

IMPROVE THE CUSTOMER EXPERIENCE AT RETAIL STORES USING TECHNOLOGY

CONNECTING OPERATION, CUSTOMER AND DATA

By Lakshan Perera





OVERVIEW

Retail is a booming industry which is growing with an annual rate of **20-25%** while making an effect to the economy of a Country. In layman's terms it is about selling of goods or services between the seller and an end user. So the retail is about exchange of money in any kind of cash or kind of a medium. Retail Supermarket is a component that does an enormous job in the retail management pillar.

In the 21 st century, technology is driving retail forward rapidly. Subsequently more and more retailers are working to implement enterprise IT Solutions with cutting edge technology to manage their day to day operation, inventory, customer detention mechanism. Below are some of the Software Solution Systems that address the retail business cases from both Customer's and Employee's perspective, while providing innovation and transformation;

1. Mobile applications and push notifications

2. Back-End infrastructure

3. Warehouse Management Systems

4. Inventory Management Systems


5. Mobile Beacons

6. Customer Analytics Segments


7. RFID Technologies

With the rapid innovation of the mobile platform, the needs of the Customers get expanded day by day. So that, customers are becoming more sophisticated as there are more options are available to purchase.


The way they see the business throughout their involvement symbolizes through the Customer Experience (CX). With a higher CX value higher the Customer will retain with the business. So that, CX has became an most have component in the retail domain.



With higher CX value Customer is
9X
more likely to
Recommend



With higher CX value Customer is
8X
more likely to
Trust



With higher CX value Customer is
10X
more likely to
Forgive and Retain

In this piece of work the main focus is to find out the technologies that enables the Customer Experience at physical and online Retail Stores.

TECHNOLOGIES THAT CAN USE IN ONLINE STORES

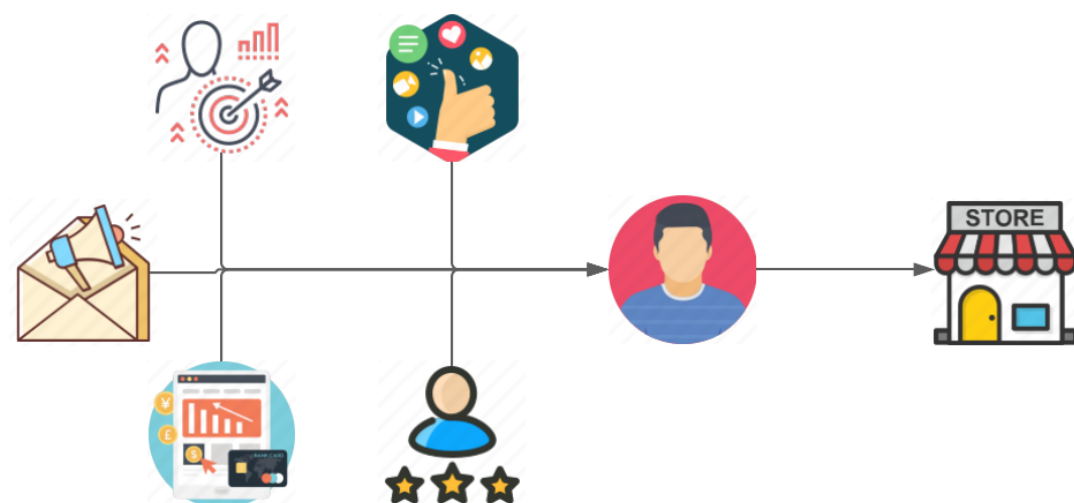
1. RETAIL OMNICHANNELS

In simplest terms, Omnichannel stands for, having multiple channels (*traditional and modern channels*) to sell the retail products to Customers without incurring losses.

For instance; take orders by phone, face to face and catalog sales are falling under traditional channel and orders coming from ecommerce platforms and EDI falls to the modern channel.

Customers who use modern channels expect the order full-fulfillment to be inexpensive or free shipping and faster delivery. So to cater for this requirement retailers look out for Omnichannel strategies. From retailers perspective it gives more availability, drive sales and traffic and integrate with digital touch points.

From the other side, it provides Customer number of convenient channels to complete the purchase.



