ROLE OF TECHNOLOGY IN RETAIL INDUSTRY

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ABSTRACT

In this new retail world, the tools, strategies and technologies required to be successful are available. A retailer is a merchant or occasionally an agent or a business enterprise, whose main business is selling directly to ultimate consumers for non-business use. Technology is changing the way many businesses operate for the better of the company and its customers. Technology is enhancing many industries from financial institutions to retail outlets. It is important that companies stay up-to-date with the increasing changes and enhancements technology is creating for their business. In the retail industry, technology is changing the way many aspects of the industry are conducted. The use of technology in retail has also made payment processes easier with contactless payments. These payment methods use RFID or NFC technology to allow the customer to make their purchase with their smartphone or even watch. This technology has eliminated the need for passwords or PINs and has streamlined the checkout process for customers. Faster transactions have led to higher sales volumes in stores that offer remote POS and contactless payments.This review paper shows how the advancements in retail technology help the retailing industry and the impact that affect retailers and customers.

Keywords : Technology. Innovation, Retailing industry

INTRODUCTION

Technology is changing many industries and benefitting many companies andcustomers in India. It is essential that companies stay up-to-date with changing technology and ensure that they are utilizing all technology that is available to them. Technology is not only making jobs easier, customers happier and businesses more accurate, it is also saving companies time and money.

Technology is part and parcel of every aspect of business today and "serves as a primary source of market differentiation, business growth, and profitability." Nowadays, keeping pace with technological developments and innovations, and putting technology successfully to use play a decisive role for businesses, retailers included. Mobile digital technologies, for instance, help create and provide targeted ads, new on-the-go services, and engage the customer. Relationships between customers and retailers are thus extended beyond the physical store into the digital sphere. Retailers contribute and are an inseparable part of new digital connections among customers themselves by creating and participating in discussions on social media.

Apart from mobile digital technologies, some other technological innovations introduced in the retailindustry include Quick Response (QR) codes, electronic price tags, digital advertising displays, self-checkoutsystems, personal selling assistants, smart kiosks, and an overall interconnection of all of theseinnovations with social media platforms and retailers' customized platforms and applications.

Role of Technology in the Retail Industry

Until very recently, customers have had to stand in long lines to purchase their merchandise. Thanks to technology, though, customers can check out from wherever they are in the store through handheld computers, scanners, and printers. This has significantly improved the satisfaction of customers because before, about 10% of customers would leave without making a purchase if they had to wait a long time in a long line.

The use of technology in retail has also made payment processes easier with contactless payments. These payment methods use Radio Frequency Identification(RFID) or Near Field Communication (NFC) technology to allow the customer to make their purchase with their smartphone or even watch. This technology has eliminated the need for passwords or Personal Identification Number(PINs) and has streamlined the checkout process for customers. Faster transactions have led to higher sales volumes in stores that offer remote Point of Sale (POS) and contactless payments.

When customers have to wait in long lines to purchase their items or can never find an associate to help them out, they get frustrated with the store and their satisfaction goes way down. Technology changes this by offering customers the help they need with self-help kiosks. These kiosks have helped businesses save money and increase the satisfaction of their customers. Machines like self-help kiosks are an excellent application of Information Technology in the retail industry.

Technology has also improved the way customers shop online by providing a more personalized shopping experience. Technology is also being used by companies to offer their customers virtual views of products through augmented reality. Augmented reality allows customers to get a better idea of what they want to purchase before they make their final decision. With this technology, businesses have improved the experience of their customers and increased their sales.

The practice of managing inventory has always been very costly for businesses. With technology that can track inventory through its purchase cycle and offer real-time information about the product to management, inventory management has gotten better and is costing companies a lot less. With technology tracking items and offering real-time updates about the items, managers have a much better sense of what is being purchased and what items they need to order to keep their merchandise stocked.

When technology is used to keep track of inventory, store merchandise is more organized and the potential for employee theft is drastically decreased.

