LOCATIONING USE CASE

Customer

• Description: Large retailer with 2,500 mobile computers deployed across 500 stores
• Issue: Customer is experiencing 20% lost or stolen mobile devices over a three-year period, or approximately 7% per year. These lost devices are costing their operation over $100,000 per year in replacement equipment. The customer has no data to help them locate or determine why they are losing equipment.

The Honeywell Perspective

At Honeywell, we believe in the power of intelligence and design products to give you more of it. For several years now Honeywell has been systematically adding powerful “self-analyzing” software to all our hardware products. Operational Intelligence is capable of methodically capturing hundreds of performance data points from our devices as they are being used in your operations. When this data is compiled and analyzed it provides amazing insight into many problems common to AIDC technology users. Missing equipment is a very common issue for many companies using mobile AIDC technology. It is so easy to set the devices down during a break or when workers are sidetracked on other priorities and discover later the device is missing. So, we incorporated new features into many of our mobile products that are intended to help customers both locate and track their missing equipment.

Looking for bottlenecks is a key ingredient to creating new efficiencies in your operations. A solution for finding hidden slowdowns in your systems is to analyze your workforce’s location as they travel during the day picking orders and replenishing inventory. This is not a search for how much time your workers are in the breakroom, but rather a study of time and motion. Have you inadvertently created artificial traffic jams in your own operations? Operational Intelligence is the perfect tool to give you that intelligence.

The Honeywell Operational Intelligence Solution

Honeywell mobile computers in combination with Operational Intelligence software have the unique ability to provide location tracking information while the devices are in use. To enable this feature, a team member walked each store with a Honeywell mobile computer and identified key areas in the store they wanted to designate as a zone. Store sizes varied but they found that 20 to 30 zones per store was the average. In this example, the zone sizes are sufficiently small that if a device were ever lost, finding it within the zone would be relatively easy. This approach helped the Store Operations team track equipment as it moved throughout the various departments in the store. The frequency the zone location is sent from each device is configurable, but in this case, they settled on once every minute.
While it was believed that this tracking feature alone would have tremendous benefits in locating lost equipment, this retailer also added an additional component to their solution. Honeywell mobile computer docks were purchased and placed in every department of the store for all available mobile devices. Store staff were instructed to always dock their mobile devices between normal usage tasks and always at the end of the day after store closing. Additionally, store staff were trained to never turn off the mobile devices so they would always be sharing their location status.

Store Operations has three primary triggers for a lost device event: 1) Employee reports a lost device during the work day; 2) Device not docked at the end of day; and 3) A device misses two consecutive docking events throughout the work day. Any of these events triggers an Operational Intelligence alert to the Store Operations team and includes information about the missing device’s last reported zone location along with the time stamp. Store Operations then contacts the department in the store assigned to that device and initiates a “search and rescue” mission to retrieve the unit.

Common causes of lost devices were discovered to be: 1) Mobile device was found among on-shelf merchandise but obscured from view; 2) Mobile device was found at the point-of-sale counter instead of being properly docked; 3) Mobile device was found in excess inventory boxes in the backroom; 4) Mobile device was found in discarded boxes intended for trash; 5) Mobile device was located in the washroom or employee breakroom area; and 6) Mobile device was last tracked leaving the store through one of its customer exits.

As the Store Operations team patterned and standardized their store associates’ processes, it became more predictable to anticipate mobile device docking events. Measuring these docking events greatly helped to identify potentially misplaced equipment before it was lost in the trash or shipped inside merchandise intended for the warehouse or another store. Identifying and acting quickly was a critical cost savings to their operations.

Overall this system has been a tremendous learning experience and has not only dramatically improved their recovery of lost mobile computers but is also supporting other workflow and process initiatives that they were unable to accomplish with their previous source of data. Operational Intelligence is providing workflow intelligence as never before, and is opening the door to new operational efficiencies.