



SmartDC improves service levels for 3PL provider and helps realize savings to its customers

Learn how distribution visibility solution by KeyTone helped a 3PL service provider and its customer achieve operational excellence in their supply chain efficiency

A hi-tech manufacturer that is a leading marketer of award-winning flash cards and drives has outsourced its operations to third party logistics provider to reduce costs and focus on its core competencies.

Finished goods are shipped from their manufacturing location in Asia to 3PL's DC. These goods are recorded as inventory in the 3PL order system and stored until an order to assemble and ship is given to the 3PL provider.

Once the order is received, 3PL assembles the products into individual boxes and creates cases that are pick-packed and shipped based on the order.

Order feeds are directly received from customer's Oracle order management system to 3PL' SAP system.

All shipments are manually verified against an order prior to loading in the carrier. The 3PL uses LTL carriers to ship pallet orders while the cartons are shipped using UPS and FedEx.

As a part of their service agreement, the 3PL maintains a minimum level of buffer inventory, guarantees minimum volumes and ensures accuracy of inventory by performing physical count of inventory at least thrice a week. Additionally, it also provides shipping confirmation data to the customer based on orders shipped.

Daily shipping volumes are typically between 2,000-3,000 cartons per day, which peaks to 6,000-8,000 per day during seasons like back to school, and black Friday. The busiest time in the warehouse is when these orders need to be loaded in the carrier before the cut-off time of individual carriers.

SmartDC Case Study

Why RFID?

Companies may be inclined to stay with just barcode technology; however, they will quickly run into limitations. Only RFID has the inherent capabilities needed to achieve real time distribution visibility and control, as shown in this table. What jumps out from this comparison is RFID's capability to amplify the benefits received from traditional bar coding.

By eliminating the manual task of reading a bar code, RFID automates data entry. This permits new ways of processing items, events, or transaction.

Key Features	Barcode	RFID
Simultaneous scanning – capable of simultaneous reading of tagged units, cases and pallets without human intervention	X	✓
Readability not impaired by dirt, abrasion, or packaging contours	X	✓
Unique identity code is resistant to counterfeiting and labels cannot be duplicated easily	X	✓
Physical size - aspect ratio of a Tag's length vs. width is very flexible and not a significant factor for the Reader.	X	✓
Various types of information through the life span of the products can be written on the same label multiple times	X	✓
Reusable tags	X	✓

Critical Business Requirements

In order to realize ROI from RFID, the hi-tech manufacturer and the 3PL provider were looking for a solution that will provide distribution visibility with the breadth and depth of information across its entire DC operations.

3PL provider is specifically looking for one solution that:

- Is easy to manage, can support multiple customers and is flexible to adapt to any DC process
- Provides the ability to manage security and privacy of order transactions for all their customers and provide secured access to generate visibility reports by each customer
- Tracks usage of shared and customer dedicated DC resources
- Compliments existing processes and supply chain systems by providing accurate and up to date information about inventory levels, orders, process exceptions and DC resource utilization

3PL provider's customer, hi-tech manufacturing company is looking for a solution that:

- Provides real time order visibility and status which can be used to respond to changing business requirements quickly
- Provides automatic proof of delivery for all orders shipped by 3PL so that the information can be used to resolve claims and meet financial compliance
- Record accurate inventory count of finished products and Work-In-Process inventory
- Provide traceability of products throughout the distribution supply chain
- Capitalize on RFID data to determine expansion needs by forecasting short term and long term warehouse capacity requirements and customer demands

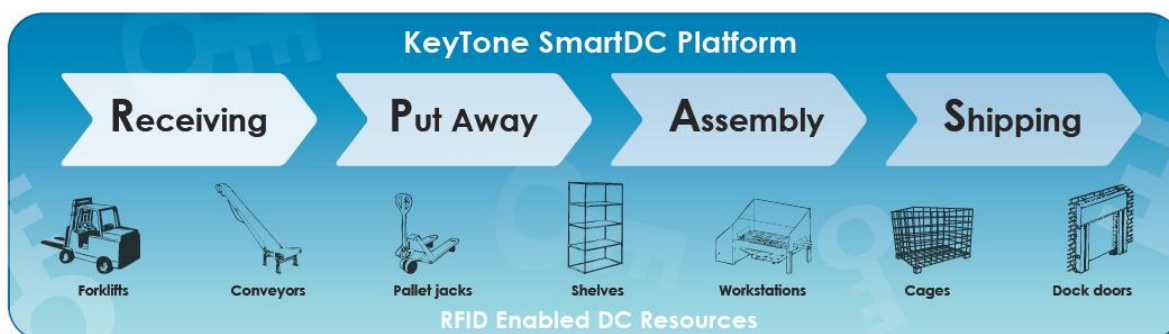
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Why KeyTone?

