June 2022

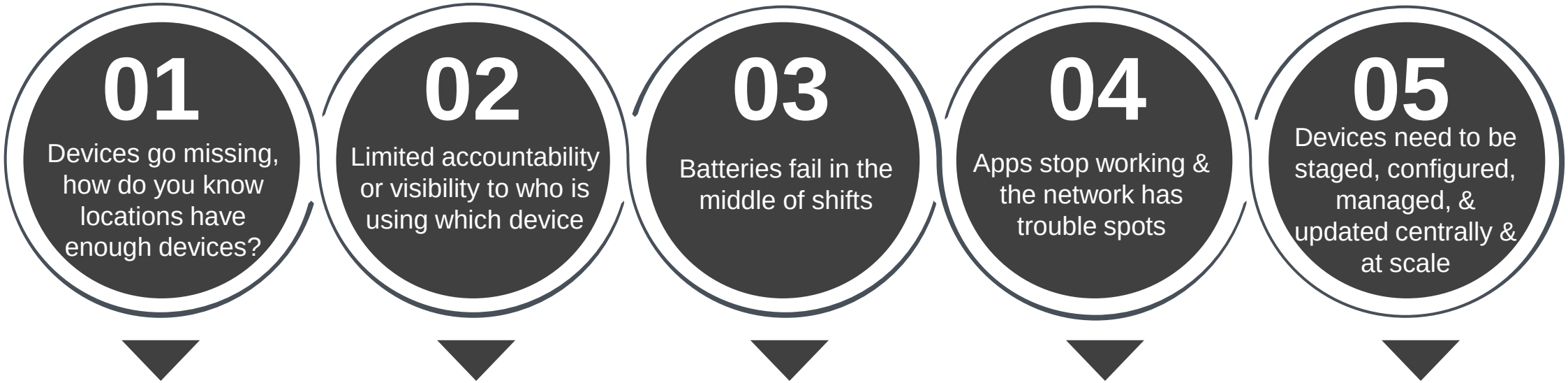
HONEYWELL OPERATIONAL INTELLIGENCE

INTELLIGENCE IN ACTION

Honeywell

COMMON ASSET OPERATIONAL PAIN POINTS

Which challenge most disrupts your customers? – Here is what customers are telling us.



- **"Devices 'walk off' all the time"**
- **"1 in 3 of our devices go missing"**
- **"My locations constantly ask for new devices"**

- **"Our team tracks what device each worker has on pen and paper."**
- **"Some workers hide their favorite device in the store"**

- **"Team members have to return to device storage if their battery dies"**
- **"Sometimes devices don't last a full shift"**

- **"Workers don't' have time to submit issue tickets"**
- **"Sometimes days go by before we know there is a problem"**

- **"how can we efficiently configure thousands of devices in multiple locations?"**
- **"I need to automate OS, firmware, and software updates across thousands of devices with minimal resources"**

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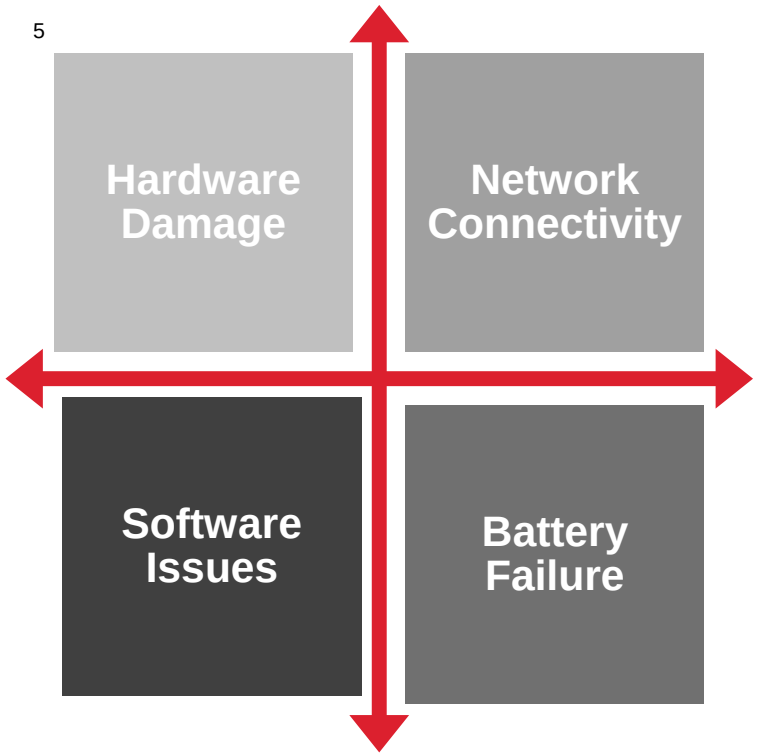
THE HIDDEN COST OF WORKFLOW DISRUPTION

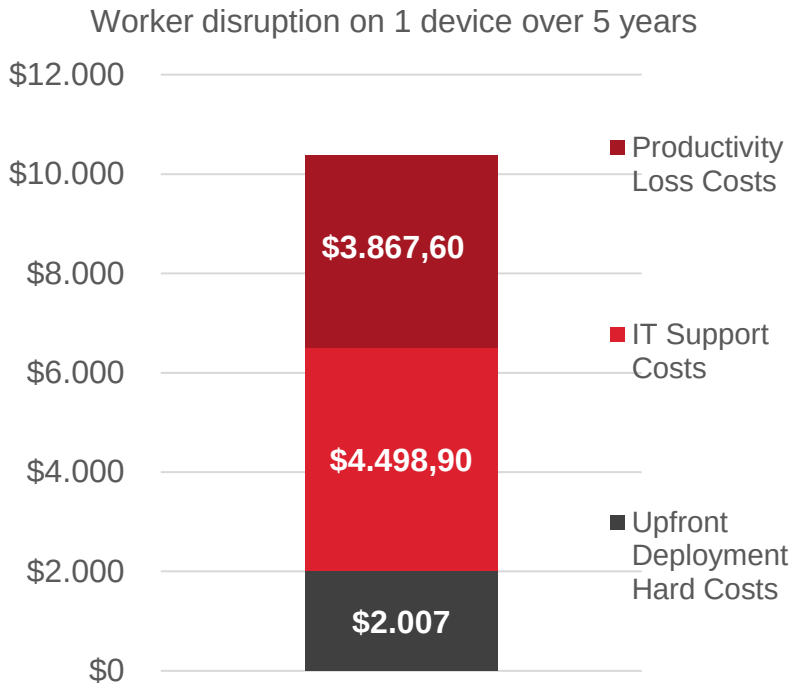
Leading disruptions for frontline workers



Impact of this disruption

- **60-110 mins lost** in mobile worker productivity **per issue[1]**
- **40-60mins** of IT Support **per issue[2]**
- Batteries fail to support a shift **75% of the time[3]**
- **23% of device failures** are reported as no fault found[4]

Impact of these issues over 5 years/device



[1-5] TCO Models for LOB Mobile Solutions, VDC Research

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1. DEVICES GO MISSING & SITES ALWAYS WANT MORE

THE CHALLENGE

Linda works for a mid-sized grocery chain in the mid-west.

- In the middle of replenishing stock, she leaves her task to help at the check-out counter. In the process she misplaces her device.
- Due to the rush, Linda does not have time to find it. She looks for it for 5 mins then informs her manager, who tells her to get a secondary device for the day.
- At the end of the day the closing manager notices a device was not docked. After a brief search (5 mins), she makes a note to request a new device from IT the following day.

POTENTIAL IMPACT

$2.2M/YR

Number of locations (Store)		**150**		
# of employees/store		**20**		
# of shifts/day		**3**		
# of incidents per shift		**1**		
PRODUCTIVITY COSTS				
Total time spent looking for device per inciendent		10		
Cost of employee time/hour		$15		
	Daily		**Annual**	
Cost of employee time/incident	$	2.50	$	912.50
Total lost productivity all stores	$	1,125	**$**	**410,625**
IT COSTS				
Lost devices that are not found/month/store		1		
IT Members time validating device is lost/incident		30		
Cost of IT employee time/hour	$	25.00		
Avg. Cost of a Device		$600		
	Daily		**Annual**	
Cost of IT employee time/incident		$13		$22,500
Total IT Time Cost		$1,875.00		**$684,375**
Total Device Cost				**$1,080,000**
TOTAL COST OF LOST DEVICES ANNUALLY				
	Monthly		**Annually**	
	$	**181,250**	**$**	**2,175,000**

