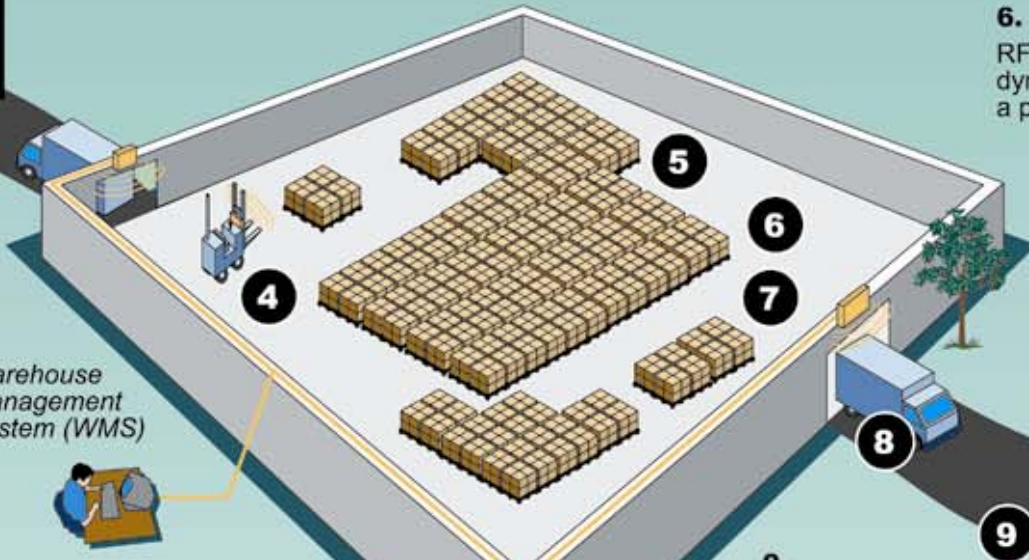


## DISTRIBUTION



**4. Arriving products** at a DC are automatically detected by readers at the unloading docks. Product is received, recorded, and allocated against orders. **Cross-docking operations** are streamlined by matching product receipts with outbound shipments. Unallocated product can be dynamically slotted, increasing warehouse efficiency.

**1. Raw materials with an RFID tag** are automatically received, greatly reducing the time and inaccuracies associated with manual inspections, three-way matching, and data entry. Products are directly loaded into inventory systems, allowing for the release of production orders and an uninterrupted flow (for JIT environments). RFID can also facilitate dynamic stocking.

**5. Sensors** at various points in the supply chain distribution network can provide information and alerts about temperature, humidity, shock, and other pre-set alerts.

