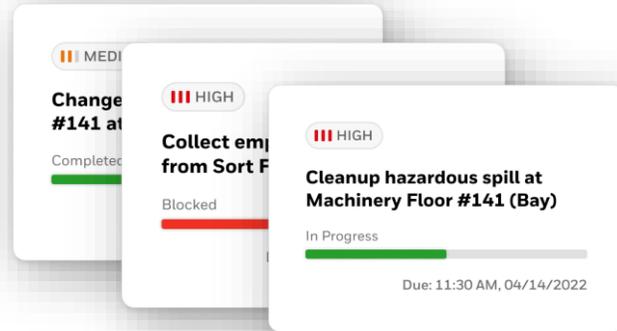


SMART TASKS

DIGITIZE WORK AND ASSIGN THE RIGHT WORKER THE RIGHT JOB AT THE RIGHT TIME

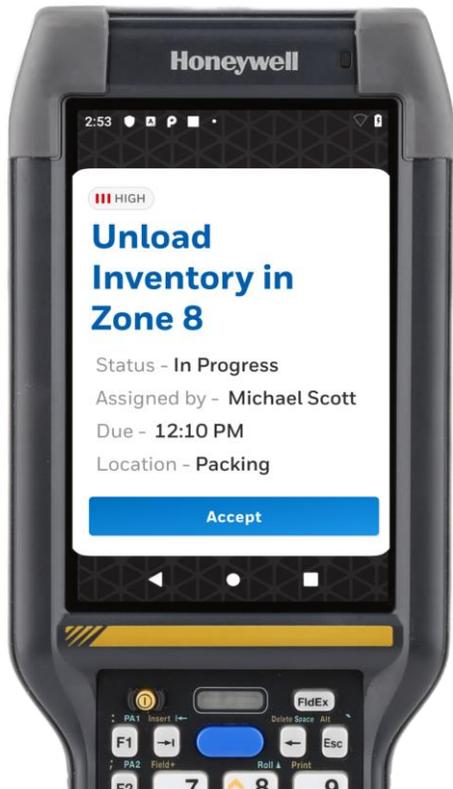
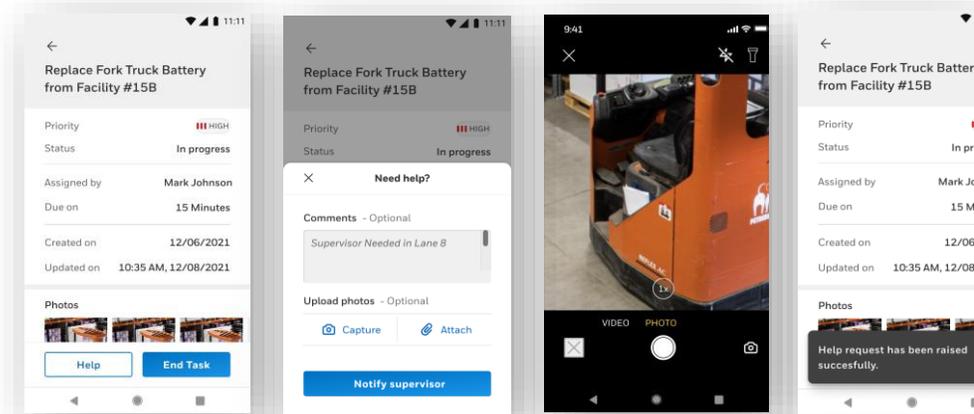
TASK TEMPLATES

Create templates for your most common standard and off standard activities.



IN-TASK HELP

Notify supervisors to communicate any blockers or help requests.



MOBILE TASK EXECUTION

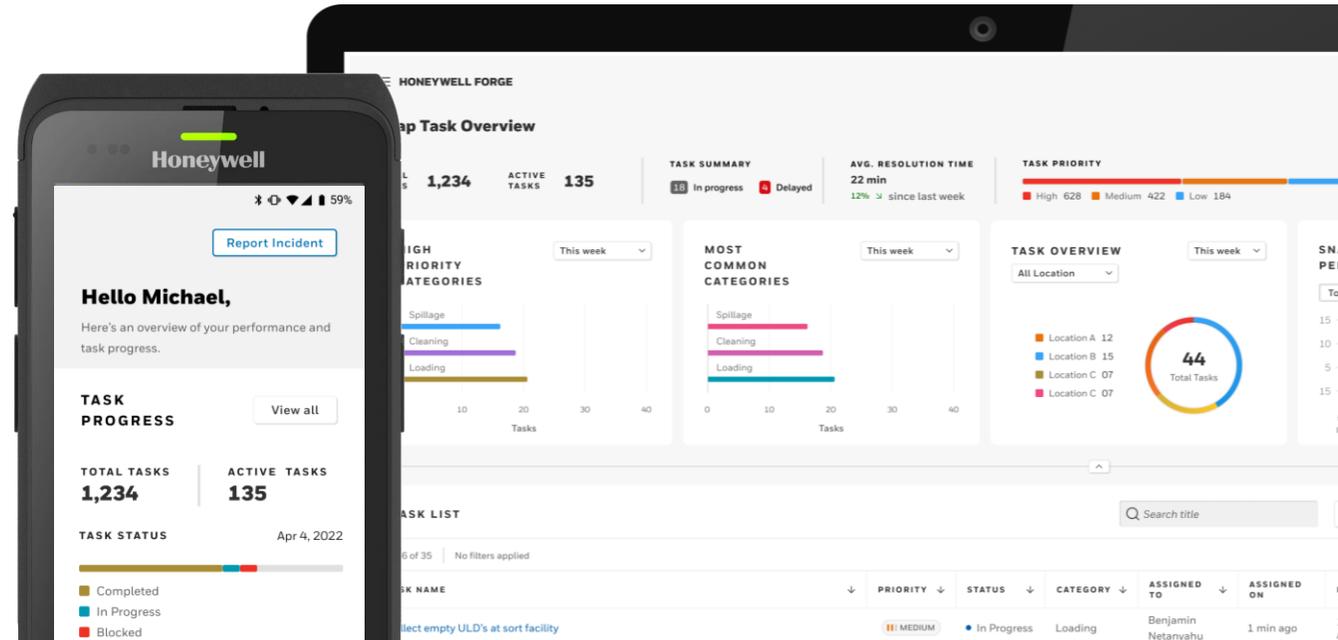
Quickly assign and execute tasks via desktop or mobile device.



Supports any device with Android OS 8 and above.