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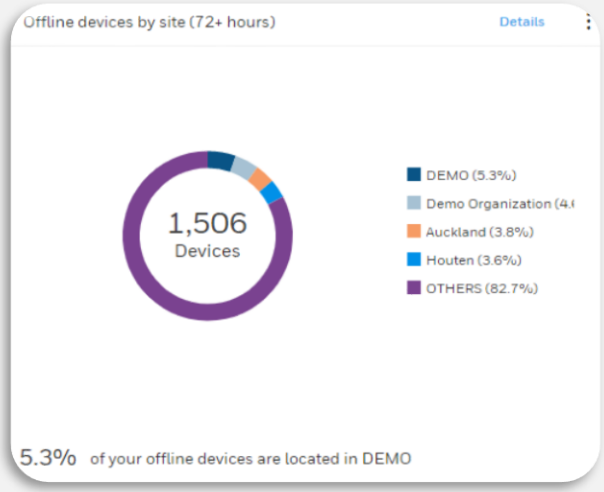
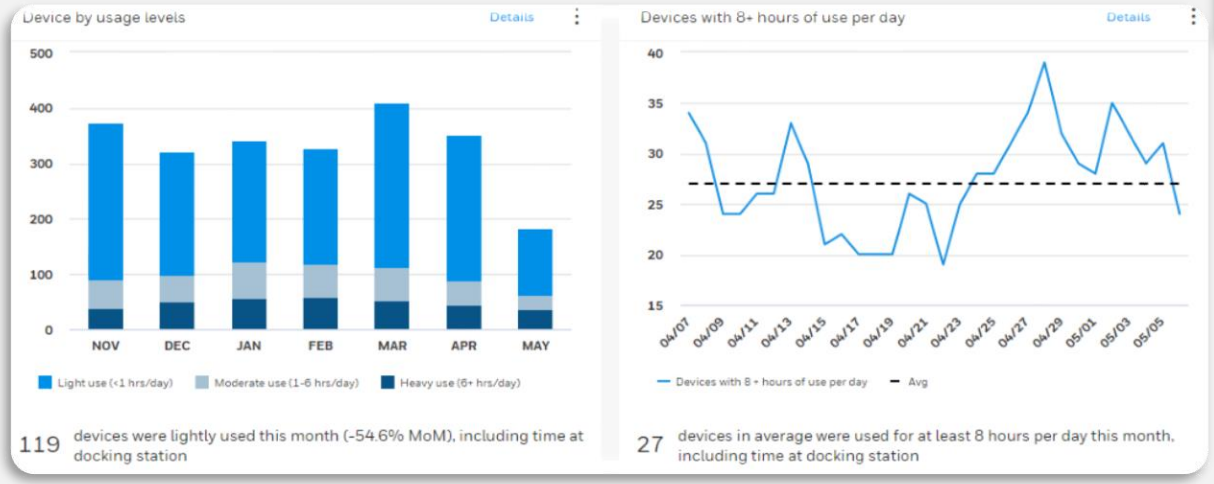
HONEYWELL OPERATIONAL INTELLIGENCE

Core Problem: Devices go missing, how do you know locations have enough devices?



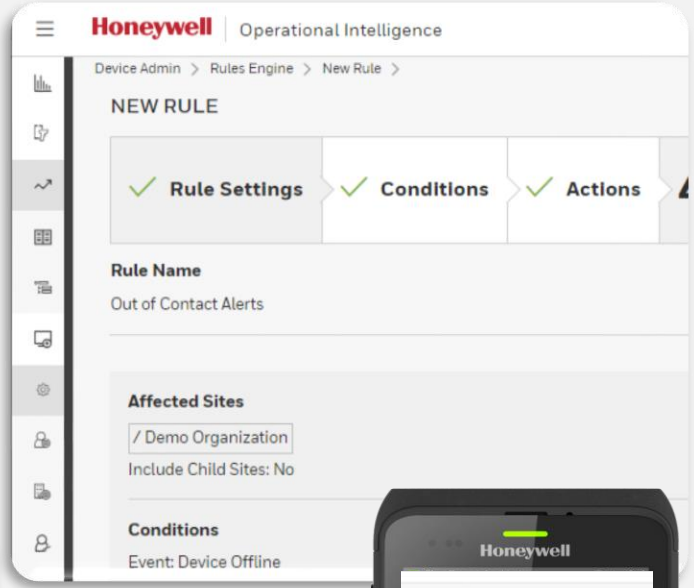
Identify lost or stolen devices

Monitor site behavior by tracking offline & never used devices



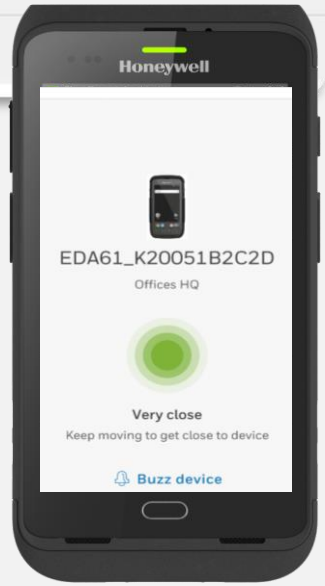
Monitor usage at the site, location & device level

Ensure each location has what they need & proactively reach out for dips in utilization



Automate workflows for Out-of-Contact Devices

Configure automated rules to alert Site Operations to devices that are offline too long.



Find Devices that are lost

Simple android application that locates lost devices and pings them when close.

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2. ASSOCIATES PHYSICALLY SIGN OUT A DEVICE ON PAPER WITH NO REAL ACCOUNTABILITY

THE CHALLENGE

Tracy works for a mid-sized grocery chain in the mid-west.

- At the start of her shift Tracy is supposed check out her device by writing her name on the sign out sheet. The store is busy and she's running behind and decides to do it at the end of the day.
- During her shift she accidentally drops it. When she picks it up, she notices the screen is cracked.
- At the end of her shift Tracy is worried about getting into trouble so she hides her device knowing that no one will know she was the one who did not turn it back in.
- At the end of the day the closing manager notices a device was not docked. After a brief search (5 mins), she makes a note to request a new device from IT the following day

POTENTIAL IMPACT

$2M/YR

Number of locations (Store)		**150**		
# of employees/store		**20**		
# of shifts/day		**3**		
# of incidents per shift		**1**		
PRODUCTIVITY COSTS				
Total time spent looking for device per inciendent		5		
Cost of employee time/hour		$15		
	Daily		**Annual**	
Cost of employee time/incident	$	1.25	$	456.25
Total lost productivity all stores	$	563	**$**	**205,313**
IT COSTS				
Broken/lost devices that are not found/month/store		1		
IT Members time validating device is lost/broken		30		
Cost of IT employee time/hour	$	25.00		
Avg. Cost of a Device		$600		
	Daily		**Annual**	
Cost of IT employee time/incident		$13		$22,500
Total IT Time Cost		$1,875.00		**$684,375**
Total Device Cost				**$1,080,000**
TOTAL COST OF LOST DEVICES ANNUALLY				
	Monthly		**Annually**	
	$	**164,141**	**$**	**1,969,688**

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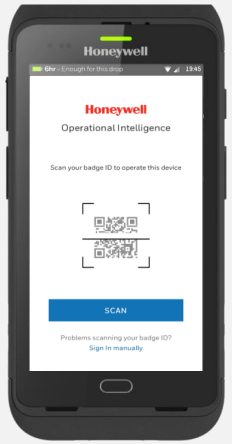
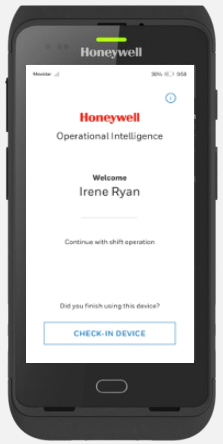
HONEYWELL OPERATIONAL INTELLIGENCE

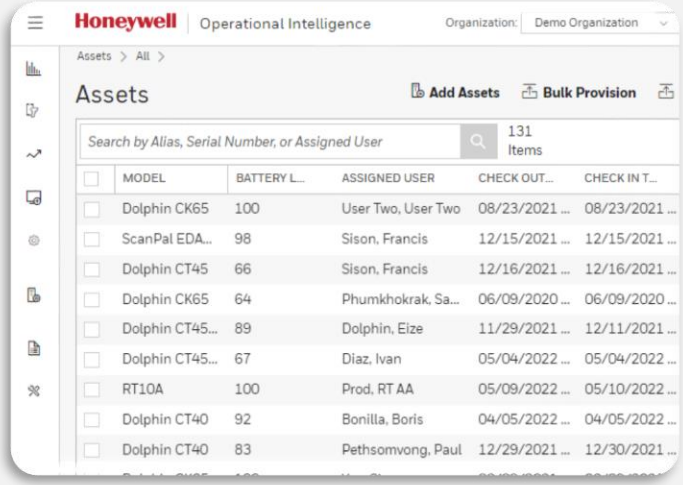
Core Problem: Workers physically sign out a device on paper with no real accountability





