



ABLogics Private Ltd.

CASE STUDY OF ABB - BTP

RFID Integrated Asset Management System(r-Track)

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ABB – BTP wanted to implement automated **RFID based Asset management system to track and audit IT, Non-IT and general assets**. ABL implemented RFID integrated r-Track solution which improved the performance efficiency of SCM department.



Executive Summary:

ABB BTP is an advanced research lab and bonded warehouse at a prestigious location in Bangalore. They receive the high value testing equipments in different categories. These assets include IT, non IT and general assets. These assets will be shifted to different Location for testing and resent back to the original location.

ABB BTP is located in a sprawling area with assets spread across 5 different floors. Each floor has different test department and assets keep moving from one floor to the other.

During this transition there was manual entry happening at the security desk. However this was cumbersome and some employees carry the assets without making entries at the security desk.

Problem Statement:

In spite of having SAP and integrated barcode system, there was major gap in the books of accounts against physical availability of assets. During audit ABB team noticed that many expensive assets got either misplaced or not traceable within the unit. This was causing major financial implications and threat to security measures.

ABB BTP has decided to minimize the problem by implementing automated asset tracking and audit process i.e. RFID based Asset Management Solution.

AB Logics Pvt Ltd was explained of the scenario and decided to challenge the problem and come out with possible better solution.



Key Challenges:

- Tracking the movement of IT , Non-IT and general assets across the floors
- Tracking the location of assets
- Asset Inventory audit
- Linking of RFID tag number to existing barcode number and serial number which is unique across ABB units
- ABB proposes to retain the existing barcode system
- All assets were metal based – challenging the positioning of the tag for better reading capability
- Data export from the new system proposed to the legacy system in use
- Total number of assets were 25000

Solution Design:

AB Logics has addressed the requirements and pain points of the client through implementing an RFID Integrated Asset Inventory Information and Management system **r-Track**.

AB Logics is a System Integration Partner and Value Added Reseller of Convergence Systems Limited, Hong Kong.

ABL Innovatively planned and designed the solution for ABB that involved fixing of passive RFID tags to all the assets.

Being all metal based assets, and to provide cost effective solution, we designed passive tags in house and used for tagging the assets at ABB. Our customized in house tags produced much better read range and functioning well for the last 2 years.

Solution Components

1. **Handheld Reader:** The Handheld reader is a rugged device – it has been proposed for audit of inventory inside warehouse, audit pre-dispatch and locate missing inventory
2. **Integrated RFID Readers:** This is an integrated RFID reader. CS203ETHER is an all weather ruggedized Ethernet connected UHF EPC C1G2 Integrated RFID reader with long read range and high read rate. This integrated reader is extremely versatile and can be used in all environments.
3. **Tags:** Tags Used – Designed and manufactured in 2 designs by ABLogics using Alien Squiggle Inlays



(These tags were designed by ABL in house specially for ABB requirement)

Solution Methodology

- An RFID tag has been fixed on the surface of the IT, Non-IT and general assets that have to be tracked.
- The RFID solution offered is conformed to EPC GEN2, Class 2, ISO 180006-C globally accepted standards.
- Metal tags were mounting on metal surface assets, tags were read/write enabled.

- Each of the tags has a unique RFID number. This number is associated to the existing barcode number of the assets which in turn associated with asset data.
- For the new assets the tags are fixed at the receiving point. This can be associated with GRN and GIN.
- Integrated RFID readers are placed in a Kiosk with a touch screen. Independent web based Kiosk application was developed for tracking the In and Out movement of the assets in each floor. When the asset is being carried by an employee the RFID reader captures the data and records in the system.
- At any given point of time, ABB SCM department are able to identify the location of particular asset.
- Kiosk track and trace application is integrated with r-Track and combined reports are generated for reviewing purpose.
- The handheld reader is used for asset inventory audit
- The information from r-Track is exported to the legacy SAP – MM Module.
- Reports has been generated on, location/category/sub category wise
- When an asset is being moved from ABB to any other location the tag is removed and disassociated at the point of dispatch. The tag can then be re-assigned to any other asset.

ROI / Benefits through this solution

- Accurate asset visibility
- Tracking the movement of assets
- Speedy Audit process
- Reports on current asset status on need basis
- Time efficiency and minimal manpower requirement