

7.20: UPC, RFID, and QR Codes

Learning Objectives

- Describe the purpose of UPC, RFID, and QR codes

There are three common technologies retailers use to identify and track individual product units in retail sales transactions, inventory management and distribution, or supply chain- UPC, RFID and QR codes. Most of these symbols are quite familiar as we see them on a daily basis.



The Universal Product Code (**UPC**) is a barcode symbology that is widely used in the United States, Canada, United Kingdom, Australia, New Zealand, in Europe and other countries for tracking trade items in stores.

Radio-frequency identification (**RFID**) uses electromagnetic fields to automatically identify and track tags attached to objects. The tags contain electronically-stored information. No line-of-sight is required to receive information from RFID which makes it better suited for inventory flowing through a warehouse conveyor system, for example.

A quick response code (QR code) is a matrix barcode made up of dots. Because it is two-dimensional, it can hold substantially more data than one-dimensional barcodes, such as UPC. It can be read by a QR scanner or by a smartphone with a camera.

This YouTube video does a fairly good job providing some background information on this technology. It discusses the origin of bar codes, describes how they work, and helps us understand the evolution to QR codes.

Practice questions

<https://assessments.lumenlearning.co...sessments/9204>

Video -- RFID vs Barcoding | Which Will be the Future of Business Innovation?



Video -- RFID and QR code for Logistics and Inventory in the Warehouse



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