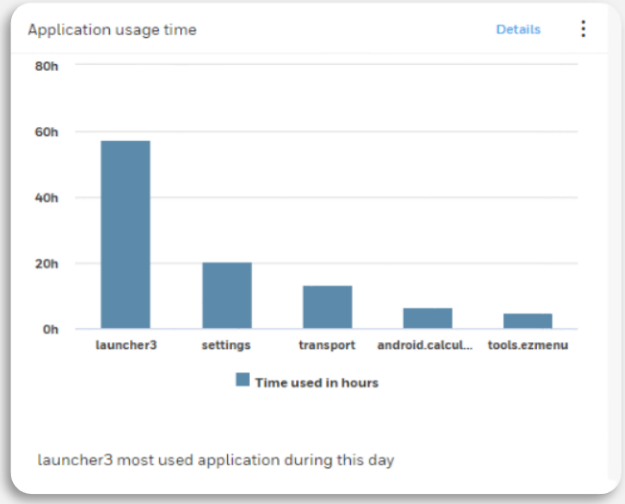
Easy device check-out for full accountability

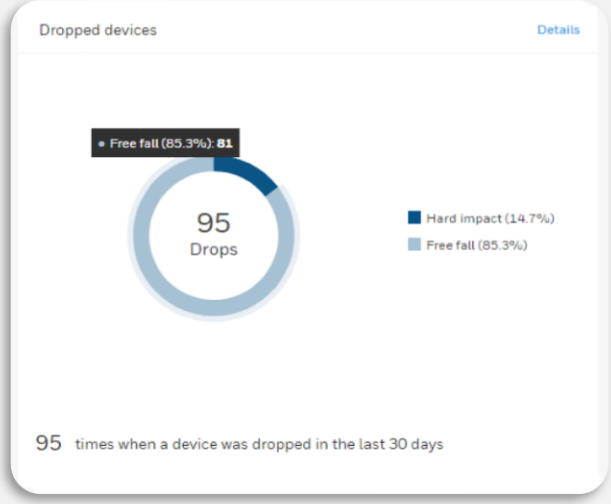
Worker's check-out devices & back in again at the end of their shift. Interior location-based check-in ensures full compliance



Audit Checked-Out Devices in real time

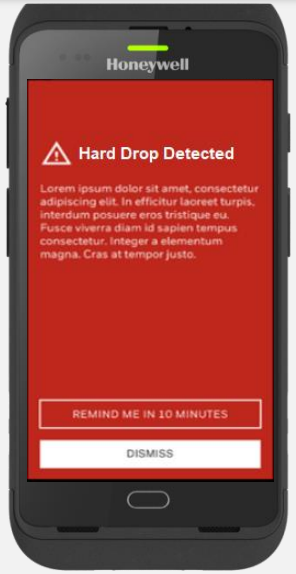
Get full visibility to devices in use & a full historical audit trail.





Monitor device drop behavior & application usage

Identify device abuse coaching opportunities and monitor application utilization



User device drop notifications

Drive new user behavior with optional frontline worker device drop notifications and alerts

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3. BATTERIES FAIL IN THE MIDDLE OF SHIFTS

THE CHALLENGE

John works for a mid-sized grocery chain in the mid-west.

- John has a favorite device that he believes works exactly the way he wants it too. He likes to use the same one everyday. He stores his device in a secret spot to make sure that he gets the same one each day.
- John is in the middle of scanning inventory when his device powers down due to low battery.
- John walks to the back room to get a spare that he knows is charging on a dock. He swaps the battery and walks back out to continue his task.
- Because John rarely docks his device, it does not update consistently which causes applications to crash multiple times/week.

POTENTIAL IMPACT

$2M/YR

Number of locations (Store)	**150**	
# of employees/store	**20**	
# of shifts/day	**3**	
# of incidents per shift	**3**	
PRODUCTIVITY COSTS		
mins spent getting a new battery/incident	10	
Cost of employee time/hour	$15	
	Daily	**Annual**
Cost of employee time/incident	$ 2.50	$ 912.50
Total lost productivity all stores/day	$ 1,125	**$ 410,625**
IT COSTS		
# of mins IT time updating devices out of sync/week	60	
# of mins IT time spent troubleshooting related issues	60	
# of related tickets submitted/day/store	1	
Cost of IT employee time/hour	$ 25.00	
Cost of IT employee time/min	$ 0.42	
	Daily	**Annual**
Cost of IT employee time/day troubleshooing issues	**$3,750**	**$1,368,750**
Cost of IT employee time/day updating devices	$3,750	**$195,000**
TOTAL COST OF MID SHIFT BATTERY FAILURE ANNUALLY		
	Monthly	**Annually**
	$ 164,531	**$ 1,974,375**

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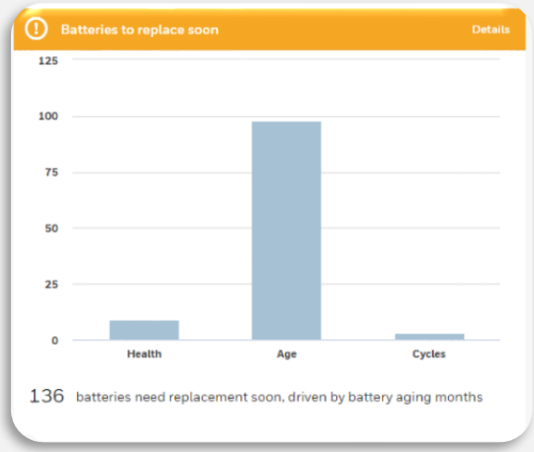
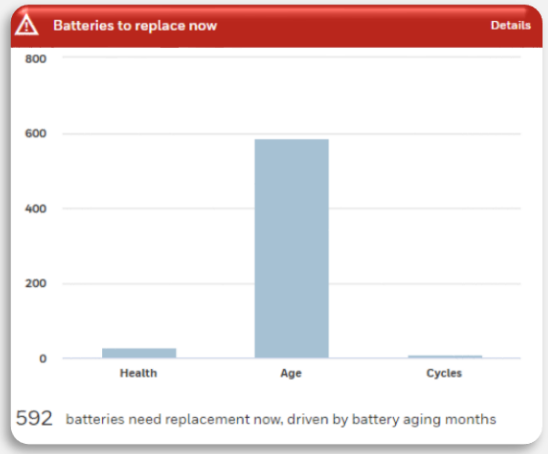
HONEYWELL OPERATIONAL INTELLIGENCE

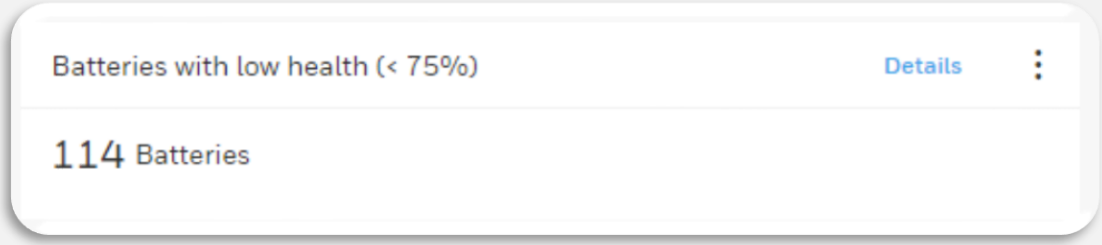
Core problem: Batteries fail in the middle of shifts

Plan bad batteries out of operations before they impact workers

Purchase batteries that need to be replaced BEFORE they start disrupting frontline workers



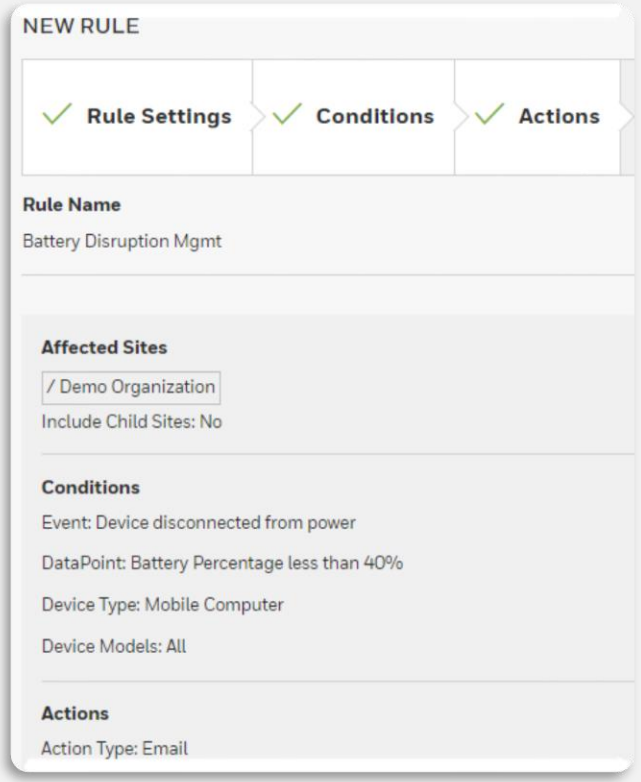


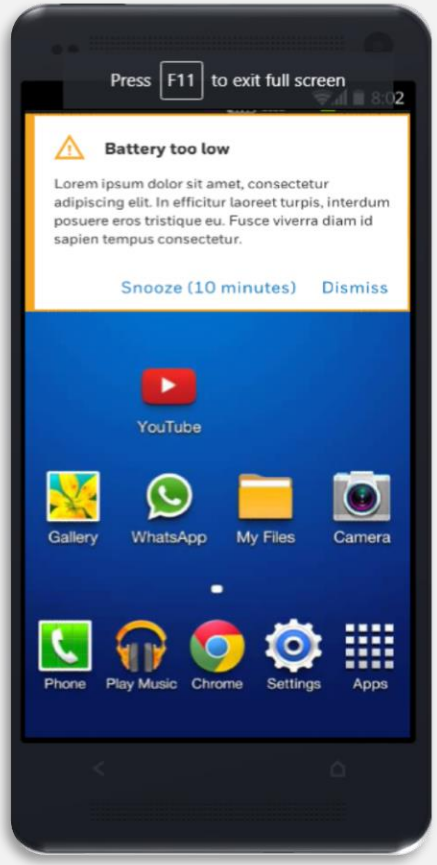


Stop bad batteries in operations before they stop work

Set up instant emails & alerts for battery disruptions

Alert users with custom device notifications to batteries that will disrupt their shift before they start work.





