

**ROLE OF TECHNOLOGY IN ORGANISED RETAIL SECTOR****Prof. K.MALLIKARJUNA REDDY**

Professor

Department of Business Management

Osmania University – Hyderabad (T.S.) -500 007

profkmreddy@gmail.com

ABSTRACT

The coordinated retail industry in India has been creating beginning around 1991 particularly after the presentation of Liberalization, Privatization and Globalization (LPG). Retailing is a dynamic and extremely lively area which draws in the public and worldwide players. To stay up with the development of retail industry, organizations are compelled to use innovation to get the functional productivity and upper hand. The advantages of the innovation are incredibly procured by the retailers today and data innovation has turned into the vital, basic and cutthroat instrument for flourishing in the business in the current situation. The present-day clients are more educated and requesting increasingly more data from retailers. The clients request the speediest and quality help with cutthroat market cost. The innovations help the modernized stock administration, POS frameworks and store network the board, and so on, The difficulties before the retail innovation is to foster the information base and introduce data frameworks which will have both in reverse and forward joining capacities. There are additionally issues or issues while taking care of the innovation and the retailer needs to track down ways of defeating such issues inside a limited ability to focus time, bombing which he can't hold the clients. Numerous product bundles are accessible in retailing and the retailer needs to choose the appropriate programming that would give most extreme advantage to business and to client. The Government of India is likewise uplifting the area by planning liberal arrangements in retailing and IT to support the area.

Key Words: *Organized Retailing, LPG, Operational Efficiency, Competitive advantage,*

Information Technology, POS systems, Software Packages.

Introduction**Backdrop**

Mechanical upset is seen in each area since recent many years and there is no special case for retailing. We run over number of new advances in retailing in all day, every day to improve the tasks and to give better client support. These advancements are zeroing in on effectiveness and adequacy of the activity framework. The new and cutting edge innovations acquire change client standpoint by making shopping experience more advantageous. To be on the bleeding edge, retailers need to give joy to the clients by presentation of new and trend setting innovation.

Innovation includes canny booths, advanced and intelligent notices, remote messages and Bluetooth innovation, self-requesting frameworks, computerized frameworks. These frameworks bring about more proficient working and compelling client care over the long haul. Developing instructive levels, family unit, westernization is a portion of the arising factors for advancement of retail innovation.

Review of Literature:

Inman and Nikolova (2017) directed an examination on mechanical headways in retails and its advantage to retailers and shoppers. The review presumed that innovative headways in the field of retailing will assist the retailer with arriving at the ideal interest group for minimal price. Additionally, the clients can take more educated choices, helpful offers and quicker administration than previously. This would assist the retailer with expanding productivity. According to the exploration study by Richards and Hamilton (2014), innovation is unmistakable all through the retail business with a blast of end gadgets, applications and web-based media publicizing. Online Technology presents a danger to blocks and mortar. Notwithstanding, new advances have likewise improved the in store insight in the types of vivid innovations, virtual mirrors, bluetooth reference points, NFC installments and in store portable applications that can change the in store insight for the buyer (Accenture, 2014). Clements (2014) expressed that connecting between clients by utilization of innovation give trust on items is an indispensable piece of the interchanges methodology.. Retail information has advanced from POS information into SoLoMo information, which is social, neighborhood and portable information. This is connected to conduct information, which incorporates what a client has purchased before, what they are perusing on the web and available, which is helping with the advancement of ongoing information

Objectives of the study:

- To study the Indian Retail Industry and the importance of technology in retailing.
- To study the emerging trends of information technology in retailing.
- To study the application of software technology in retail activities

Scope: This article is confined to study the role of technology in retailing sector and retailing outlets.

Need of the study: To keep pace with the growth of retail industry, companies are forced to leverage technology to bring in the operational efficiency and competitive advantage. Customer satisfaction is the most important aspect to be taken care by any marketer more so in retailing. Many research studies focussed on the technology implementation in retailing but there is a gap existing for study on how the retail technology is applicable to various retail functions. Hence, the present study.