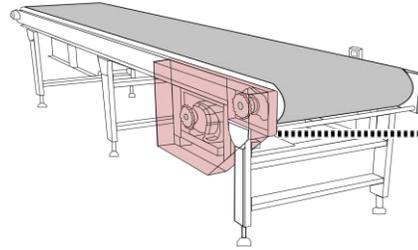
TASK ANALYTICS

Track execution, analyze trends, and identify areas for improvement.



ENTERPRISE APIs

CONSUME, CONTROL, AND CONNECT ENTERPRISE FUNCTIONALITY WITH YOUR EXISTING ENTERPRISE SYSTEMS



III HIGH SAFETY INCIDENT

Jam Detected at Conveyor #14

Status – Created
Reported by – MHE System
Report Time – 08:34

[View Details](#)

AUTOMATED EVENT REPORTING

Drive awareness, trend & impact analysis, and remediation directly from connected Operational Technologies



III HIGH

Replace Media on Printer S28

Status – Assigned
Assigned by – Printer
Due – 13:28
Location – Shipping South Door 28

[SNOOZE](#) [ACCEPT](#)

AUTOMATED TASK MANAGEMENT

Put your operational data to work by automatically creating detailed tasks using contextual information from connected assets, and always ensure you have the right person for the right job at the right time



Late Start Detected

Employee(s) – Gibbs, Frank
Flores, Julia

Department – Packing South

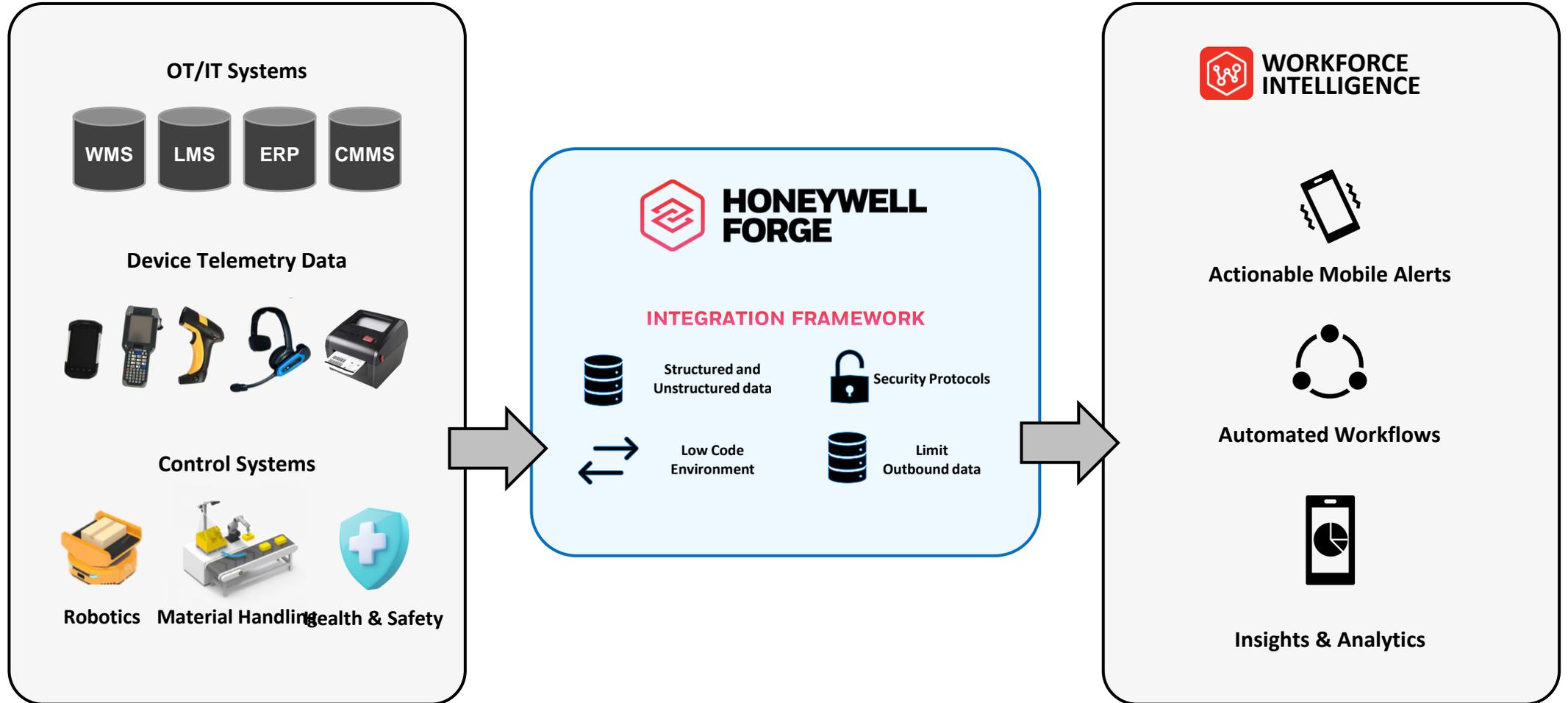
[View Details](#)

AUTOMATED WORKFORCE INSIGHTS

Leverage data from other operational systems to generate meaningful actionable insights from raw performance, time & attendance, order fulfillment, training, etc. data

ENTERPRISE INTEGRATION & DEPLOYMENT

EASILY CONNECT YOUR EXISTING TECHNOLOGY ECOSYSTEM TO INSTANTLY DRIVE CLOSED-LOOP OUTCOMES



STREAMLINING OPERATIONS

OPERATIONAL VALUE

PAIN-POINTS

- Paper-Based Forms, Tasks, Requests, etc.
- Constantly training new, younger workforce.
- Not able to make decisions using my data.