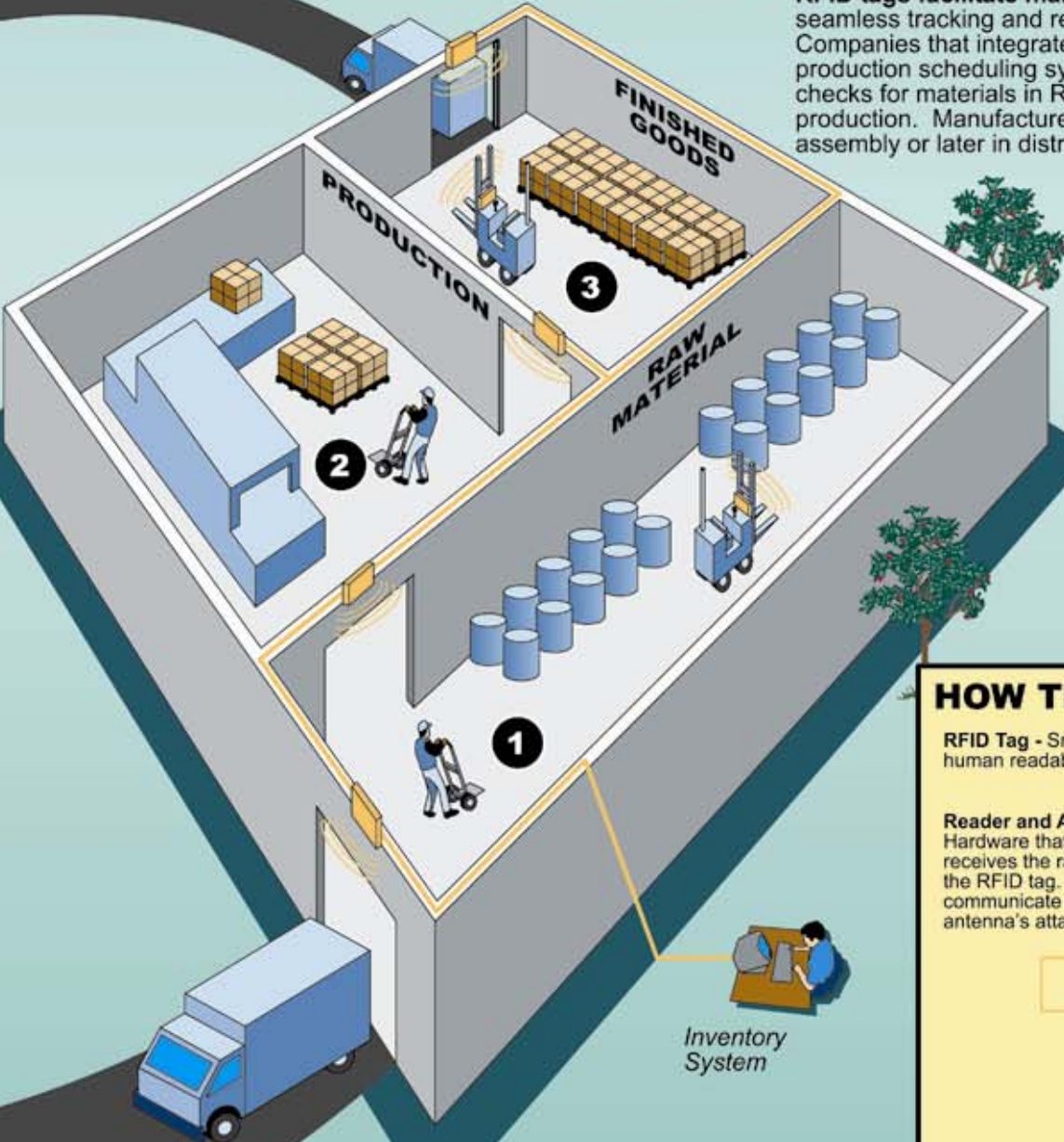
**6. RFID** increases the effectiveness of a **warehouse management system** by facilitating dynamic slotting, inventory accuracy, and pick routes. By tracking every movement of a product, the WMS is in synch with the other DC applications

**7. RFID** benefits the customer by **facilitating** the following activities:

- Product loaded on the outbound vehicle can be validated based on tag data
- RFID technology can integrate with the creation of key shipping documents (e.g., BOL, ASN, CSO)

**8. RFID** increases the transparency of goods in transit by relaying real-time shipment **tracking** information. Most of this functionality is provided by carriers. The lot tracking points are made better from a recall management point.