Methodology:

The article is descriptive in nature and is purely based on secondary data by referring to journals, magazines, websites, texts, reports of companies and previous research studies, etc.

Meaning of Retailing:

Retailing comprises of purchasing the items from producer/provider and straightforwardly deal to the buyers. He is considered as an affiliate. The term retailing is existing since the presentation of monetary forms in world economies. USA is the center I for retailing on the planet as the greater part of the retail association are settled in US. For instance, Walmart Stores Inc, Home Depot, Kroger, Costco, Target, and so forth A large portion of the retail area is driven by the acts of USA retail industry. Retailing includes the offer of items as well as the development of products now and again.

The retailing cycle includes the accompanying players: the producers or providers, calculated and production network accomplices, stockroom, dispersion channel, store and clients. We observe many retailing designs basing on their inclination of items, the inclination of clients and the overall contest on the lookout. Anything that might be design, utilization of innovation is inevitable now-a-days. A portion of the arrangements are: Mass Discounters, Mom-and-Pop Stores, Warehouse Stores, Category Killers, Departmental Stores, Boutique, Catalog Retailers, e-rears, Franchise. Corner shops, Vending Stores, Hyper Markets, and so on

The great component that impacts the retailing area is the innovation. The achievement of any retailer relies upon the utilization and separating the innovation. The coordinated areas particularly the grounded retailers have an advantage than the disorderly retailers are not in a situation to exploit innovation accessible on the lookout. This might be because of many compels like little retail shops, less deals and less benefits. The retailing area is innovation serious and the retailers are unequivocally related for their provisions. Innovation assists them with getting their provisions inside the expressed lead time. In a roundabout way, this saves the expense through holding less inventories. The worldwide business has crossed more than \$12 trillion dollars and top retailers possess around 35% of the absolute retailing. The advancement of the retail business is fundamentally because of accessibility of extra cash for the beyond twenty years.

Indian Retail Industry:

The coordinated retail industry in India has been creating starting around 1991 particularly after the presentation of monetary and different changes. Advancement, Privatization and Globalization has made the business more energetic at public level as well as at worldwide level. It is one of the most powerful and quickly developing industry and drawing in huge players to it's overlay. It involves around 10-12% of GDP and giving 8% of work. The progressions India saw in retailing are expanding accessibility of worldwide brands, laying out of an ever increasing number of shopping centers, hyper markets, accessibility of all the more retail space, after deals administration, great climate/feeling than to cost. Different variables that contribute for the advancement of retailing are change in ways of life contrasted with conventional periods, worldwide openness, attention to clients, and so forth One more benefit for the advancement of retailing in India is having more youth and working class populace.

The key attributes of Indian Retailing are:

- The growth of retail industry is multifold in India which is around 10% every year.
- India is having largest number of outlets in the world. About 12 million retail outlets are existing in India.
- World 5th largest retail destination in retail space and ranked 63 in terms of World Bank's Doing Business 2019
- As per United Nations Conference on Trade and Development's Business to Consumer (B2C) E-Commerce Index 2019, it occupies 73 positions.
- Its position is 16 in FDI Confidence Index after USA, Canada, Germany, UK, China, Japan, France, Australia, Switzerland and Italy.
- Market Size of retail industry at CAGR is expected to reach by US\$1.1 trillion by 2020
- Offline retail namely brick and mortar (B&M) is expected to increase by 12000 crores in FY2020.
- Due to huge investment in retailing and rapid increase in internet users, it is expected that India will become fastest growing e-commerce business in world.
- India's FDI equity inflow in retailing has touched US \$ 2.12 billion during April 2000-March 2020 according to Department of Promotion of Industry and Internal Trade.
- Due to heavy demand for consumer goods in different sector namely electronics, home appliances, etc., many companies have invested in Indian retail space in recent month before COVID -19.
- Walmart Investments Cooperative U.A invested Rs 2.75 billion (US\$ 37.68 million) in Wal-Mart India Pvt Ltd.
- Government of India changed the FDI policy rules in food processing industry to attract more and more foreign investment. 100% FDI is allowed by Government of India through automatic route in single brand goods

The Key Issues in Retailing:

The retailer needs to resolve the accompanying issues in the worldwide setting in particular Providing right items, Product Presentation, Traffic Building, Layout of Retail Stores, Location of Retail Stores, Customer Satisfaction, Technology, and so forth, The innovation has turned into the essential texture of the retailing business today. It is passed on to the carefulness of the retailers, to involve the innovation for an upper hand. Innovation is utilized in each part of retailing specifically client information (Customer relationship the executives

programming), item development (Use of RFID labels for following), place to checkout (Scanners, stands, self-serve checkout), web advancements (Online shopping baskets, buy proposals) and some more.