BENEFITS

- Digitize paper-based processes
- Modernize emulator and legacy warehouse and labor management systems
- Leverage device data to enhance your workforce management

VALUE

- Digitize activity for increased visibility
- Streamline operational workflows and communication
- Provide a modern experience your workers can be proud of.
- Enable data-driven decision making

USE CASES

WORKFLOWS

- Routine Inspections
- Daily Checklists
- Training & Coaching
- Inventory Management
- Time & Attendance
- Value-Added Services
- Incident Reporting
- Service Requests
- Equipment Inspections
- In-Direct Activity
- Unplanned Downtime/Delays

INSIGHTS

- Site, Area, and Individual Performance
- Task & Incident Trends
- Top/Bottom Performers
- Idle Time Detection
- Late Start/Early End
- KPI/Performance Deviations
- Training Opportunities
- Worker Recommendations
- Resource Load Balancing

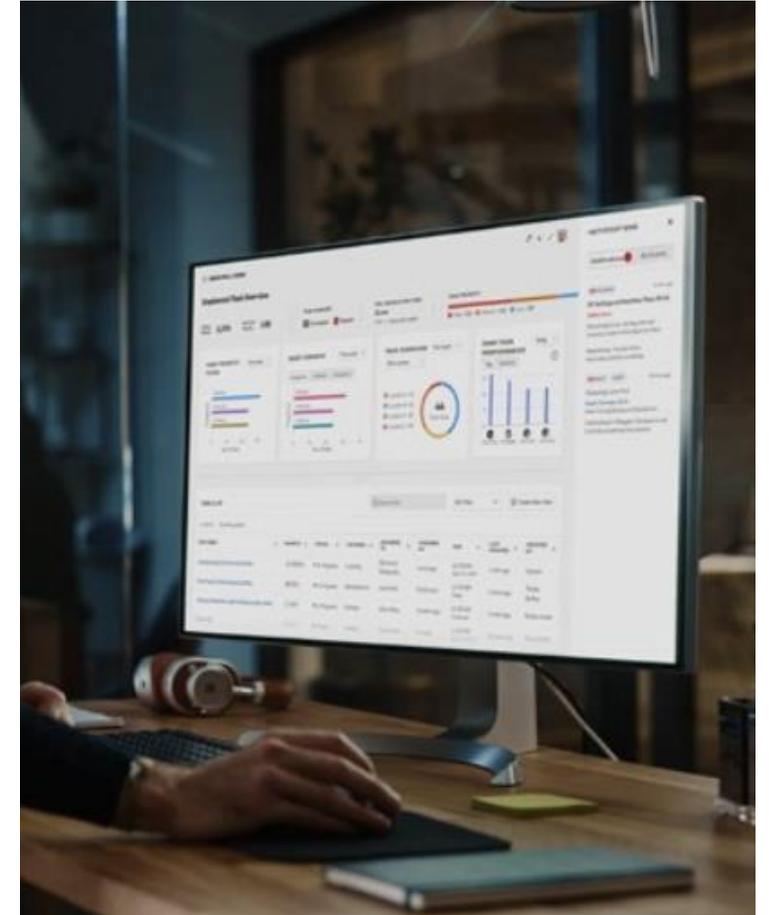
PRODUCT DIFFERENTIATORS

KEY OUTCOMES

- Streamline operations, reducing manual tasks and enhancing overall efficiency
- Modernize the employee user experience
- Proactively prevent downtime and disruptions with configurable alerts
- Integrate multiple sites, systems, and departments into a unified enterprise view

COMPETITIVE DISTINCTIONS

- Flexible task and incidents templates to meet your specific business needs
- Seamless integration that doesn't require an overhaul of existing systems
- Incorporate employee activity and device data into your workforce management strategy



EMPOWER YOUR TEAMS ELEVATE OPERATIONS



Boost Team Efficiency

Respond to real-time information and position team members where they are most needed most.



Streamline Workflows

Prioritize and assign all device and system-generated tasks across sites, systems, and individuals.



Improve Line-of-Site

Give field team member real-time visibility into the activities across all your operations.

