

1.9: Information Systems in Retail

Learning Objectives

- Discuss the role information systems have played in the changing retail industry

Information systems are the tools, hardware and software that help retailers achieve success in a dynamic environment. They serve several functions including planning, inventory control, managing budgets and sales goals, and also with point of sale transactions and logistics.

Let's take a brief look at some of the most frequently utilized information systems in retail.

Inventory management software (IMS) is a software system for tracking inventory levels, orders, sales and deliveries. It can also be used in the manufacturing industry to create a work order, bill of materials and other production-related documents. Companies use inventory management software to avoid product overstock and outages. It is a tool for organizing inventory data that before was generally stored in hard-copy form or in spreadsheets.

One aspect of IMS is Asset Tracking which is when a product is in a warehouse or store, it can be tracked via its barcode and/or other tracking criteria, such as serial number, lot number or revision number. Systems. for Business, Encyclopedia of Business, 2nd ed. Nowadays, inventory management software often utilizes barcode, radio-frequency identification (RFID), and/or wireless tracking technology.

Let's take a look at an example of how one retailer, Lululemon, uses RFID.

A link to an interactive elements can be found at the bottom of this page.

You can view the [transcript for "A RFID Journal Video lululemon" \(opens in new window\)](#).

Here are some other quick stats about RFID:

- RFID allows retailers to improve accuracy from 60 to over 90% due to monitoring stock more often and efficiently.
- Lululemon accuracy improved to over 98% as a result of using RFID. Employees in store are also able to check inventory levels with the customer standing right there!
- RFID tags are utilized now more than ever in retail: Growing from 3 billion tags in 2014 to almost 8 billion in 2017
- Target rolled out RFID to all stores in 2016 and used more than a billion RFID tags in the process.

CRM (Customer Relationship Management)

Customer relationship management software looks at data about current and future customers to help a company understand the customer better in hopes of retaining and building customer relationships.

Customer Relationship Management systems capture the following details to help retailers drive sales and gain a better understanding of the consumer:

1. *Contact Details*: Name, email, social media, how customer learned of company
2. *Personal Profile of Customer*: Family info, hobbies, group memberships and associations
3. *Sales history*: What have they purchased in the past? How did they pay for the item? How did they respond to certain advertisements?
4. *Customer Communication*: This includes any time a customer speaks with a company representative.
5. *Customer Feedback*: Companies typically get feedback by asking customers to fill out surveys.

Let's take a look at the case of Target that lost customer's trust due to a breach in data and what they are doing to gain some of that trust back. Although Customer Relationship Management is critical in understanding the customer there have been recent cases in which personal customer data has been breached causing concern industry wide. Can you think of any other cases in which personal customer data has been breached and what the company did to regain trust?

A link to an interactive elements can be found at the bottom of this page.

You can view the [transcript for "How Target's CEO is Working to Regain Customers' Trust" \(opens in new window\)](#).

Accounting Information Systems

An **accounting information system (AIS)** is a system of collecting, storing and processing financial and accounting data that are used by decision makers. An accounting information system is generally a computer-based method for tracking accounting activity in conjunction with information technology resources. The resulting financial reports can be used internally by management or externally by other interested parties including investors, creditors and tax authorities. Accounting information systems are designed to support all accounting functions and activities including auditing, financial accounting & reporting, managerial/ management accounting and tax. The most widely adopted accounting information systems are auditing and financial reporting modules.

Summary

When first introduced computer based information systems were controlled by third parties that the retailer hired to do analysis. This was also due to the size of rudimentary computers that could take up an entire room and require teams to run them. As technology advanced, these computers were able to handle greater capacities and therefore reduce their cost. Smaller, more affordable minicomputers allowed larger businesses to run their own computing centers in-house and the began to decentralize the computing power from large data centers to smaller offices. In the late 1970s, minicomputer technology gave way to personal computers and relatively low-cost computers were becoming mass market commodities, allowing businesses to provide their employees access to computing power that ten years before would have cost tens of thousands of dollars. This proliferation of computers created a ready market for interconnecting networks and the popularization of the Internet. High speed networks and enterprise software has enabled all aspects of the business enterprise to be combined together to offer rich information access encompassing the complete management structure. Managers can now access a MIS remotely with laptops, tablet computers and smartphones.

The widespread adoption and usage of MISs is closely related to advancement in modern technology and innovations. As MIS continue to change and become more accessible they play a larger role in the day-to-day life of the retail industry. MISs allow for more internal management, meaning there is less of a need to hire out side of company to do data analysis. Less man hours are needed to do complex projects or filing of paperwork since it can be done electronically and easily completed in store.

The modern day MIS continues to help managers, workers, and shoppers have successful interactions. A MIS assists companies to identifying areas that can help the company improve its business processes and operations. Companies are able to identify their strengths and weaknesses due to the presence of revenue reports, employees' performance record etc. Since an MIS uses a wide array of data it allows managers and decision makers to accurately and efficiently manages all types of labor and products in a retail setting to increase business value and profits. Benefits of using a MIS include making it easier to track items and products in the supply chain, reducing inventory, reducing labor costs, and establish and maintain good customer relationships.

? practice questions

<https://assessments.lumenlearning.co...sessments/9127>

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