Price auditing has been a time-consuming and costly process for businesses. Price auditing is necessary, though, for companies to ensure that they're not overcharging or undercharging their customers. Technology has streamlined this process by automating price checks when products are scanned. This creates more accurate pricing, saves store employees a lot of time and creates better trust between the store and the customers. The impact of this information technology in retaining has been very great and beneficial.

Technology Innovations in the Retail Industry

A closer focus is given to current and future technologicalinnovations in the retail industry and what implications these innovations mean for retailers. The role of technology is discussed with examples of those technologies include location-based applications, targeted and customized mobile promotions, mobilepoint-of-sale, personal shopping assistants and radio frequency identification technology.

1. Radio Frequency Identification (RFID) Technology

   RFID technology has the potential to affect business model innovation andeven more so in the future.

   - RFID technology has various applications in the retail store but also in the wholesupply chain.
   - RFID tags can contain all kinds of product-related information that customers could access using their mobile devices.

2. Electronic Price Tags

   Electronic price tags have several benefits; this technology is unlikelyto lead to business model innovation.

   - Electronic price tags are a convenient replacement for traditional paper price tagsand offer the retailer the option to change prices quickly.
   - They "eliminate" customers' complaints about incorrect product prices.
   - They free stores' personnel to attend to other tasks, i.e. they present time and labor savings.

3. Personal Shopping Assistants

   This technology offers several benefits, it is unlikely to lead to business model innovation.

   - The technology provides various benefits from information about product locationand characteristics, store sales, shopping tips and suggestions, to quick check-out process.
   - Retailers gain access to even more data about their customers.
   - Customers using this technology seem to spend more money.

4. Mobile Payments and Digital Wallets

Both mobile payments and digital wallets currently do not present the potential toaffect business model innovation.

- Digital wallets combine the functionality of mobile payments with digitalcouponing, digital storage of various cards and loyalty membership programs into one solution.
- Digital wallets are "portable" between mobile devices, as well as on-line.
- Both mobile payment applications and digital wallets suffer from not-yetdevelopedretail infrastructure, from too many players each offering a proprietary solution, data privacy concerns.

5. Mobile Point of Sale

This technology does not currently present the potential for affecting businessmodel innovation.

- The technology creates a stronger link between the customer and the assistantwhich may translate into increased sales and customer satisfaction.
- Customers' time is not wasted in lines.
- Payment options are limited to credit cards and mobile applications.

6. Location-based Applications and Mobile Promotions

Location-based applications and mobile promotions present a potential for affectingbusiness model innovation, especially in the years to come.

- A link is created between customers' smartphone shopping applications and retailers' promotion offers.
- Customers are encouraged to discover more products and visit other parts of thestore which may translate into increased store sales.
- It is up to customers to decide whether or not they want to receive the retailer'spromotions which decreases data-privacy concerns.

7. Digital Promotions

Digital coupons and promotions present a potential for affecting business modelinnovation, especially in the years to come.

- Digital promotions are dependent on customers' attitude towards moderntechnology and its use in their daily lives.
- Customer data collection raises an issue of privacy infringement but is vital for acommercial success of digital promotions.
- Data analytics skills are necessary for discovering insightful information aboutcustomers' shopping behavior and tailoring appropriate promotions.

Conclusion

Considering these developments, the retail sector will witness a noticeable transformation in years to come. The retail scenario in India has always been dynamic. Retail competition in the country is escalating and shifting to new arenas. Simultaneously, the purchase decisions of

21st-century customers are evolving rapidly. It is the responsibility of the retailers and brands to provide the shoppers with unique customer experience. Retailers who understand consumer behavior and meet their ever-evolving expectations will ultimately emerge as the winners.

In conclusion, technology grants several opportunities in terms of costs, efficiency, and customersatisfaction but also in terms of product and process innovations. Moreover, technology presentsopportunities, and arguably challenges, to retailers' business models. IT investment is essential not only for the success but for the survival of retail industry.

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