2. PUSH NOTIFICATION AFTER PURCHASE

Push notification is a way that once the retailer knows the customer for a sometime, pass them some information relates to ongoing deals.

Once the notification is scheduled, then through the *cloud environment and push notification service component* it bring the accurate information to the customer's finger tips.

These notification services are used by service providers like retail chains, airlines, hotels to remind the appointments and hot deals. Technologies like these help to improve the customer experience.

3. INTEGRATED CUSTOMER ANALYTIC PRACTICES

A good understanding of customers is extremely important for running a successful business. Through, **Know-Your-Customer (KYC)**, retailer can create and deliver the offers as per the expectations.

In order to understand the customer expectation, through Segmentation, Targeting and Positioning components (**STP framework**) customer analytical techniques can be used to get more accurate insights.

These data help to increase sales, reduce costs, to have a deeper customer engagement and purposeful promotions improve customer experience.

4. VIRTUAL FITTING ROOMS

A virtual fitting room technology enables customers to find sizes and style profiles by based on their needs. This technology is especially beneficial for apparel companies, granting customers the ability to “try on” and purchase clothing without having to leave the comfort of their homes.

According to survey statistics, retailers have effectively reduced the return rates by 36%..



Technologies that can use in physical stores

1. Radio Frequency Identification

For a better track of individual items, Radio Frequency Identification tags has helped to expand growing number of retailers.

In many business cases, vendors has to implement the tracking system to make use of it. RFID reader and the RFID tag object are the main components that can be seen in this technical structure.

Once the object is within the range, by receiving the feedback signal from the reader recognize the respective object.

Tracking assets and managing inventory, improving inventory accuracy, implement a better production control are some of the advantages of having RFID technology.

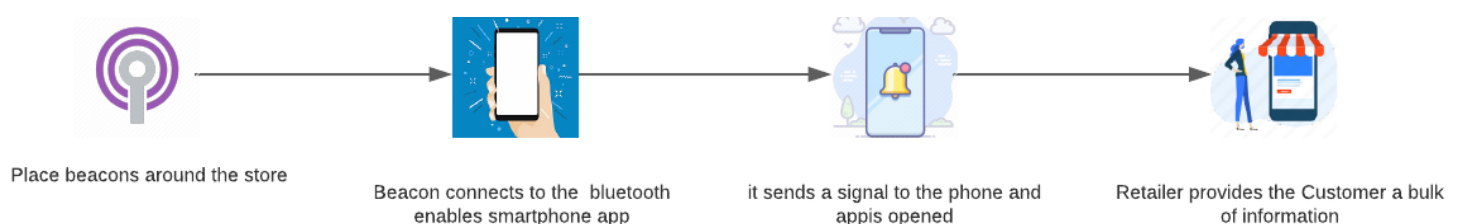
2. Beacon Technology

Technically, these low cost blue-tooth equipment that are used to transmit information to the near-by devices.

Benefits of using beacons are:

1. Ability to send telemetry information in a reliable way
2. Open format and flexibility
3. Integrate with Google and IOS products as it is widely supported
4. Improve interactions with Customers and give a better Customer experience

For instance, by sending the special offers to the Customer retailer convince to purchase them while directing to the location



3. Mobile Point of Sale (mPOS) Systems

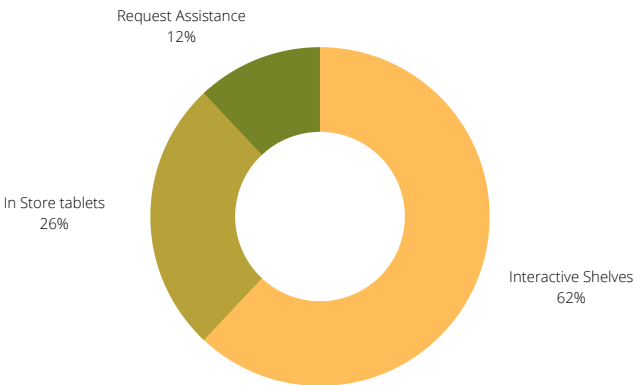
Business is going every where with mobile. This technology enables to not to stay longer around cash registers. And allow Customer to complete the transaction through credit, debit and prepaid cards. According to the research results, more than 64% of Employees are happy and made their jobs easier.