WALKTHROUGH

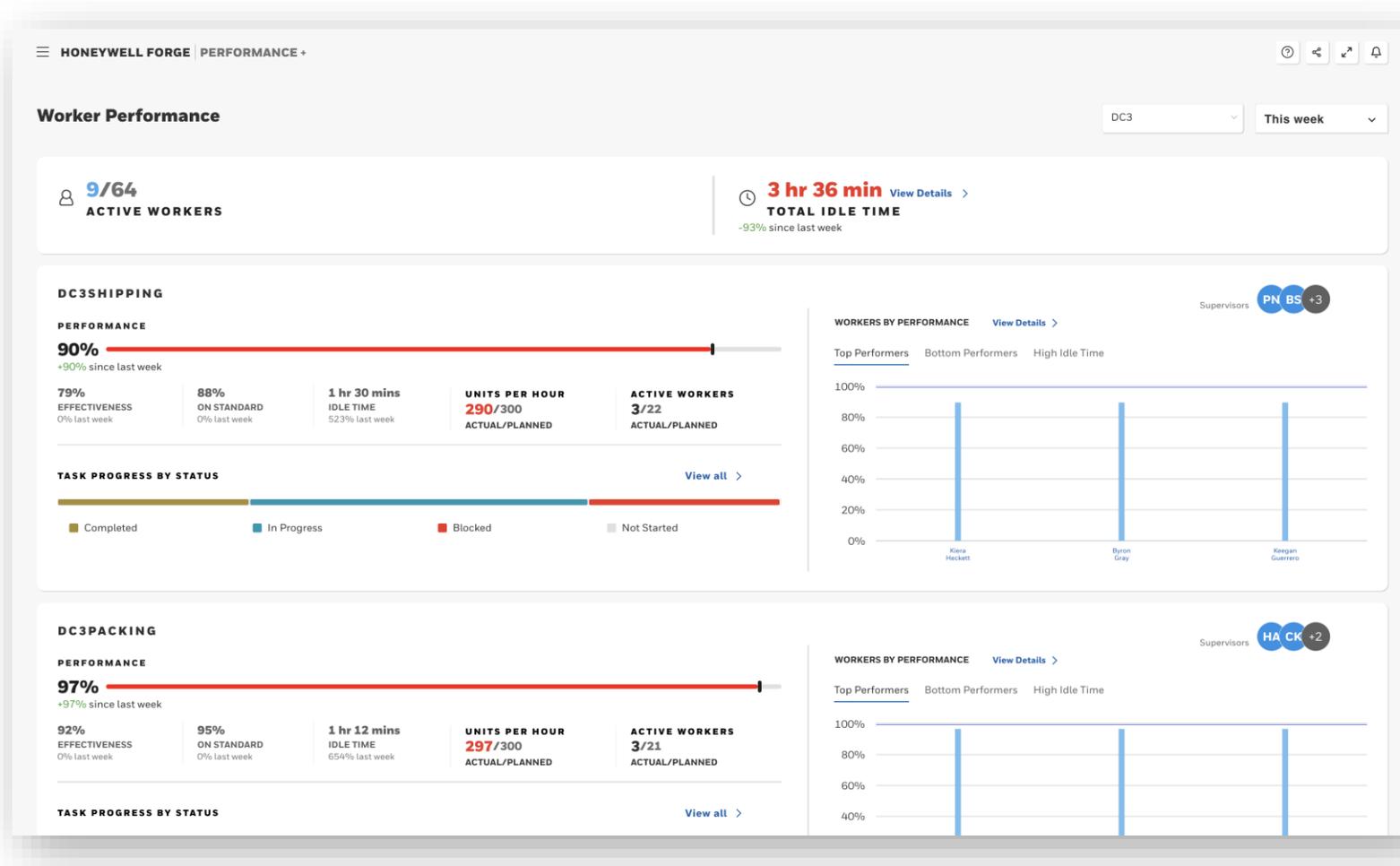
WORKER PERFORMANCE

MONITOR PERFORMANCE ACROSS SITES, AREAS, SYSTEMS, AND INDIVIDUALS

SUPERVISOR



VIEW AREA PERFORMANCE



IDLE TIME DRILLDOWN

TOP & BOTTOM PERFORMERS

**Dashboard can be used standalone using Smart Tasks or integrated with host systems (WMS, LMS, ERP, CMMS)

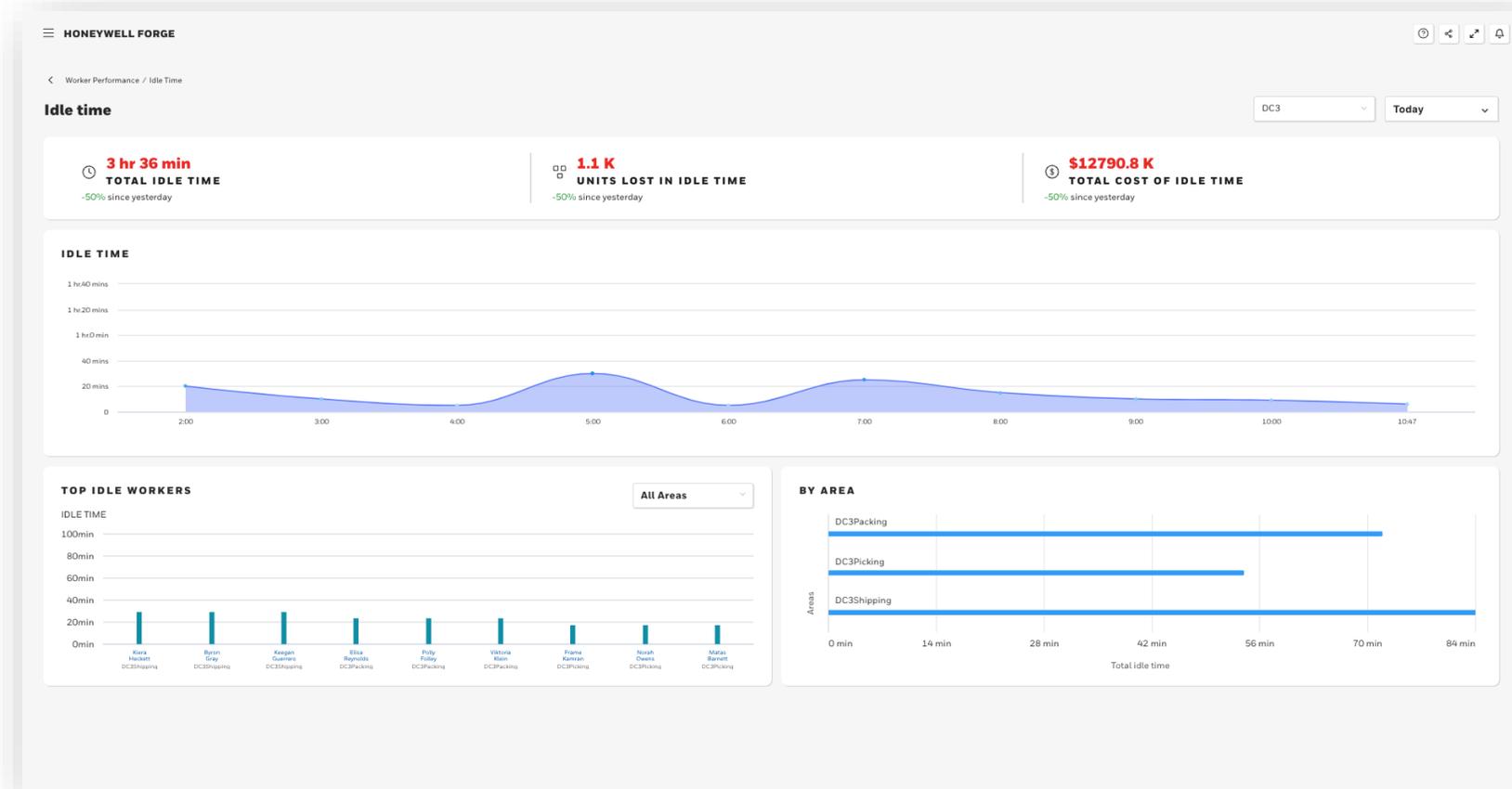
IDLE TIME DRILLDOWN

VIEW DETAILED METRICS AND QUANTIFY YOUR IDLE TIME

SUPERVISOR



VIEW IDLE TIME METRICS



TIME SERIES OF IDLE TIME

IDLE TIME BY INDIVIDUALS

IDLE TIME BY AREA

WORKER OVERVIEW

DETAILED LIST OF WORKERS IN THE FIELD AND CURRENT PERFORMANCE

SUPERVISOR



ACTIVE WORKERS ON SHIFT

WORKER PROFILE DRILLDOWN

FILTERABLE & CONFIGURABLE

PERFORMANCE METRICS BY INDIVIDUAL

HONEYWELL FORGE | PERFORMANCE +

Worker Overview DC3 This month

WORKERS LIST

66 workers | No filters applied

WORKER	STATUS	AREA	USER TIME	IDLE TIME	PERFORMANCE	EFFECTIVENESS	ON STANDARD	UPH
KF Kamran, Frame	Inactive	DC3Picking	<div style="width: 100%;"></div>	18 min	104%	104%	100%	102
ON Owens, Norah	Inactive	DC3Picking	<div style="width: 100%;"></div>	18 min	104%	104%	100%	102
BM Barnett, Matas	Inactive	DC3Picking	<div style="width: 100%;"></div>	18 min	104%	104%	100%	102
RE Reynolds, Elisa	Inactive	DC3Packing	<div style="width: 100%;"></div>	24 min	97%	92%	95%	99
FP Folley, Polly	Inactive	DC3Packing	<div style="width: 100%;"></div>	24 min	97%	92%	95%	99
KV Klein, Viktoria	Inactive	DC3Packing	<div style="width: 100%;"></div>	24 min	97%	92%	95%	99
HK Heckett, Kiera	Inactive	DC3Shipping	<div style="width: 100%;"></div>	30 min	90%	79%	88%	97
GB Gray, Byron	Inactive	DC3Shipping	<div style="width: 100%;"></div>	30 min	90%	79%	88%	97
GK Guerrero, Keegan	Inactive	DC3Shipping	<div style="width: 100%;"></div>	30 min	90%	79%	88%	97
BL Bean, Lizzie	Inactive	DC3Picking	<div style="width: 0%;"></div>	0 min	No Data	No Data	No Data	No Data