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4. APPS STOP WORKING & THE NETWORK HAS TROUBLE SPOTS

THE CHALLENGE

Sam works for a mid-sized grocery chain in the mid-west in IT.

- Sam supports 150 stores on a small IT team (10)
- Sam's spends a lot of time responding to individual tickets around applications not working in the field. Root causes of this issue vary from network issues to the apps themselves failing and needing updates.
- Sam is responsible to respond to each issues within 24 hours
- About **half** of the issues Sam responds too are related to application-level issues and issues ultimately caused by network & access point level failures.
- Sam does about 8 tickets/day and about 60 mins per issue
- Each issue represents about 60 mins of disruption at the store due to issue disruption.

POTENTIAL IMPACT

$1.6M/YR

Number of locations (Store)	**150**	
# of IT Employees	**10**	
# of tickets per day	**100**	
AVG mins spent per ticket (IT+Store Disruption)	**120**	
IT COSTS		
IT's time spent troubleshooting/ticket (in hrs)	1	
Cost of employee time/hour	$28	
	Daily	**Annual**
Cost of employee time/incident	$ 2,800.00	$ 1,022,000.00
Store Productivity Disruptions		
Store's time spent impacted by disruption (in hrs)	1	
Cost of Associate/hr	$15	
	Daily	**Annual**
Cost of Store Associate/day troubleshooing issues	**$1,500**	**$547,500**
TOTAL COST OF MID SHIFT BATTERY FAILURE ANNUALLY		
	Monthly	**Annually**
	$ 129,000	**$ 1,569,500**

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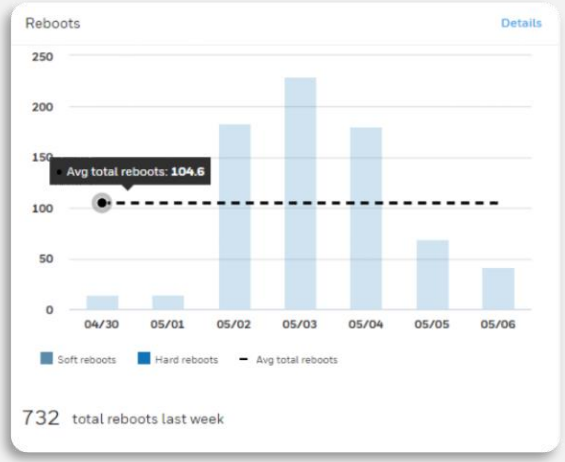
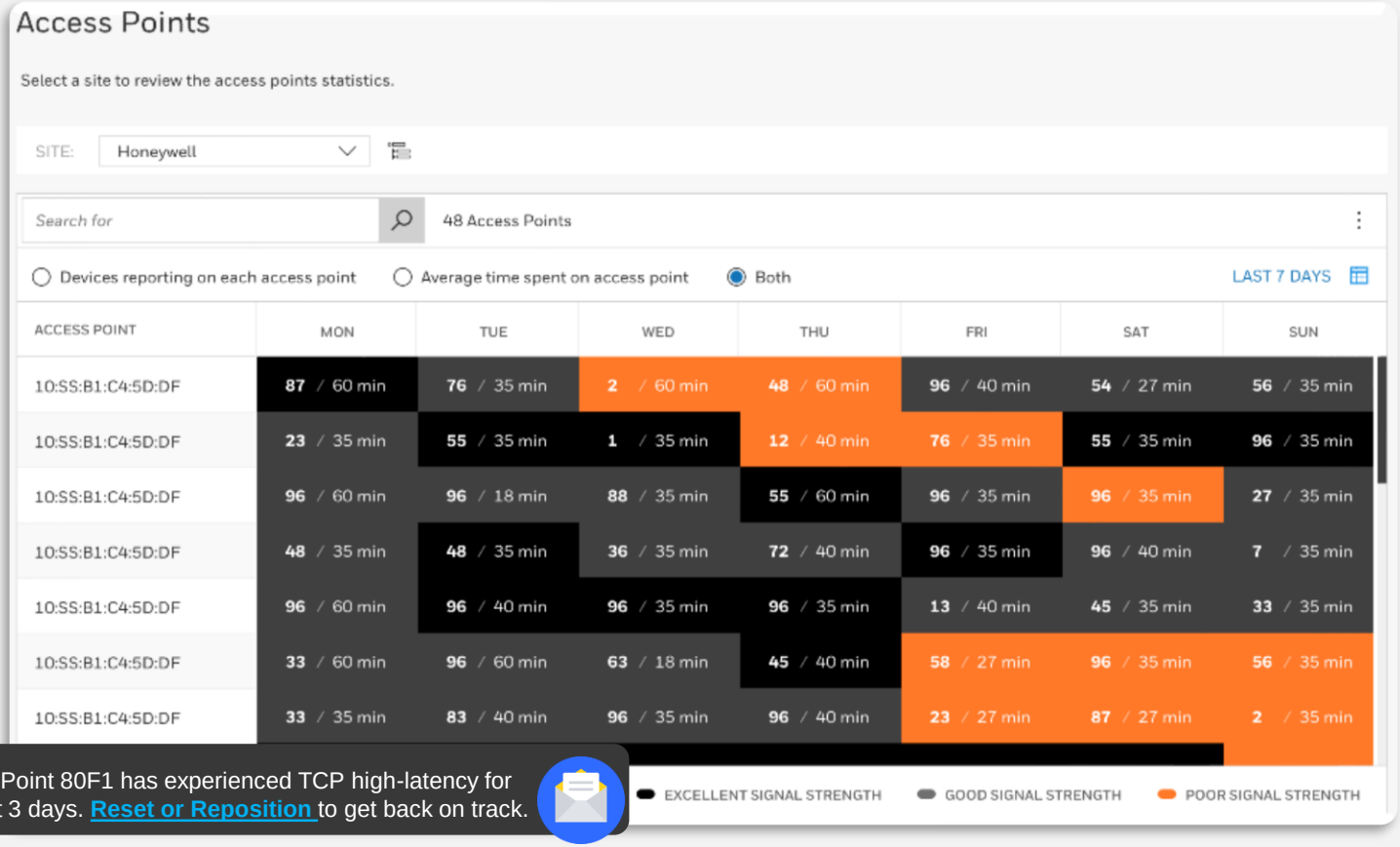
HONEYWELL OPERATIONAL INTELLIGENCE

Core Problem: Apps stop working and the network has trouble spots



Device Reboots: A core KPI that indicates spikes in worker disruption

Monitor core KPIs that indicate spikes in worker field disruption



Access Point Heat Map

Customer's, partners, & network providers spend weeks troubleshooting network issues and dead spots.

Get the devices view of Access Point signal strength to help isolate problems and be proactive.