Application of Information Technology in Retailing Sector

Retail innovation brought most noteworthy changes since past a long time in creating the information expected for better comprehension of clients. It will likewise assist with learning the stock position and recharging. Innovation is valuable in distinguishing the items that have extraordinary interest and items that have little development. In different regions where the retailers' store network and stock administration impacted is the utilization of radio recurrence distinguishing proof (RFID) which utilizes central processor replaces the scanner standardized identifications and can be perused by radio wave from a good ways. The best model is the Walmart, USA utilizing RFID.

Because of occupied timetables, many individuals are utilizing innovation to meet their prerequisites. Computerized or web based shopping is driving individuals to arrange their prerequisites by utilizing innovation and would involve a conspicuous spot in the years to come. Urbanization, per capita pay.

The utilization of data innovation in different exercises connected with retailing are:

IT in Supply Chain Management: The application of information technology in retailing includes all the functions that enable to give prompt and quick service to customers. It involves product supply, delivery, recycling of materials, components, end product and services. This provides the value addition to the organization. There is a reduction of cost in inventories due to use of technology to a greater extent. It is essential for retailing to use technology to face cut-throat competition.

IT in Purchasing Management

Since 1970, Electronic Data Interchange was used in purchasing process. Since 1990, advancement in retail technology is used for flexible internet based e-procurement systems. Many e-commerce firms have realized the benefits of these technology services. The advantages are saving in time and cost.

IT in Forecasting Demand

The goal of a good forecasting technique is to minimize the gap between actual and forecast demand. Different methods are used to forecast the demand. Different softwares are used to forecast the demand at retail stores/outlet. Some of the forecast software are: Forecast Pro Software, Smart Software and many more.

IT in Performance Measurement: Information technology in retailing helps us to analyses the various objectives through data mining and data warehousing. Non-performance or under performance of products can be removed from the shelf to maintain the profitability. This task becomes more complex if there is lack of technology and perform functions

manually is highly cumbersome. Performance measurement requires lot of data and continuous evaluation .Due to large volume of information available it has become almost impossible to do this evaluation process manually and thus the role of IT in retailing has been increasing. Supply Chain Operations Reference (SCOR) is used for agement diagnosis, bench marking and is a process improvement tool and used globally.

IT in Inventory Management: The information technology provides the sharing of demand and inventory data quickly with less cost. It influences the production and stock position in retail outlets. IT is also used in material requirement planning and manufacturing resource planning.

Store management: The retailers are now focusing on customer's in store experience to differentiate themselves with the help of technology. Software of store management helps in improving store efficiency.

Technology Driven Value Chain Changes

Another area where the technology in retailing useful is Customers signing credit card bills with their fingers on touchscreens and using apps to order.

Touch screen Food Vendors: Many companies are using digital boxes which will help to produce many numbers of variations in products. By using touchscreen device we can dispense more and more varieties of products. These are more useful in retail food outlets.

Tablet Restaurant Management: Many apps are developed by retailers to service the customers better. The flexible iPad app provides real-time views of tables, catalogs the menu by a selection's name or ingredients, processes sales and delivery tickets and sends orders to the kitchen. It is used in restaurants which come under food retailing. This is more useful for new customers who do not have any idea about the retail outlet. The app will also work with traditional receipt printers and cash drawers.

LED Alert Systems: These systems make the workers alert to time sensitive tasks. It can also help to maintain ambience in high-end eateries.