BF Burks, Fatimah	Inactive	DC3Picking	<div style="width: 0%;"></div>	0 min	No Data	No Data	No Data	No Data
RK Reed, Kiera	Inactive	DC3Picking	<div style="width: 0%;"></div>	0 min	No Data	No Data	No Data	No Data
OP Patel, Otto	Inactive	DC3Picking	<div style="width: 0%;"></div>	0 min	No Data	No Data	No Data	No Data
PF Pham, Faiz	Inactive	DC3Packing	<div style="width: 0%;"></div>	0 min	No Data	No Data	No Data	No Data
IC Ibarra, Candice	Inactive	DC3Packing	<div style="width: 0%;"></div>	0 min	No Data	No Data	No Data	No Data
MK Malone, Kiri	Inactive	DC3Packing	<div style="width: 0%;"></div>	0 min	No Data	No Data	No Data	No Data
WM Wang, Maeve	Inactive	DC3Packing	<div style="width: 0%;"></div>	0 min	No Data	No Data	No Data	No Data

WORKER PROFILE DRILLDOWN

CONSOLIDATED VIEW OF INDIVIDUAL PERFORMANCE AND ACTIVITY

SUPERVISOR

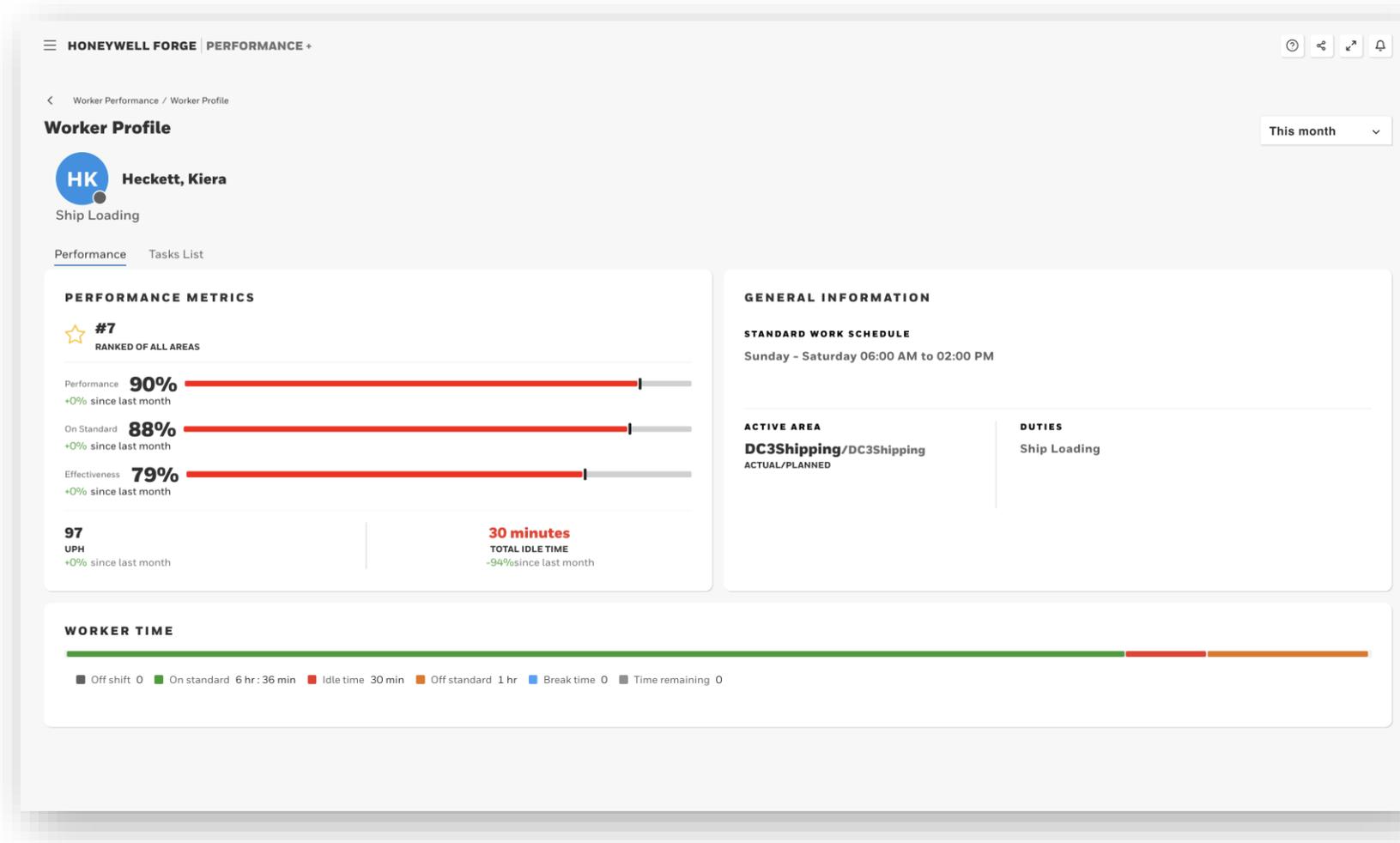


INDIVIDUAL PERFORMANCE METRICS

INDIVIDUAL DETAILS & SKILLS

BREAKDOWN OF INDIVIDUAL TIME

INDIVIDUAL TASK HISTORY



**Dashboard can be used standalone using Smart Tasks or integrated with host systems (WMS, LMS, ERP, CMMS)

WORKER PROFILE DRILLDOWN

CONSOLIDATED VIEW OF INDIVIDUAL PERFORMANCE AND ACTIVITY

SUPERVISOR



INDIVIDUAL PERFORMANCE METRICS

INDIVIDUAL DETAILS & SKILLS

BREAKDOWN OF INDIVIDUAL TIME

INDIVIDUAL TASK HISTORY

HONEYWELL FORGE | PERFORMANCE

Worker Performance / Worker Profile

Worker Profile This month

HK Heckett, Kiera
Ship Loading

Performance Tasks List

PERFORMANCE METRICS

★ **#7**
RANKED OF ALL AREAS

Performance **90%**
+0% since last month

On Standard **88%**
+0% since last month

Effectiveness **79%**
+0% since last month

97
UPH
+0% since last month

30 minutes
TOTAL IDLE TIME
-94% since last month

WORKER TIME

Off shift 0 On standard 6 hr: 36 min Idle time 30 min Off standard 1 hr Break time 0 Time remaining 0