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5. PRINTER INSIGHTS & ASSET MANAGEMENT

THE CHALLENGE

Potential Impact
- Unknow Printer Utilization
- High-touch configuration
- Reactive Troubleshooting

Average Hospital
- 2000+ Printers
- 160 Locations
- 100K+ labels printed/year

Utilization/ Right Sizing

- 2000 Printers across 160 locations, it's hard to determine if there are enough or too many devices in each location
- Assets can likely be moved between locations instead of buying more

Preventable Failure

- Wasted time & resources troubleshooting onsite
- Wasted time troubleshooting locally & not doing other tasks
- Unattended issues can be mission critical and expensive if delayed

Onsite-Required Configuration

- 2000 prints over 160 locations where configuration must be done in person & associated cost includes
  - Time spent at each printer
  - Time spent navigating location
  - Time & resources traveling to locations

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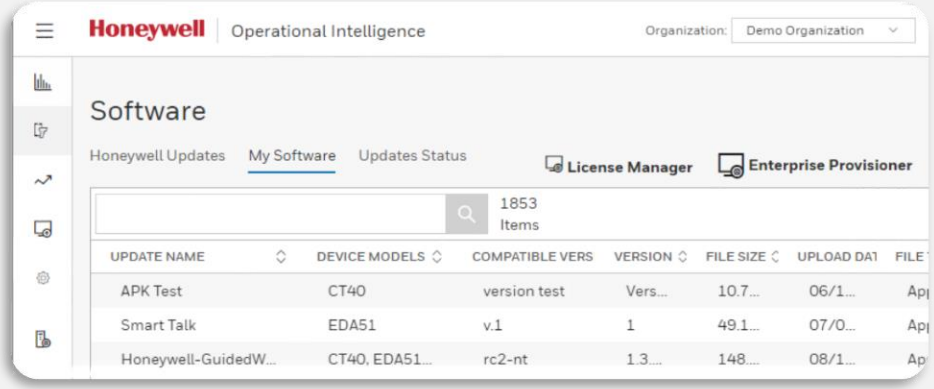
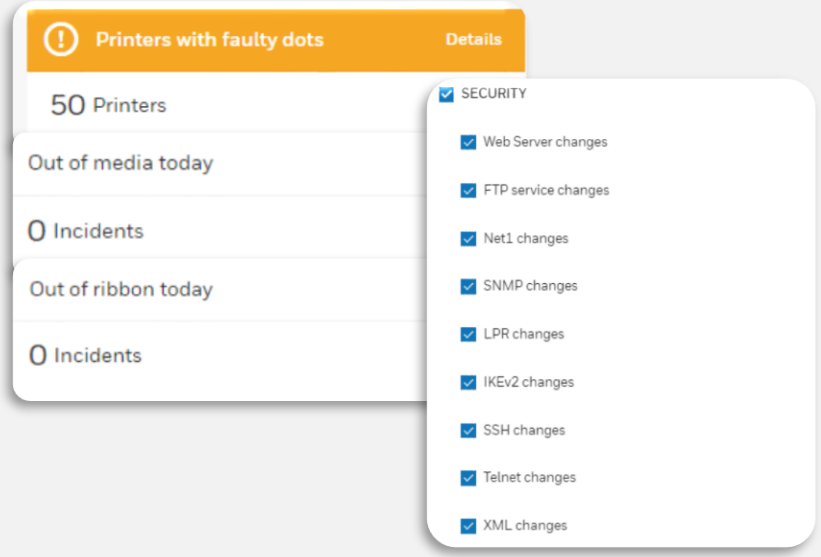
HONEYWELL OPERATIONAL INTELLIGENCE

Manage & Monitor Your Honeywell Printer Assets

Centralized Provisioning & Configuration

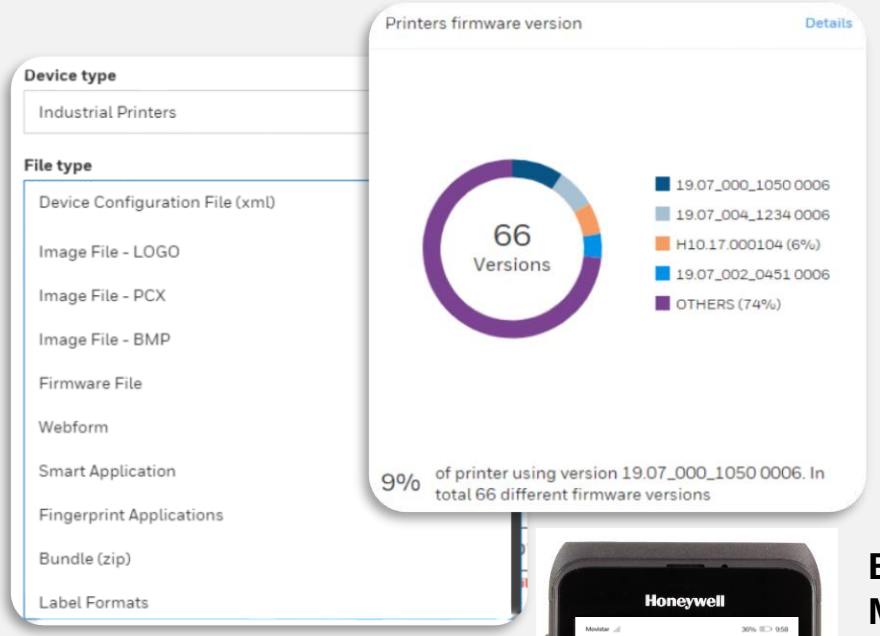
Fully & centrally provision, stage, & configure your Honeywell printers, mobile computers & scanners





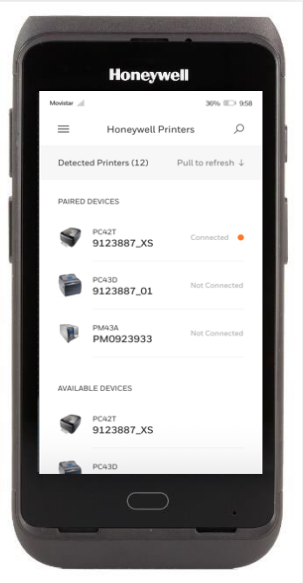
Critical Disruption Monitoring

Multiple dashboards, over **50** configurable alerts, and essential security monitoring, provide IT teams every they need to be alerted in real time to printer disruption in the field.



Update Apps/Firmware/OS

Ensure compliance and security by centrally automating your update process for device applications, security patches, & Operating System updates



Bluetooth Printer Management through mobility application

Update, configure and manage BT only printers using a Honeywell mobile computer as a gateway

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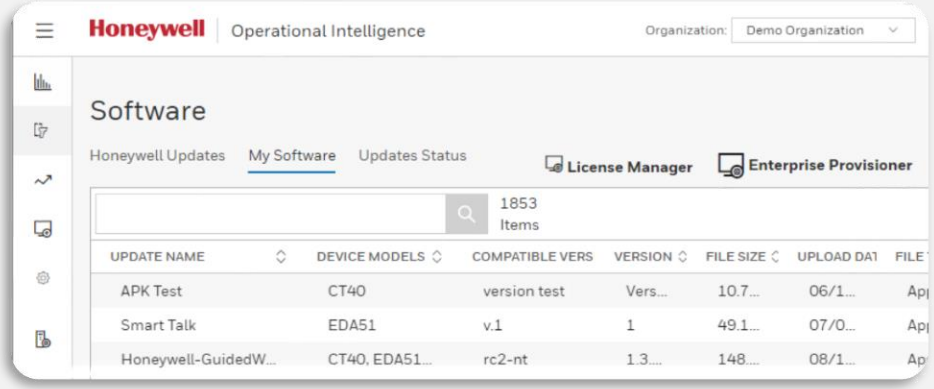
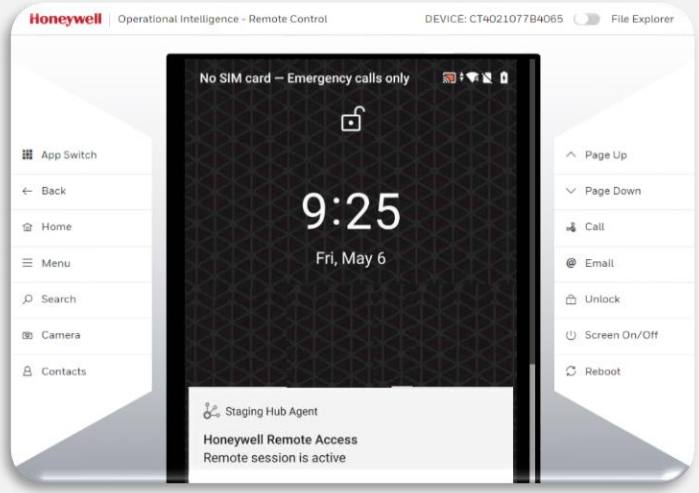
HONEYWELL OPERATIONAL INTELLIGENCE

Manage Your Honeywell Mobile Assets

Device Staging & Configuration

Fully & centrally provision, stage, & configure your Honeywell printers, mobile computers & scanners

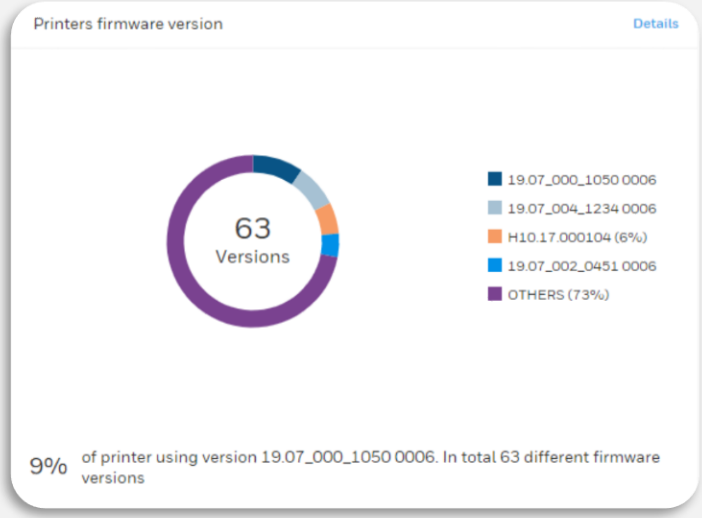




Remote Control & File Browser

Respond instantly and remotely to issues in the field. Fully control Honeywell mobile computers.

