

Case Study:

RFID Scanner Cabinet Boosts Warehouse's Efficiency

A 3PL service provider benefits from using RFID to manage their fashion brand client's consignment, recorded a payback as short as 1 year

Hashtags: #RFIDTechnology, #Athleisure, #LuxuryBrand, #HongKongFashion, #InventoryManagement, #LogisticsOptimization, #SupplyChainInnovation, #RetailTech

Introduction

The retail industry has been rapidly adopting new technologies with the goal of increasing efficiency and accuracy. One such technology is RFID, which allows for quick and accurate tracking of inventory. In this case study, we will examine how a 3PL service provider implemented RFID technology to support a quick expanding athleisure luxury brand in Hong Kong.

Background

The athleisure luxury fashion **Brand M** has over 20 shops in Hong Kong. It offers a wide range of fashion products, including clothing, footwear, and accessories. RFID is adopted for its operations. The technology copes with the demanding tasks of replenishing, returns, sales orders, and goods receiving. Before the implementation, it was a time-consuming task to check each box manually, even with the use of barcode technology. **Brand M** partners with **Warehouse G**. It acts as a 3PL service provider to support the brand's internal inbound and outbound logistics.

Implementation

Since the fashion brand already has every item tagged with RFID tag or label, **Warehouse G** only has to install the latest RFID-scanning device with integrated software to support the brand's internal inbound and outbound logistics, using **RFID Semi-Auto Cabinet**.



Warehouse G is now able to provide a much quicker inbound checking simply by putting the whole carton box into a RFID scanning cabinet. Instead of opening each boxes for counter-check, with the use of RFID scanner cabinet, the list of inventory comes out within 2 sec. In case of any missing pieces or over-shipped item, the list is printed out with a direct thermal transfer label so the operators can do further checking.

LESS BOX-OPENED, MORE SAVING

Inbound/Outbound: The inbound checking process was much quicker, with the scanning cabinet able to scan the RFID tags on the entire carton box at once. The outbound sales orders made by manual picking could be verified with RFID before being dispatched to retail stores. Printing systems is integrated with WMS systems, such as inventory management or order processing systems, to automate the printing of labels and shipping documents. This helps to reduce manual labor and improve efficiency.

Return / checking: The RFID pad reader on USB can help **Warehouse G** in the return/checking process by allowing for the quick and accurate short-range scanning of RFID tags. Comparing with barcode technology, RFID does not require searching for the paper hangtag and aiming at barcodes, it also helps to reduce the time by over 80% of folding effort for apparel items just due to opening the plastic bags.

LESS BAG OPEN, LESS FOLDING; LESS WASTAGE

Results

The implementation of RFID technology only took **2-month** to complete, and it has greatly improved the efficiency and accuracy of the brand's logistics operations. **Warehouse G** was able to provide quick and professional support as a back-office service for **Brand M**'s retail shops.

The ROI (return on the investment) in the semi-automatic scanning cabinet was shortened to **just 10 months by direct labour saved**. The further software extension to stock-taking will bring much more promising saving.

Overall, the implementation of RFID technology was a successful venture that greatly benefited the brand and its customer.