GENERAL INFORMATION

STANDARD WORK SCHEDULE
Sunday - Saturday 06:00 AM to 02:00 PM

ACTIVE AREA
DC3Shipping/DC3Shipping
ACTUAL/PLANNED

DUTIES
Ship Loading

Worker Profile This year

KF Kamran, Frame
Picking Picking Lead

Performance Tasks List

Task Name	Priority	Status	Category	Assigned On	Due	Last Updated	Created By
Collect Empty ULDs take to Area A	MEDIUM	Completed	Putaway	10:37 AM Sep 26, 2023		10:54 AM Sep 26, 2023	Machoni, Israel
Putaway Inventory	MEDIUM	Created	Putaway Inventory	09:48 AM Sep 26, 2023		09:49 AM Sep 26, 2023	Machoni, Israel
Fix Pump Leak Zone 3C	HIGH	Created	Maintenance Work	03:29 PM Sep 26, 2023		03:29 PM Sep 26, 2023	Beatty, Lawrence
Fix Pump Leak Zone 3C	HIGH	Created	Maintenance Work	02:29 PM Sep 26, 2023		02:29 PM Sep 26, 2023	Beatty, Lawrence
Fix Pump Leak Zone 3C	HIGH	Created	Maintenance Work	01:41 PM Sep 26, 2023		01:41 PM Sep 26, 2023	Beatty, Lawrence
Fix Pump Leak Zone 3C	HIGH	Created	Maintenance Work	12:45 PM Sep 26, 2023		12:41 PM Sep 26, 2023	Beatty, Lawrence
Fix Pump Leak Zone 3C	HIGH	Created	Maintenance Work	11:45 AM Sep 26, 2023		11:41 AM Sep 26, 2023	Beatty, Lawrence
Team Meeting	LOW	Created	Shoe and Fire Removal	11:00 AM Sep 26, 2023		11:00 AM Sep 26, 2023	Beatty, Lawrence
Safety Briefing	MEDIUM	Created	Safety Check	10:42 AM Sep 26, 2023		10:42 AM Sep 26, 2023	
Facility Inspections	MEDIUM	Completed	Area Cleaning	10:57 AM Sep 18, 2023		11:54 AM Sep 18, 2023	Ragunath, Muthu