View device files and update them in real time



Update Applications/Firm ware/OS

Ensure compliance and security by centrally automating your update process for device applications, security patches, & Operating System updates

Honeywell Launcher & Browser

Includes term license of Honeywell's secure launcher and enterprise Browser solutions

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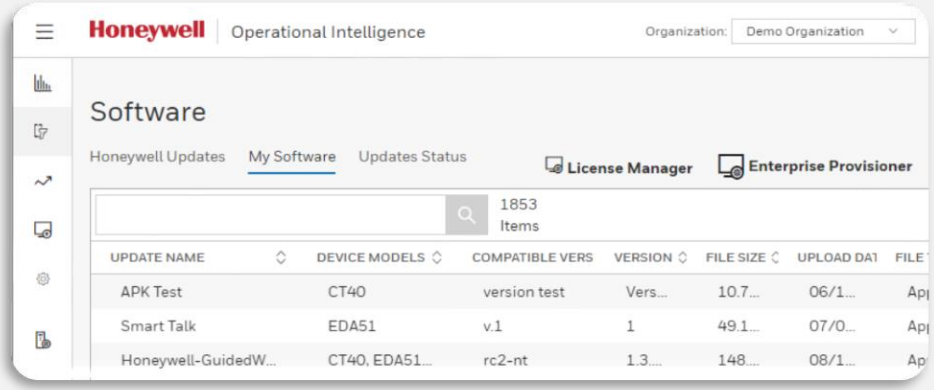
HONEYWELL OPERATIONAL INTELLIGENCE

Manage Your Honeywell Scanners

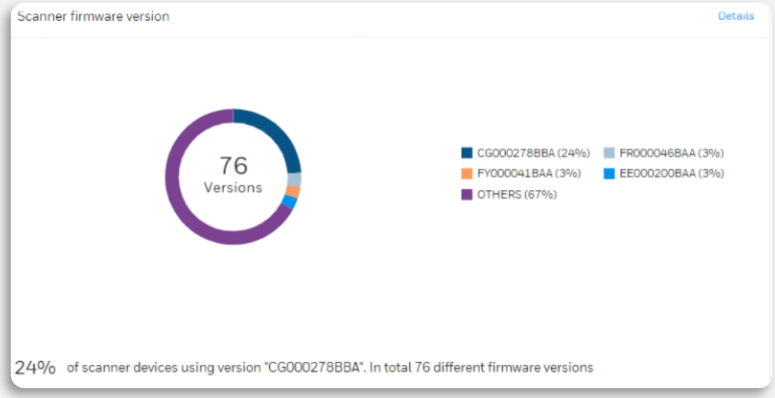
Device Staging & Configuration

Fully & centrally provision, stage, & configure your Honeywell printers, mobile computers & scanners



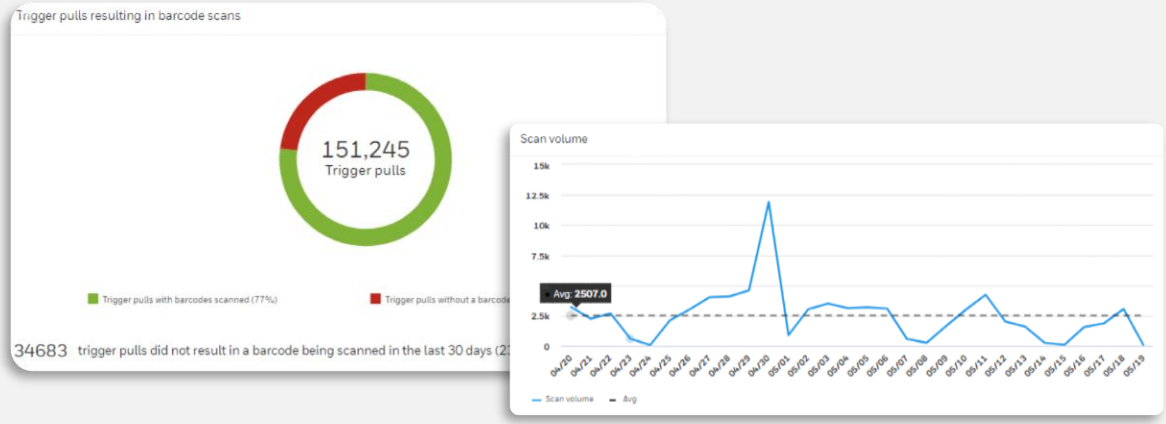
Update Applications/Firmware/OS

Ensure compliance and security by centrally automating your update process for device applications, security patches, & Operating System updates



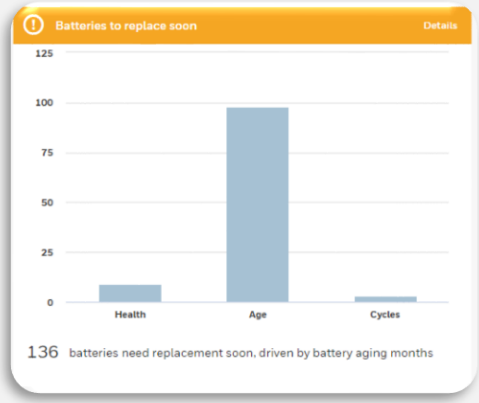
Scanning Usage & Behavior Monitoring

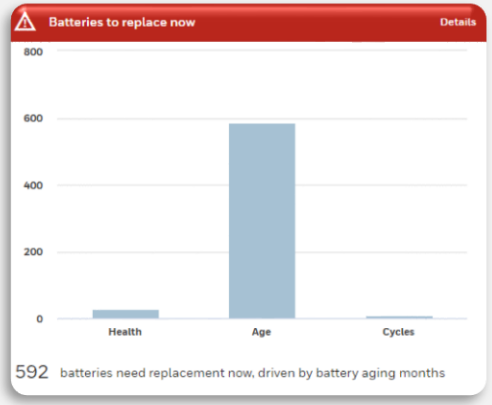
Respond instantly and remotely to issues in the field. Fully control Honeywell mobile computers. View device files and update them in real time



Plan bad batteries out of operations before they impact workers

Purchase batteries that need to be replaced BEFORE they start disrupting frontline workers





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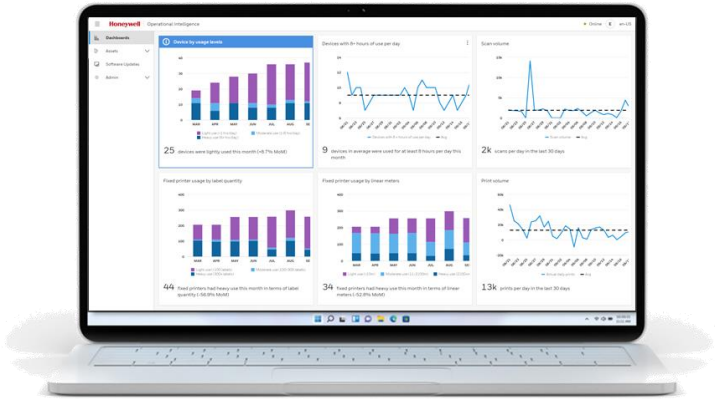
ROI SUMMARY SLIDE

CUSTOMER PROFILE

EXAMPLE PROFILE

- # of sites: **150**
- # of shifts: **3**
- Average # of workers/site: **20**
- Centralized IT responsible for Ops: **Yes**
- # of IT employees responsible of Ops: **10**
- # of Assets: **1500**



Multi-Site (150)	Conservative Annual Impact	Medium Annual Impact	High Annual Impact
DEVICES GO MISSING, SITES WANT MORE	$110,000	$220,000	$330,000
IMPROVING WORKER ACCOUNTABILITY	$100,000	$200,000	$300,000
MITIGATING BATTERY FAILURE	$100,000	$200,000	$300,000
PORACTIVE FAILURE MONITORING (NETWORK, REBOOTS & APPS)	$80,000	$160,000	$240,000
CONFIGURE, UPDATE, & MANAGE ASSETS	$0	$0	$0
TOTAL IMPACT	$390,000	$780,000	$1,173,000
ESTIMATED ROI	622%	1344%	2072%
IMPROVMENT IMPACT	5%	10%	15%

