Corralling Stray Reads

Garbage in, garbage out. This well-known axiom about the quality of computer data is applicable to RFID in-store inventory- management information: Results are useful only if the system reads the correct tags. The problem is, as RFID technology has matured, read rate performance has improved. So now, fixed readers identify not only the tagged merchandise you need to track as it moves from the back room to the sales

floor (or vice versa), but they also read tagged items in the surrounding area. These stray reads must be managed to ensure data accuracy, so retailers can obtain real-time inventory visibility and gain business value.

Just how significant is this issue? Say, for example, men's jeans in the back room are stacked on a wall adjacent to the door. An RFID reader could read the tags on those jeans and interpret that inventory as having moved through the portal. The inventory system would then mistakenly consider those jeans available on the sales floor when, in fact, the shelf might be empty. If a customer can't find the jeans he wants to purchase, the store loses the sale. Moreover, losing the sale of a "core" item like jeans often results in lost sales of ancillary items such as shirts, belts and socks.

In response to this challenge, Checkpoint Systems and other RFID solution providers have developed intelligent systems that enable stray read-filtering capabilities to ensure a high degree of accuracy at doors separating the sales floor and back room, as well as at other fixed read points, such as receiving doors and store exits. These systems read all tags, but only report those that move through the read point.

Store shelves pose a similar challenge, but here, too, solution providers have devised a way to ensure inventory accuracy. An application on a handheld reader can be configured to track only certain merchandise categories and styles—for example, denim, men's, blue, size 12. So when an

employee takes inventory, the handheld reads all the items on the shelves but filters out those that do not meet the criteria. If the retailer maintains a planogram of items on a shelf, the handheld can scan the bar code on the shelf, identify the shelf location and determine if the items it reads match those in the planogram. The only catch: The handheld can’t differentiate between items at the end of one shelf and the beginning of another.

Apparel retailers increasingly are adopting RFID-based solutions because they recognize the business benefits of merchandise visibility and loss prevention. Overcoming the stray-read challenge is essential for them to realize RFID’s full potential.

Raj Jayaraman is senior director of merchandise visibility solutions for Checkpoint Systems, a provider of RFID-based merchandise visibility and apparel labeling solutions.