**Dashboard can be used standalone using Smart Tasks or integrated with host systems (WMS, LMS, ERP, CMMS)

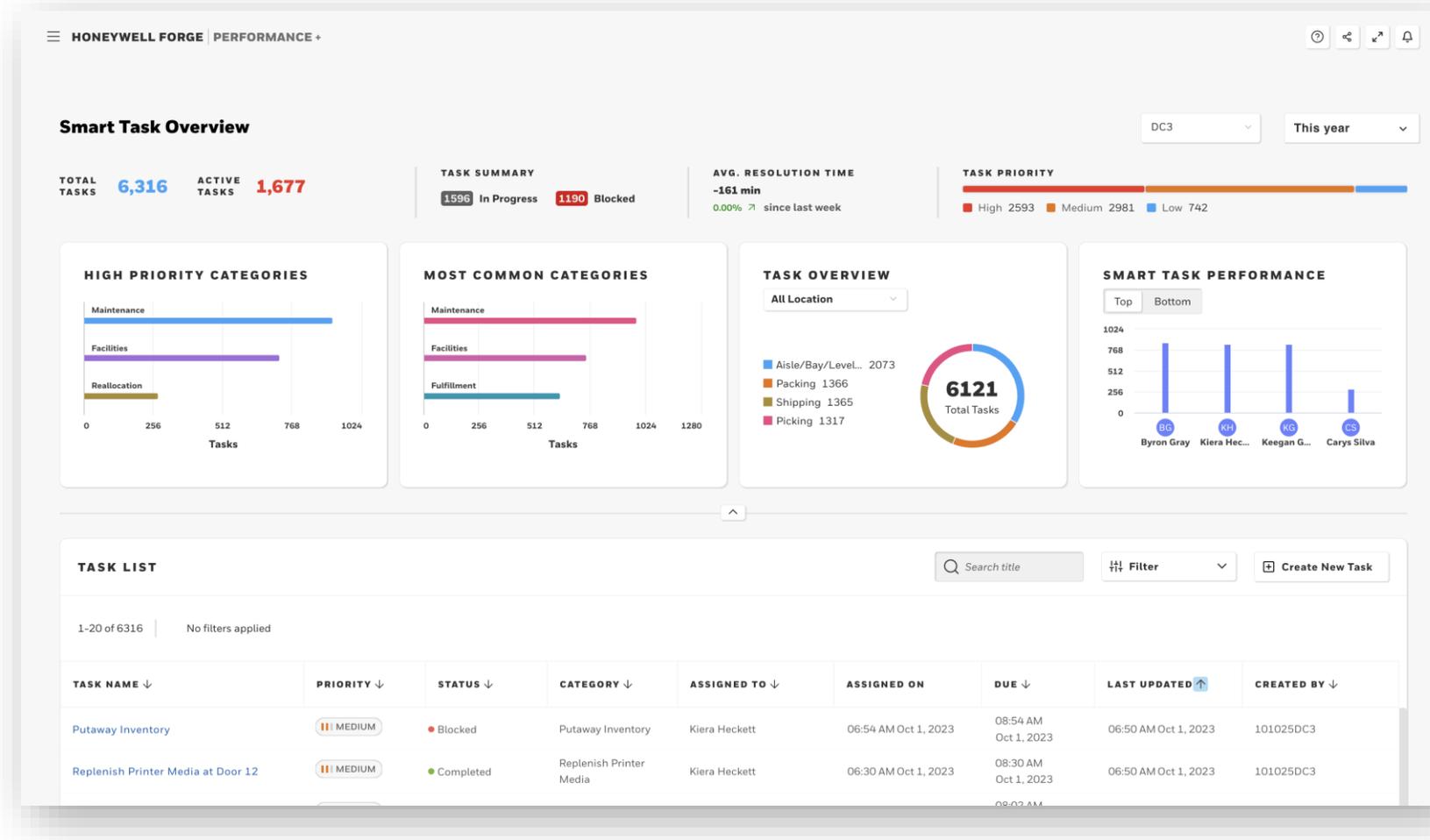
SMART TASK OVERVIEW

ASSIGN THE RIGHT WORKER THE RIGHT JOB AT THE RIGHT TIME

SUPERVISOR



HIGH LEVEL TASK OVERVIEW



WIDGETS FOR TASK RELATED INSIGHTS

TASK HISTORY AND STATUS

CREATE TASKS AND ASSIGN WORK

**Dashboard contains data from Smart Task Management

INCIDENT OVERVIEW

RESPOND QUICKLY AND EFFICIENTLY TO INCIDENTS AND UNPLANNED EVENTS

SUPERVISOR



LIST OF
INCIDENTS AND
UNPLANNED
EVENTS

Incident Overview

TOTAL 62 OPEN 35

INCIDENT PRIORITY: High 32, Medium 18, Low 12

AVG RESOLUTION TIME: 0 min, 0.00% since last week

INCIDENT ID	INCIDENT NAME	PRIORITY	SAFETY ISSUE
65	Pump Leak at Zone 3C	HIGH	SAFETY
64	Oil Spillage at Dock Door 1	HIGH	SAFETY
63	Inventory Count Error	HIGH	SAFETY
62	Collect [ASSET TYPE] DC3PickMod2Level2 - Pick Mod 2 Level 1 Conv 2 (Test)	LOW	
61	Collect [ASSET TYPE] DC3PickMod2Level2 - Pick Mod 2 Level 1 Conv 2 (Test)	LOW	
60	Oil Spillage at Dock Door 1	HIGH	SAFETY
59	Collect [ASSET TYPE] DC3PickMod2Level2 - Pick Mod 2 Level 1 Conv 2 (Test)	LOW	
58	Oil Spill VAS ShoeSorter DC3LowerShipping - DC3LowerSorter	HIGH	SAFETY
57	Supervisor Requested at Shipping	MEDIUM	SAFETY
56	Inventory Count Error	HIGH	SAFETY

CREATE
INCIDENTS
FROM DESKTOP
AND MOBILE

MANAGE
INCIDENTS BY
CREATING TASKS

DETAILED ACTIVITY FOR
EACH INCIDENT

Pump Leak at Zone 3C

Details | Tasks | Attachments

INCIDENT DETAILS

STATUS	REPORT TIME	REPORTED BY	CATEGORY	SITE
Created	02:10 PM EDT, 9/29/2023	Son, Ernest	Fix Active	DC3

LOCATION: C | ASSET TYPE: GeneralConveyor | ASSET: DC3LowerInduct - Conveyor 7127

ACTIVITY LOG

- Machovec, Israel: Fix Pump Leak Zone 3C- Task Created (Today, 10/02/23 10:50 AM)
- Son, Ernest: Pump Leak at Zone 3C- Incident Reported (3 hrs ago, 09/29/23 2:10 PM)

Task Creation Modal:

Task Details

Fix Pump Leak Zone 3C

Category: Maintenance Work

Task Units: 0

Assigned To: Ernest, Flavia

Capabilities: Maintenance

Status: Created

Task Progress Details

- Task Created: 10:50 AM EDT, 10/2/2023

Start Time: 0 hours, 3 mins

Last updated: 10:50 AM EDT, 10/2/2023

Due: -

Recurrence: -

Description: Follow the attached instructions to fix the pump leak.

Comments: Add Comment

Start Task | Edit Task

FEATURE DESCRIPTIONS

FEATURE	DESCRIPTION	BENEFIT	VALUE
Worker Performance	Monitor individual worker performance metrics.	Optimize task assignments and skill development.	Enhanced productivity and targeted training.
Worker Overview	View a comprehensive snapshot of worker activity.	Gain insights into worker contributions.	Improved task allocation and performance analysis.
Idle Time Drilldown	Analyze idle time to identify productivity gaps.	Reduce unproductive downtime.	Enhanced resource utilization and task efficiency.
Worker Profile Drilldown	Access detailed worker profiles.	Assign tasks based on skills and strengths.	Effective task allocation and skill development.
Smart Task Overview	Get an overview of ongoing tasks and progress.	Streamline task management and tracking.	Enhanced task coordination and efficiency.
Task Templates	Create and use templates for common tasks.	Standardize task assignment and execution.	Improved task consistency and time savings.
Incident Overview	Monitor incidents and workflow interruptions.	Swiftly respond to operational challenges.	Efficient incident management and resolution.
Incident Templates	Set up predefined templates for incidents.	Expedite incident reporting and resolution.	Faster incident handling and reduced downtime.
Supervisor Mobile	Access WFI features on mobile as a supervisor.	Manage tasks and incidents on the go.	Improved task oversight and quick decision-making.
Worker Mobile	Access WFI features on mobile as a worker.	Receive task assignments and report incidents.	Enhanced worker efficiency and real-time updates.

GETTING STARTED

HIGH LEVEL WORKFLOWS

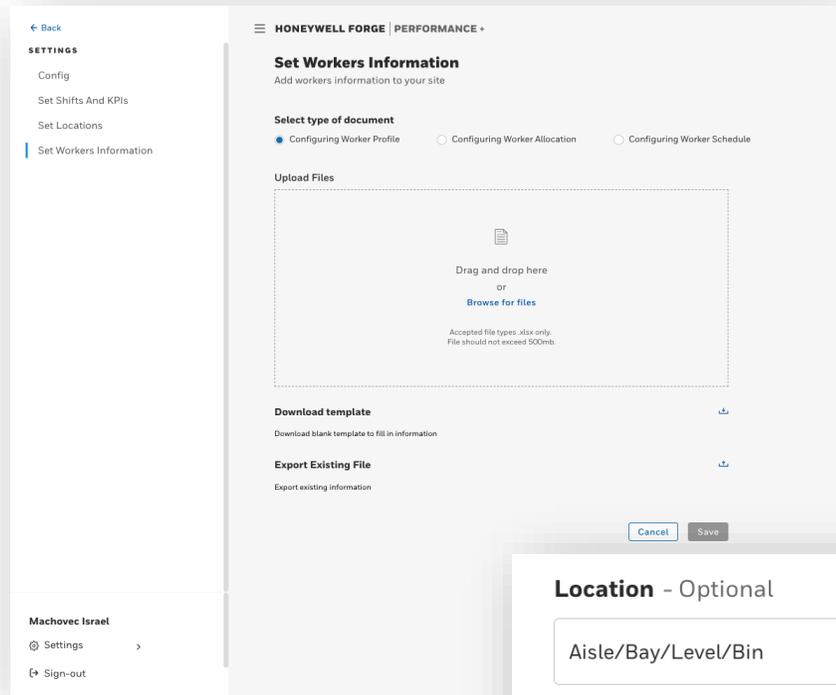


SIMPLIFIED SETUP

EASY TO SETUP, INTEGRATE, AND CONFIGURE FOR YOUR UNIQUE BUSINESS NEEDS

BULK-UPLOAD CONFIG

Bulk-upload configuration portal for common business objects.