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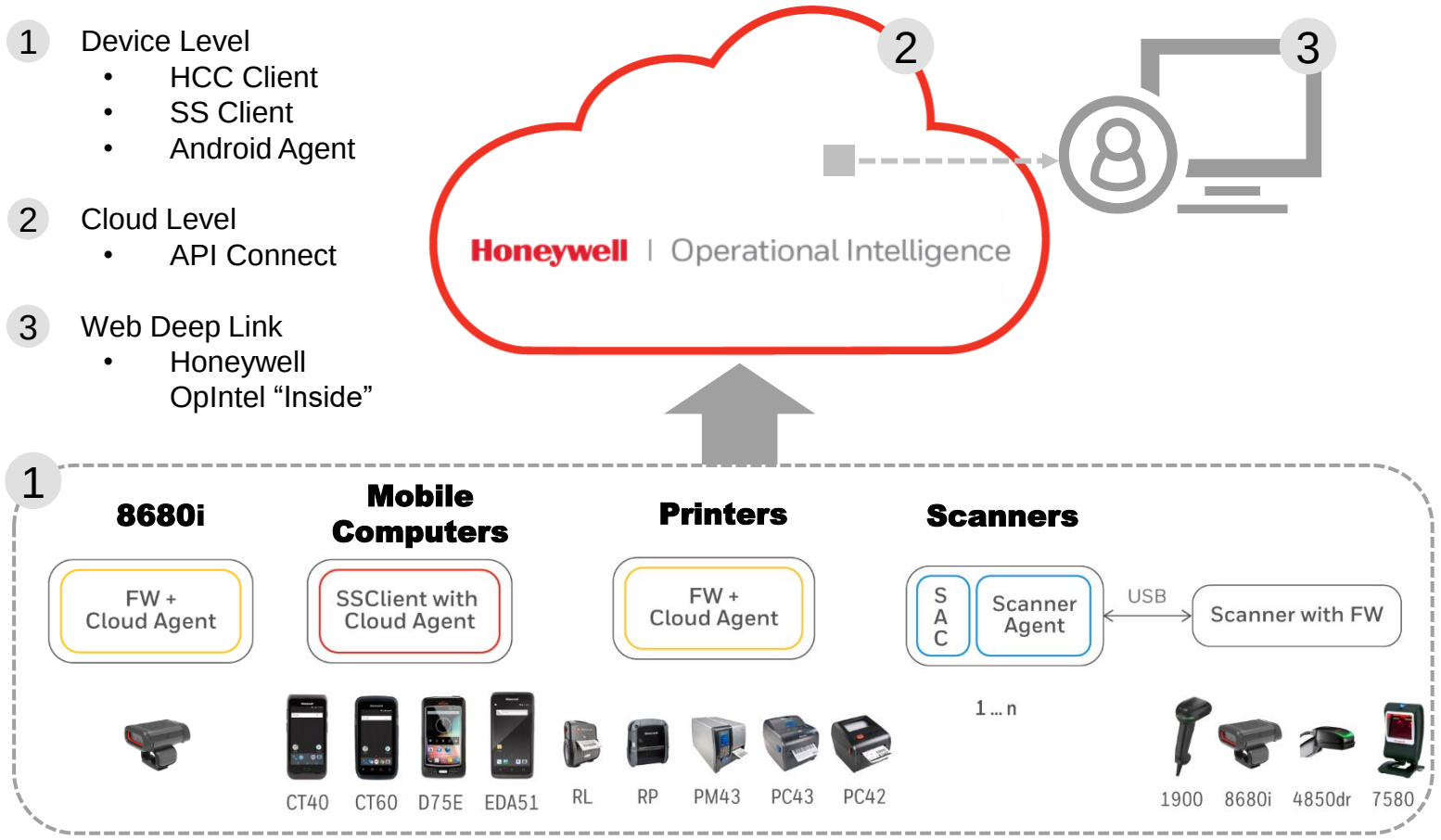
HONEYWELL ECOSYSTEM

Connectivity to the Honeywell ecosystem unlocks data and **insight** to other applications empowering partners and end customers to:

- Leverage data from the edge
- Create new solutions
- Improve current applications
- Drive workflow efficiency
- Improve productivity

Connector

1. Device Level
   - HCC Client
   - SS Client
   - Android Agent
2. Cloud Level
   - API Connect
3. Web Deep Link
   - Honeywell OpIntel “Inside”



Delivering actionable insight at every layer of connectivity

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A LOOK AT TWO OF OUR CUSTOMERS

Honeywell

HONEYWELL OPERATIONAL INTELLIGENCE

Large Retail Customer #

Customer Profile

Large supply retailer with over 2000 stores across North America. Core focus is on technology enablement with an IT team that is focused on moving from “reactive” to “proactive” in support of store operations.

Qualified Customer Challenges

1. Device under-utilization tracking
2. Wifi Coverage Issues
3. Abnormal device reboots (Associate disruption)
4. Mobile application issues
5. Missing Devices
6. Insufficient battery charge
7. Battery needing replacement

1 Utilization & Lost devices

2 Limited Accountability

3 Battery Disruption

4 App & Network Issues

16,000 Mobile Computers

Customer Business Case

- **Centralize on a single solution as the primary MDM.**
- **Provide real-time support for frontline workers via remote control.**
- **Reduce battery-caused worker disruption.**
- **Ensure devices are up to date and secure.**

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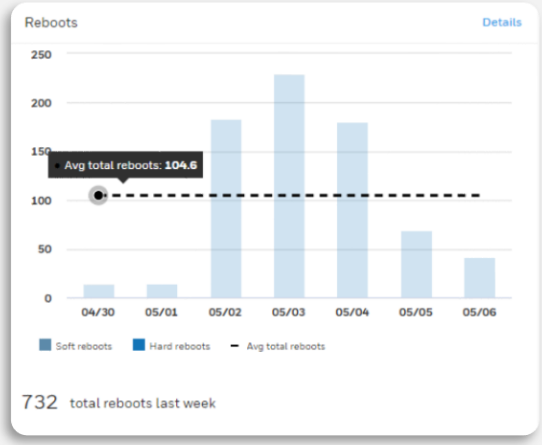
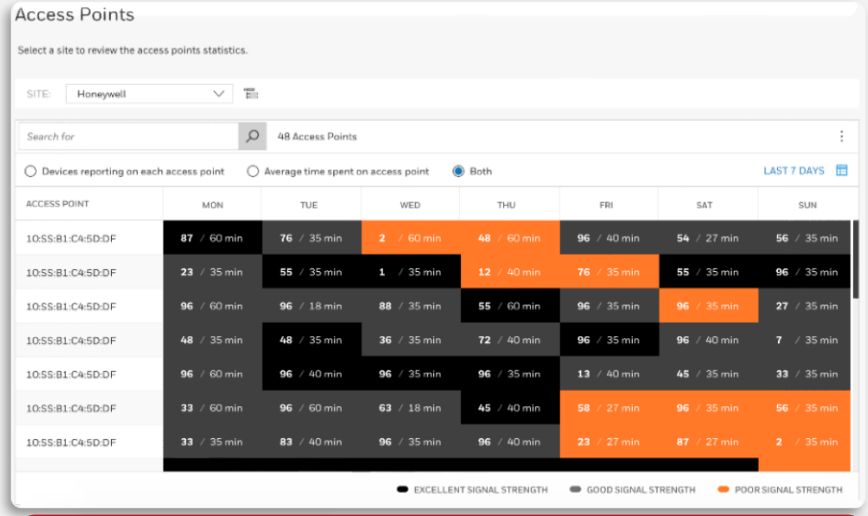
HONEYWELL OPERATIONAL INTELLIGENCE

Key Solutions for Large Retailer #1



Device Reboots: A core KPI that indicates spikes in worker disruption

Provides IT a proactive view on issues happening in the field before they are submitted as tickets

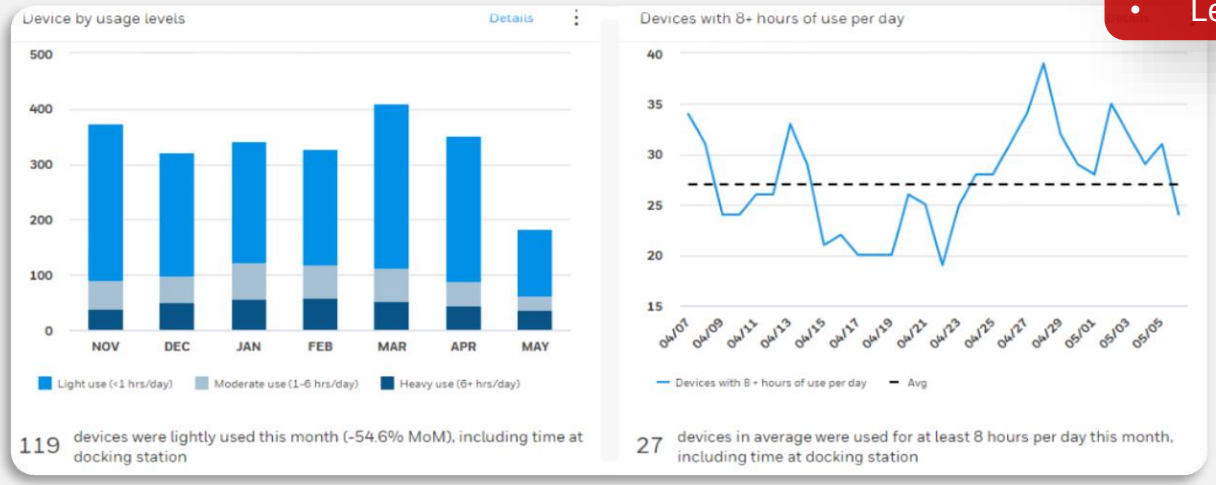


Insights into possible access point issues

Customer's, partners, & network providers spend weeks troubleshooting network issues and dead spots.