Webcam-Enabled Monitoring: By using advanced algorithms in technology, it helps to detect any noncompliance of rules with reference to health and safety codes. This is more useful in food retail outlets. Further employees were given identification badges with radio frequency transmitters. This will help the employees to observe the customers and meet their needs, if any.

Computerized points-of-sale (POS): This has helped the industry to move from cash registers and completely install computerized points-of-sale (POS). McDonald has such system.

WI-FI Hotspots: The most recent development has been installing WI-FI hotspots which are electronic payment model which help to quicken the ordering and payment. It shortens the time of supply, preparation, and payment time. me and payment.

Bio-diesel Technology: This helps the retail sector especially in food retailing to reduce carbon emissions with the truck making the deliveries.

Nintendo DS system: This technology is used as an e-learning training tool for their new recruit staff. These gaming systems train the recruits and grade them on their performance, in which they can compare with other colleagues and view their progress. These results in less paper work and allow the employees to enjoy their job learning experience.

ACS" Technology: This is another technology that is used for service desk functions, user access, executive and security administration, desktop support and messaging services, as well as end-to-end application performance monitoring service that improves diagnosis of performance issues across core technology stacks and will support development, testing and quality assurance processes.

IT in Customer Relationship Management

There is different CRM software available in the market and plays a major role for CRM. With the help of technology in retailing, we can identify the most valued customers and focus on building long term relationships. CRM software allows storing the data of individual customers and most valuable customers. It helps in loyalty programmes.

ERP Systems in Retailing:

ERP software packages integrate all the data and related processes into a unified information system. Large retail outlets are implementing ERP packages. It helps in the order entry, accounts payable and receivable, purchasing, distribution, sales, fiancé and inventory management, etc.

Other software/technology in retail outlets will help in

- Faster approval of purchases from the inventory of the retailer
- Capturing the product detail
- Software with related item or suggested item prompts
- Transaction Suspend
- Automatic store credits
- Capture of customer information
- Reconciliation
- Time Stamping
- Clocking In Period

Benefits of Retail Technology

- Technology is user friendly, scalable, flexible, reliable and easy to maintain
- Helps to track individual transactions from the POS to the general ledger
- Improves efficiency and maximize the value of the organization
- Synchronize the data efficiently.
- Improves warehouse operations most effectively.
- Provides better Customer Service

- Customer Support through call center
- Handling of Post Sales Service
- Helps to building of long term relationships with the customer
- Helps in campaign Management
- Helps in effective Selling Processes

Problems in Technology Implementation

- Outdated Software – Many retailers have implemented the outdated technology which is rigid and inflexible. This becomes a challenge and reduces the efficiency of the retail business. We come across advanced technology/software in retail industry and competitors are adopting. Today's business environment demands real time adaptability from the software systems.
- Limited scope – The retail systems were designed to take care of specific problems, tasks and lack the enterprise wide approach to the problem solving. Some of technology used is unsuitable for present business environment which are very dynamic in nature. Markets are highly competitive in nature and competitors are waiting for opportunity to take the advantage.
- High maintenance costs – Old technology is costly to maintain as such systems are not used in retail industry at present. Small retailers cannot afford to install new systems. The components are also costly with high maintenance cost and require specialized personnel for maintenance purposes.
- Integration and scalability problems – Some of the old systems used in retailing cannot synchronize or integrate with modern systems. Such integration and scalability problems tend to multiply as the size and scope of retail operations increases.
- Increased risk to the business – A combination of old and new information systems makes the whole system susceptible to failure or crash. The heterogeneity in the system is the primary cause of risk.

Conclusion:

Technology is regarded as one of the core competencies that bring opportunity to the retailer and create value for the business. Customer insight cannot be fully leveraged without technology to enhance the relationship. Technology provides and analyses the information across marketing, sales, and operations. Global economies have witnessed unforeseen changes for two decades due to introduction of reforms and retailing is not an exception. It has seen a sea change because of introduction and use of latest technology in order to meet the customer demands and make the operations easier. Further, it helps the retailers to dispose the customer more quickly. Overseas investment is encouraged by respective governments and policies are framed to attract more and more foreign players.

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