And also, it gives retailers a way to integrate new payment types such as Apple pay, which is pitches the Customer experience into a new level and retain and continue the Customers with their Business

4. Inventory Tracking

As well as the other technologies, Inventory tracking and management also make a profound impact over the Customer experience. The Customer experience for this area is also growing, as most of the customers prefer to know if the product exist in the stocks without the assistance of a salesperson.

According to a consumer survey done on 2019 by the International Council of Shopping Centers, 64% of shoppers are interested in for interactive shelves, 26% of customers prefer for in store tablets and rest of the customers look forward for onsite assistance. The results are demonstrated in below chart.

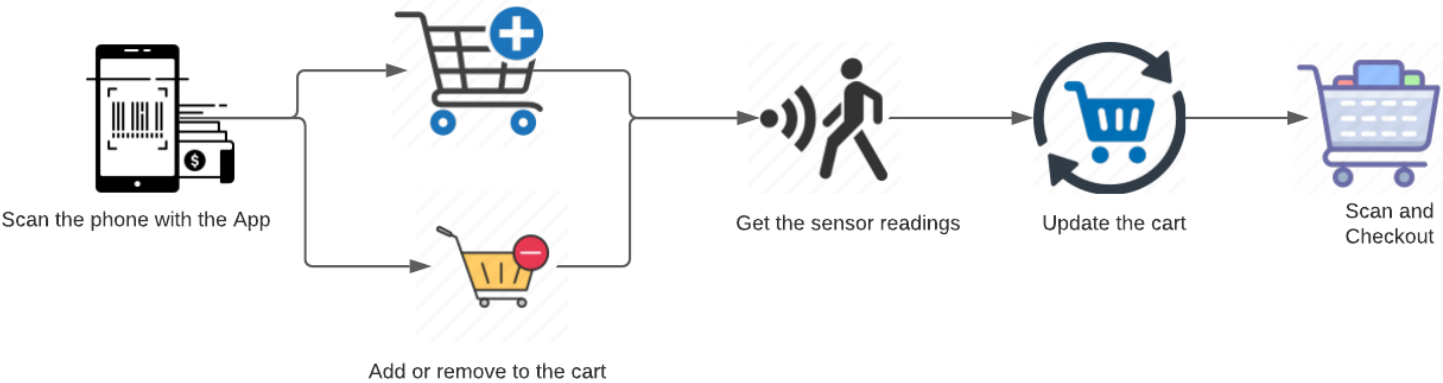


5. CASHIERLESS CHECKOUTS

This technology trend is visible during the Covid 19 pandemic time period. When the human touch is limited, placing a touch free practice gives value to the retailer and the customer.

During this process, it uses internal sensors to scan each item that a customer picks up. Once the shopping is completed, customer can scan the phone and can walk out of the store, knowing that the credit card will be charged automatically.