Ensure each store has what they need proactively

Monitor usage at the site, location & device level

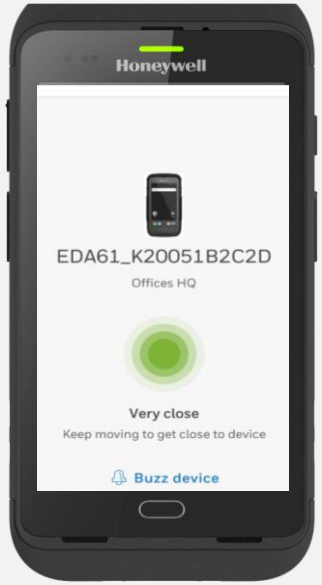


Additional Value

- Device drop monitoring for asset troubleshooting
- Leadership view on data & KPIs

Find Devices that are lost

Simple Android application that locates lost devices and pings them when close.



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HONEYWELL OPERATIONAL INTELLIGENCE

Large Retail Customer #2

Customer Profile

Large retail chain with more then 50 stores across Japan. This retailer offers customers daily necessities, building materials, & camping goods

Qualified Customer Challenges

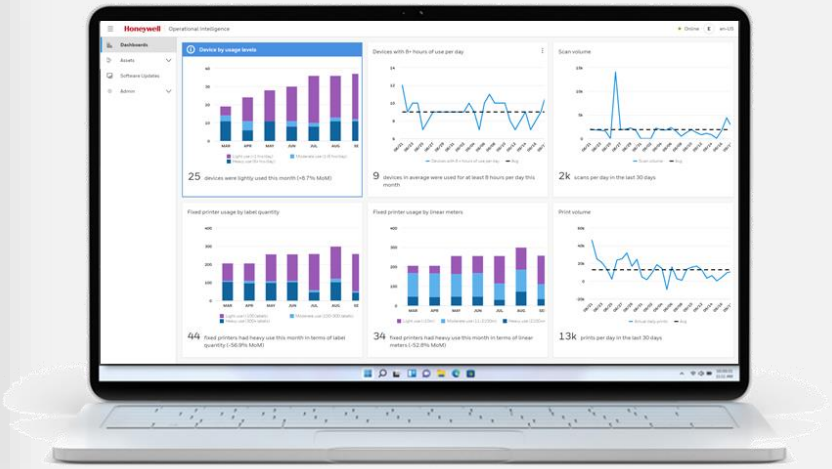
1. Asset staging, configuration, & Updates
2. Controlling devices to provide real time support
3. Pushing files to devices in the field
4. Insufficient battery charge
5. Battery needing replacement

1 Utilization & Lost devices

5 Asset Management

3 Battery Disruption

12,000 Mobile Computers



Customer Business Case

- **Centralize on a single solution as the primary MDM**
- **Provide real-time support for frontline workers via remote control & file browser.**
- **Reduce battery-caused worker disruption.**
- **Ensure devices are up to date and secure**

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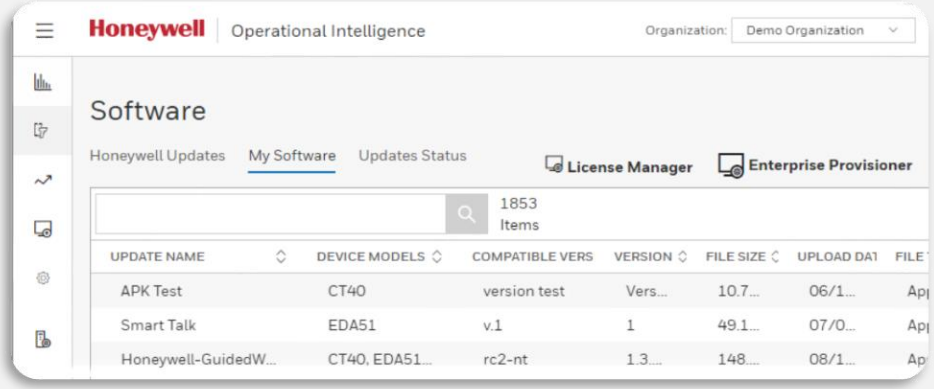
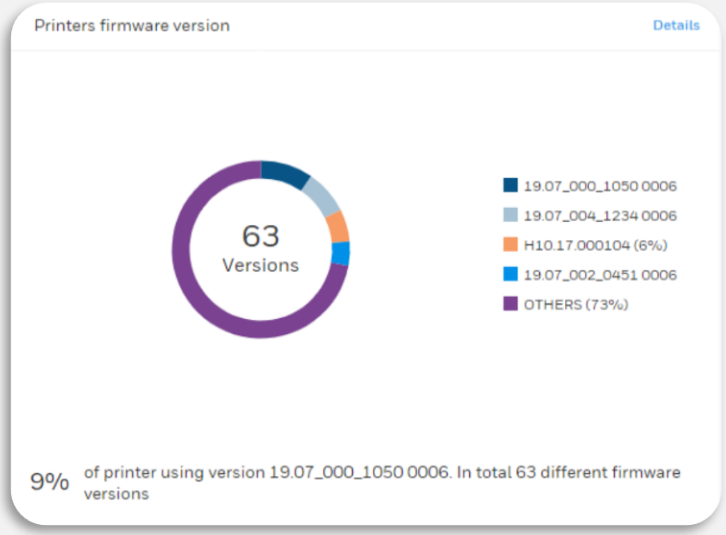
HONEYWELL OPERATIONAL INTELLIGENCE

Large Retail Customer #2

Device Staging & Configuration

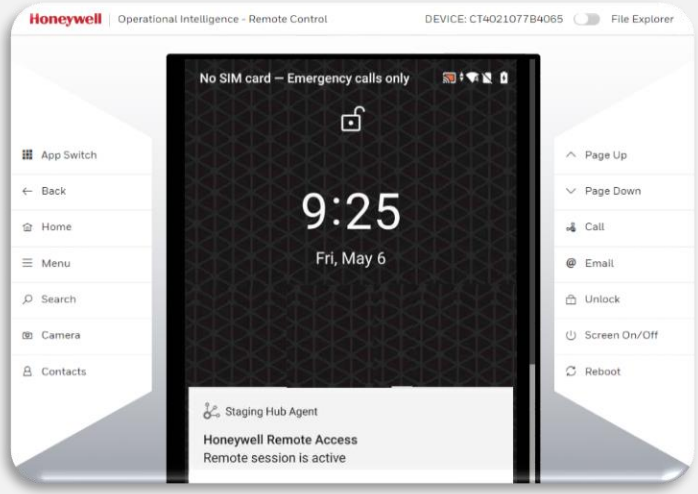
Fully & centrally provision, stage, & configure your Honeywell printers, mobile computers & scanners





Update Applications/ Firmware/OS

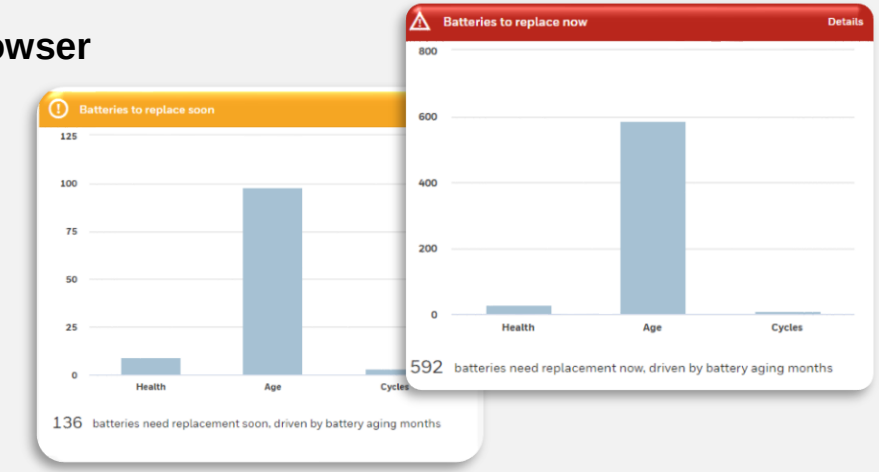
Ensure compliance and security by centrally automating your update process for device applications, security patches, & Operating System updates



Remote Control & File Browser

Respond instantly and remotely to issues in the field. Fully control Honeywell mobile computers.

View device files and update them in real time



Plan bad batteries out of operations before they impact workers

Purchase batteries that need to be replaced BEFORE they start disrupting frontline workers

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THANK YOU

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