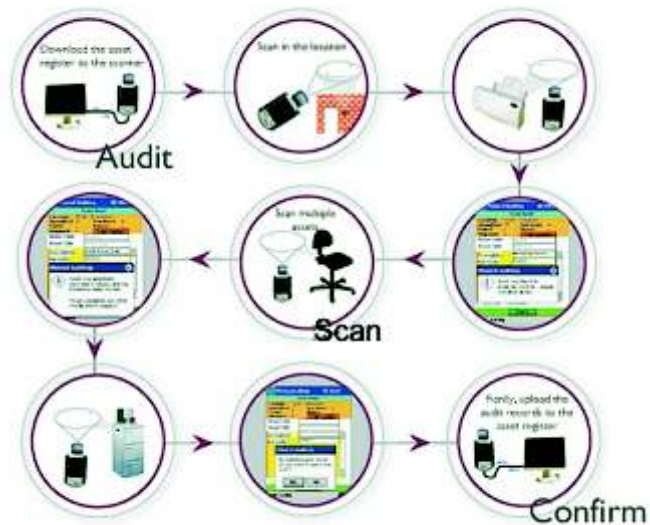


The ABC's of Asset Tracking



Application Solutions for Asset Tracking

Application Overview

Organisations deal with enormous number of assets fixed or movable that keep circulating IN and OUT side the premises. Traceability is a major concern because of the time spent that adds cost to the organisation. Lack of insight into the location and use of these assets leads to under utilization, lost revenue, reduced profits, consumer and employee safety risks. Knowing what assets are available, where they are at any given time and what their operational status is, is important to every company. However, getting an accurate snapshot of this information is not easy for most companies because

- a) asset data is often not up-to-date due to the time-consuming and costly manual effort required to collect and update the data.
- b) the data usually resides in silos across the enterprise and it is hard to get a consistent view.

Maintaining an inventory of fixed or capital equipments like machinery, furniture, laptops or industrial equipments is not an easy task. While bar codes provide a great improvement over manual process, it is no match to RFID based tracking. In fact, by using RFID system additional 75% of the time can be saved over the bar code system with greater accuracy.

The benefits of RFID go beyond tracking capabilities. RFID provides greater accuracy in sustaining data. The RFID tag stores data in along lasting microchip, instead of paper or bar code labels which deteriorates over time and need replacement. RFID also provides better data security as tags can not be cloned as easily as a bar-code or a paper label. RFID does not require line of sight scanning. Locating a bar-code or paper label consumes much time. At the same time if an asset is moved it becomes difficult to record the movement. RFID readers whether fixed or mobile read all the tags (150+ per second) in their range (max. up to 5 meters, depending on the requirement). Asset status is recorded, so that you can know which asset is **missing, moved, misplaced or present**.

Benefits of RFID Asset Tracking

- Automatically track and secure assets with little or no human intervention.
- Constant and accurate visibility.
- Assets available when needed.
- Unauthorised movement of assets are tracked immediately.
- No line of sight required.
- Fast and easy check in/out of assets.
- Reduced capital expenditure.
- Balanced asset distribution.
- Increased efficiency and productivity.
- Security concerns are addressed.
- Help in audit compliance.

THREATS:

- » Lost/Misplaced critical Assets
- » Loss of critical data
- » Lost opportunities
- » Extra Effort (time/Manpower) to locate
- » Under utilisation of assets
- » Expired maintenance and warranties (Along with Asset Breakdown Management)

SECTORS IMPACTED:

- » IT/ITES/BPO/KPO
- » Service
- » Medical
- » Government
- » Professional
- » Manufacturing
- » Transportation

BENEFITS:

- » Reduced manual errors
- » Accurate and up-to-date asset information
- » Increased asset utilization
- » Increase ROI & total cost of ownership
- » Improved security
- » Retire unused or under-utilised assets
- » Help with Audit compliance

The application along with Asset Breakdown Management can prove beneficial to organizations. They can gain full visibility into the movement, activity, security, maintenance and performance of the critical assets and reduce expenditure and time



SUCCESS STORY

The PROBLEM

An international audit firm sought to address the inefficient process of manual hand-checking of more than 500 employees laptop into and out of one of its facility.

The CHALLENGE

- Deploy RFID to track laptops and establish the ownership with employees at the time of entry and exit.
- Identify the tag that can meet the challenge of fixing on the back side of laptop and identified by the system.
- Get immediate alerts at various points for immediate action.
- Reduce the queuing of employees for security checks.
- Efficient yet cost effective solution.

The SOLUTION

Vicinity deployed the readers from ThingMagic along with Bi-Static antenna at both the entry/exit points. On each laptop a specially made RFID tag was affixed at the bottom. Also, each employee was given a RFID human tag. When ever an employee enters or leaves the facility the UHF system detects the laptop and human tag, validates and given an audio/visual alert to the security. Simultaneously, the details are displayed on the PC of IT administrator.

The ACHIEVEMENT

A fully operational system enabling the automated identification, tracking and establishing ownership of laptops, leading to increased efficiency, enhanced security.

About Vicinity RFID:

Vicinity RFID is a leading solution provider in the field of UHF RFID passive solutions. Our mission is to provide the solutions based on cutting edge technology to the complete satisfaction of customer and give them better ROI. The range of solutions include

- Asset Breakdown Management
- Inventory Tracking
- Document Tracking
- Parking Management
- Patron Management
- Speciality Retail
- Supply Chain Integration
- Customised RFID Solutions.

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Vicinity RFID provides complete solutions for UHF RFID applications including hardware, accessories, middleware application software, link to existing backbone and custom development where required to address the unique requirement of customer. It is also possible to link the solution with the plant maintenance schedule or such other back end system.

Features of Asset Tracking Solution

- » What equipments or assets you own
- » Who has them
- » Where are they
- » Take inventory of your assets
- » Audit your assets
- » Check in/out your assets
- » Full querying and reporting functionality.
- » Complete user controlled reporting

Fixed Reader

Mercury 4 from ThingMagic is more than a multi-protocol RFID reader. It uses advanced Software defined Radio Technology to be able to read any tag. Out of the box, Mercury 4 can read all variants of EPC tags simultaneously, without any loss in performance. Mercury 4 can process data as well as capture it, via a user programmable, fully functional Linux operating system. Information can be filtered, managed and even acted upon right at the edge of the network. The business rules can be programmed right into the reader, so local operations like diverting conveyors, sounding alarms, or controlling gates can take place instantly. With so much on-board intelligence, Mercury 4 doesn't just read tags - it acts in real time.



MERCURY 4

Mobile Reader/Computer



WORKABOUT PRO
Hand-held Computer

The WORKABOUT PRO from PSION TEKLOGIX is available with Windows CE .NET configuration. This device delivers the performance, ruggedness and durability required for mobile data collection in harsh environment. Based on industry standard Microsoft and Intel X Scale architecture seamless integration with the existing or desired infrastructure. Unparalleled expansion and connectivity option allow the benefit of RFID to be combined with other data collection technologies. Compact Flash and SD/MMC memory expansion slots combined with USB and a 100-pin High Speed Expansion interface, to provide flexible radio and peripheral connectivity. A high degree of customisation flexibility enables the WORKABOUT PRO to be perfectly tailored to the application.