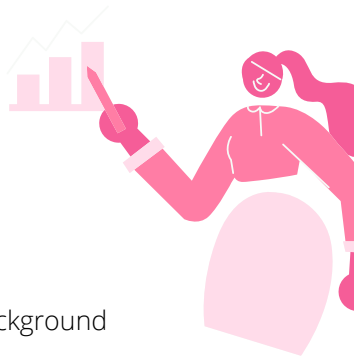
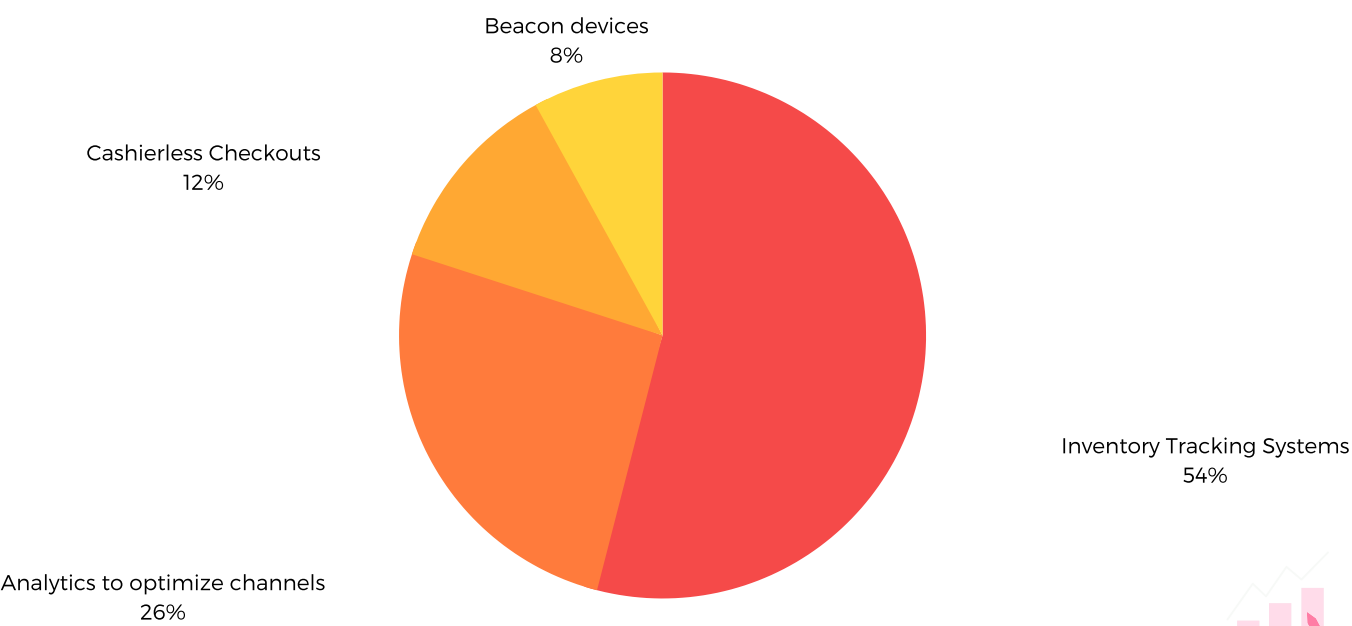
During this aspect customer does not want to wait in long lines to pay for the bill. Finally, by placing the Cashierless checkouts, it can guarantee a cleaner and more convenient retail customer experience.



Most of the identified retail business use cases can be achieved by applying the respective technology. The same RFID tags that support loss prevention also lead to improved inventory tracking; to handle the order full-fillment successfully retailers can apply omnichannel; also they hep to absorb more shoppers into business; creating more opportunities for connecting customers with the business through sending notifications; and pushing them to purchase items through mobile beacon technology; RFID assist to prevent the loss in the inventory operation and track the movement of each item.

By applying the correct technology along with the improved and effective solution it can help retailers to shift the entire business landscape and customer shopping experience in to a new level.

Finally, according to the 2020 retail technology survey report below pie chart shows what are the technologies that users has mentioned to implement to provide a better customer experience



FURTHER REFERENCES

- 1. **Retail industry background** - <https://www.vault.com/industries-professions/industries/retail/background>
- 2. **Embrace Omnichannel in Retail** - <https://www.mulesoft.com/resources/api/omnichannel-retail-strategy-benifits>
- 3. **Using virtual fitting rooms** - <https://www.shopify.com/retail/virtual-fitting-rooms>
- 4. **RFID Technology** - <https://www.atlasrfidstore.com/rfid-insider/rfid-vs-barcodes/>
- 5. **Data analytics and Big data practices in retail** - <https://jelvix.com/blog/use-big-data-in-retail-business>
- 6. **mPOS in retail domain** - [https://moki.com/blog/mpos-systems-what-are-they-and-why-should-you-care/#:~:text=Mobile%20Point%20of%20Sale%20\(mPOS,card%20readers%20and%20barcode%20scanners.](https://moki.com/blog/mpos-systems-what-are-they-and-why-should-you-care/#:~:text=Mobile%20Point%20of%20Sale%20(mPOS,card%20readers%20and%20barcode%20scanners.)
- 7. **Self driving technology in retail** - <https://www.netsolutions.com/insights/cashierless-stores-future-of-retail/>
- 8. **Retail technology survey report** - <https://www.jabil.com/blog/retail-operational-efficiency.html#download-form>