The 3PL provider and the hi-tech manufacturer evaluated many system integrators and solutions company based on the following criteria:

- Solution provider should have experience in developing a phase wise roadmap and a deployment approach while laying a technology foundation that can be scaled easily to realize the benefits of RFID
- Solution should not only integrate with existing supply chain systems but also integrate people and processes
- RFID brings value to a host of business scenarios and each of the business scenarios affects a different business process involving different set of people. A good platform should be able to cater to these different needs
- Solution provider should be able to provide an end-to-end solution and be able to support the 3PL to build in-house expertise to manage and maintain the system after deployment
- Solution should be easy to upgrade as new standards and new RFID technologies are introduced

KeyTone has developed a comprehensive solution for distribution visibility by leveraging its SmartDC software platform. SmartDC is modular, making it easy and flexible to adopt RFID for any business process and extend its capabilities to other DC processes as the company grows.



For companies that operate their own DC, SmartDC delivers greater insight and collaboration without sacrificing control and flexibility across distribution operations. By using SmartDC, companies are able to improve productivity, reduce shipment errors, decrease costs, increase quality, and improve product sales.

SmartDC provides 3PL providers with the ability to improve collaboration with all their customers using a single RFID platform. SmartDC improves supply chain visibility, productivity, and efficiency resulting in faster response times to changing business requirements. With SmartDC, 3PL providers can deliver more strategic value added services, thus establishing greater competitive advantage in attracting new customers and retaining existing ones.

SmartDC helps companies:

- Simplify RFID adoption by providing flexibility to enable selected business processes today and add new DC processes as the company grows
- Improve visibility, accuracy, and throughput by cross-functional collaboration across all distribution processes: Receiving, Put-away, Assembly and Shipping
- Achieve compliance and reduce business risk and liability associated with not meeting various financial and retail mandates
- Compliment existing processes and supply chain systems by providing accurate and up to date information about inventory levels, orders, process exceptions and DC resource utilization
- Capitalize on RFID data through granular analysis of DC performance, trends, and events

SmartDC Case Study

KeyTone was chosen because it had the experience:

- In developing a RFID strategy & phase-wise execution plan
- In providing a solution that can enable different types of products and processes with RFID
- In 3rd party enterprise application integration
- In managing & supporting large scale deployments

Benefits

KeyTone distribution visibility solution increases the ROI and expedites payback from RFID technology investment within DC environments. Whether the business driver is process automation, better inventory traceability, increased throughput, and productivity, enterprises can improve forecasting, quickly adjust processes, and improve overall distribution of their shipments. In addition, enterprises benefit from the following:

- **Real time inventory traceability**
SmartDC manages inventory visibility across various DC processes and provides the organization the ability to see the location of any inventory by DC process in real time
- **Resource Utilization**
SmartDC' decision support tools help optimize resource utilization for both inbound and outbound shipments by combining information on warehouse operations with real time updates of activity across the supply chain.
- **Inbound goods visibility**
SmartDC provides visibility into the receiving & put-away processes and eliminates shrinkage and claims dispute
- **Outbound shipment management**
SmartDC provides order like visibility across pick-pack-ship process and co-ordinates dock operations to ensure the right shipment is loaded in the right truck.
- **Value-added services**
SmartDC enables Work-In-Process inventory tracking in custom assembly and kitting processes

Inbound reports	Put-away reports	Assembly Reports	Outbound reports
Electronic proof of receipt	Physical inventory report (by location, by SKU, etc.)	Yield report (by process, station, and SKU)	Electronic proof of delivery
Receipt status report (by order, suppliers, time etc.)	Inventory movement detail report	Station utilization report	Order status report (by order, by suppliers, by lot etc.)
Receiving dock utilization report	Cycle count report	Daily assembly report (by lot, time, station, period)	Order loading report
Inventory report	Inventory traceability report	Defect distribution report Reject report by process/station	Order verification report

Critical Distribution Visibility Information

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