## MANUFACTURING

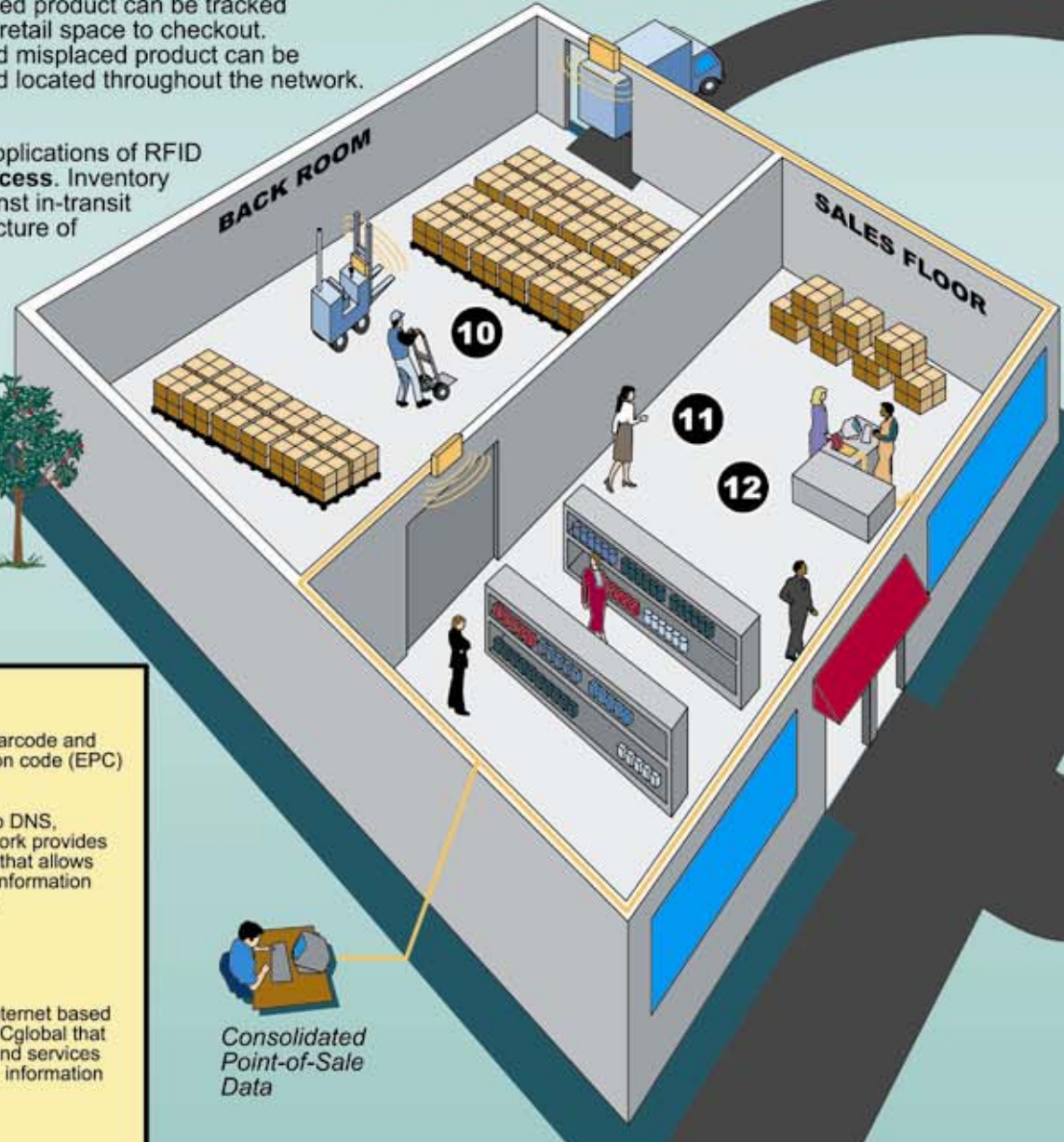


**2. RFID tags facilitate manufacturing** by enabling seamless tracking and retrieval of RM product. Companies that integrate their RFID technology with the production scheduling systems can perform real time checks for materials in RM, WIP to help better schedule production. Manufacturers can tag the finished product in final assembly or later in distribution.

**3. Shipping** can be improved by automatically verifying pallet level RFID reads to shipping manifests.

**9. Retail product tracking** is improved through the use of RFID. Tagged product can be tracked from backroom to retail space to checkout. Empty shelves and misplaced product can be communicated and located throughout the network.

## RETAIL STORE



**10. One of the most impactful applications** of RFID is in the **replenishment process**. Inventory levels can be balanced against in-transit orders resulting in a clear picture of the replenishment profile.

**11. Product recall management** can be improved by the track-and-trace visibility provided by RFID. Lot management can assist in the tracking of specific product, mitigating the effect of a large recall.

**12. Shrinkage and store theft** can be reduced by placing tags on individual products. These tags are deactivated after the customer pays for the product. If someone attempts to leave the store with a product that has not been deactivated, a reader at the exit will activate an alarm or signal.