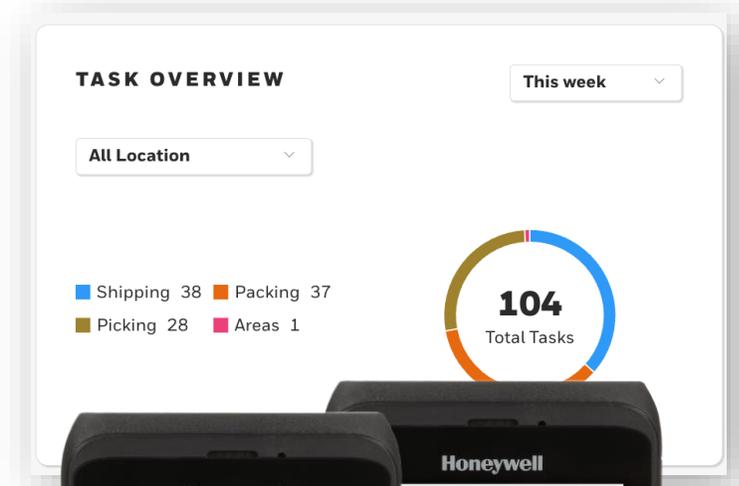


SITE & ASSET HEIRARCHY

Map business objects from siloed systems into a common data model for reporting

MOBILE INSTALLATION

Easily install via Mobile Device Management Solutions



SYSTEM CONNECTORS

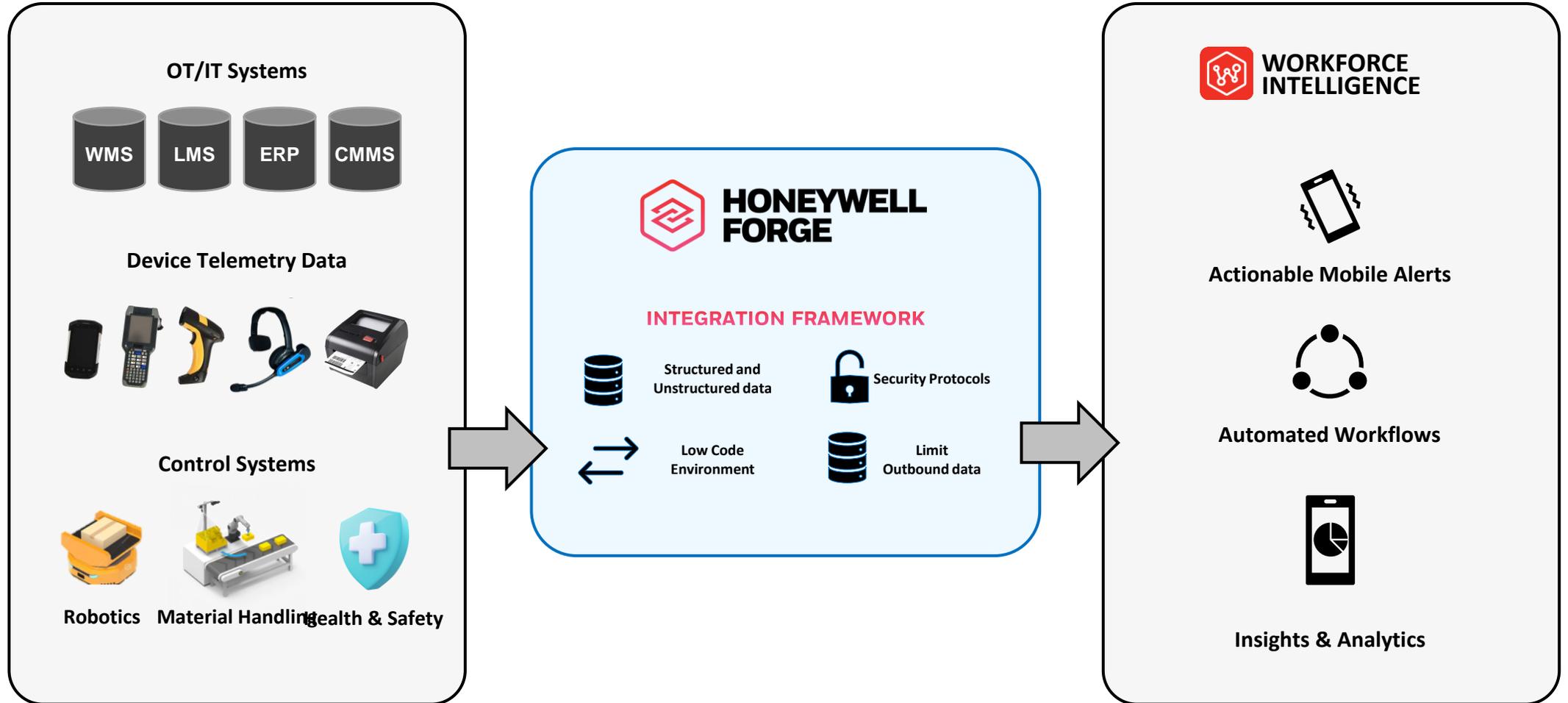
Connectors to host systems such as WMS, ERP, CMMS, and LMS

The configuration form shows the following fields:

- Location - Optional:** A dropdown menu with the value 'Aisle/Bay/Level/Bin'.
- Aisle:** A dropdown menu with the value 'AA'.
- Bay:** A dropdown menu with the value '12'.
- Level:** A dropdown menu with the value 'B'.
- Bin:** A dropdown menu with a list of options: '1' (selected) and '2'.
- Asset type - Optional:** A dropdown menu with the value 'None'.

INTEGRATION & DEPLOYMENT

EASILY CONNECT YOUR EXISTING TECHNOLOGY ECOSYSTEM TO INSTANTLY DRIVE CLOSED-LOOP OUTCOMES



THANK YOU