

USE OF ELECTRONIC INNOVATIONS IN RETAIL

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Abstract

Retail refers to a “Business that sells products or services to consumers for their personal or family use”. A retailer is the last link in the distribution channel he has direct contact with the consumers and knows their requirements very well. In India 90% of the retailing is done in unorganized sector but the scene is changing quickly. Over the last 10 years retail industry has seen a number of world retailers coming and setting their stores in India. These are generally well managed stores which are in organized sector and have proper documents and processes. With the change in retail scenario and computerization of all businesses even retail is becoming advanced with the use of electronic modes. This paper tries and brings out the more efficiency in the whole system of retailing.

Keywords: Retail, Vendor Managed Inventory; Cross Docking; Collaborative Planning Forecasting and Replenishment; Radio Frequency Identification;

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1. Introduction

Retail refers to a “Business that sells products or services to consumers for their personal or family use”. Till date retail sector in India is dominated by unorganized small “baniya” shops which provide bare minimum facilities to its customer and do not make use of any new technology. But when we talk about organized retail the scenario is totally different. They employ well educated professionals for every aspect of their business whether it is operations or management.

From last week retail has become talk of the town with government trying to implement 51% foreign direct investment in multi brand retail. This move has seen mass opposition by the people from all over the country. The small retailers say that if such policy would come in then the Indian small retailer would not be in a position to fight with global mammoths of the retail sector like Wal Mart or Tesco. As a result 40 million Indian who operate in unorganized retail would be thrown out of business.

But this is just one side of the coin. On one hand where some people are opposing it there is another wing that says with the advent of multi brand global retailers to India the consumers will be positively affected to a large extent as these players will bring in with them huge investment which will create numerous jobs in the sector. Apart from that they will bring other infrastructural facilities which will improve efficiency of the retailer and would reduce a lot of wastage which happens because of non availability of these facilities. Every year tons and tons of farm produce goes to dustbins because of lack of cold storage and air-conditioned trucks which could transport these vegetables and fruits from one place to another. Politicians who are in it's favor say that it would improve efficiency all through the supply chain and would also increase take home for farmers bought by the direct procurement from them.

2. Research Method (10pt)

Review of literature

Piyali Ghosh, Vibhuti Tripathi and Anil Sharma in their research paper concluded that Store atmospheric attributes such as colour, lighting, sales personnel, music affect the image of the store are very important in attracting customers. Retailers have realized the importance of such

attributes and systematically try to improve ambience including appropriate colours, music that attract their target customers.

S. Ramesh Kumar & Dinesh Kumar, in their research article “*Exploring consumer retail shopping experience*” showed that stock availability, quality, brand variety, knowledgeable salesperson and product display are likely to have a significant impact on store image.

Kaul in his research article “*Consumer shopping behaviour among modern retail formats*” found out that individual determinants such as shopping intension, attitude toward retail outlet and shopping habit play important role on consumer shopping decisions. So retailers should concentrate on strategies in building consumer positive attitude towards their retail, so that consumers visit their retail store in order to make purchases regularly.

Leung & Oppewal, in the research paper “*The roles of store and brand names in consumer’s choice*” concluded that a high-quality brand or high-quality store is sufficient to attract the customer to a retail store. The study also revealed that store names have a larger impact on store choice than the brand names of the products that these stores have on offer.

Tripathi & Sinha, in their research paper “*Study of consumer behavior with respect to shopping*” opined that retail store choice does not come from the perspective of an individual but of the family. They argue that it is mostly the family and not the individual who is the consumer of the retail offering.

Objective & Scope of the Study

- To understand the various new electronic medium used in retail.

Type of Study: The study is a theoretical explanation of all the electronic innovations used in retail these days.

3. Results and Analysis

Some of the technology which would perk up such efficiency in logistics and retail is discussed as under.

1. Vendor managed Inventory (VMI) or Quick response inventory system (QRIS) – It is the most technologically advanced integration between the retailer and his vendor. Here inventory at the retailer's front is monitored and managed by manufacturer/vendor. It reduces the need to stock high level of inventory at retailer's store. It includes activities like determining appropriate order quantities, managing proper product mixes, right time of replenishment and appropriate safety stock levels. Thus it leads to a lot of reduction in lead time, paper work, reduces stock out situation etc. VMI is also called as Quick response inventory system (QRIS) as it alerts the vendor as soon as inventory level at the retail's store reaches a minimum level. Generally inventory is managed by pull strategy wherein retailer keeps a record of his own inventory and places the order to the vendor whenever he needs certain products. It involves a lot of steps and paper work like first a person responsible for checking the inventory level investigates the level of inventory then if there is any requirement he tells it to the purchasing department, then a requisition is created which is to be sent to the vendor or manufacturer first by telephone if requirement is urgent then formally by a letter. Then the vendor dispatches the order and the store manger receives it at the retail store. In VMI reverse happens, here inventory is managed by Push strategy. All the stock is fed in the retailer's computer which in turn is liked with the vendor's computer. So as soon as retailer sells a SKU, vendor comes to know about it and as and when stock falls below a certain level, vendor himself sends the supply to the retailer. This reduces cost to a big extent.

Some benefits provided by Quick Response System are –

- a. Reduced logistics expenses
- b. Reduced lead time
- c. Improved product availability and lowered inventory investment

2. Cross Docking – Cross Docking as a part of supply chain management was introduced by the world's biggest retailer Wal Mart as a part of reducing costs of merchandize placed in its stores. The process of cross docking is initiated when the retailer mentions to his vendor the different quantities of merchandize needed at its different stores. It is a system in which vendors' ship merchandise to a distribution center, pre-packed in quantities required by each store. In one way

it is just like floor ready merchandize as each store's supplies are packed separately. But such products may not be necessarily tagged. It comes out to be less expensive as very little or no storage is required and processing is minimal.

3. Collaborative Planning Forecasting and Replenishment (CPFR) – The concept of Collaborative Planning Forecasting and Replenishment was introduced by Larsen and was first put to use in the year 1995 by Wal Mart . It is collaboration between two or more parties in the supply chain who jointly plan a number of promotional activities and work out synchronized forecasts, on the basis of which the production and replenishment processes are determined.

In VMI vendor and retailer share only sales and inventory data but CPRF involves sharing proprietary information such as business strategies, lead time information, promotion plans and production schedules. Both the parties like manufacturer and the retailer share information electronically regarding their expectation about the sales then they tally it and if there is any difference they try to resolve it and come out with one solution. As it leads to exchange of a lot of confidential information CPFR requires that both the parties have a relationship of trust and commitment from both the parties. CPFR reduces inventory costs while improving product availability.

4. Radio Frequency Identification (RFID) – It is a technology which uses radio waves to identify an object or person at a distance. RFID uses electronic chips which are capable of storing data about the product such as its manufacturer, date of manufacture, price etc. These chips are inserted into containers, on shipping cartons or in product labels. It is better than barcodes as these barcode can only identify the product when it is actually there, but using RFID a product can be traced from a distance. It is important as it can identify as where a certain product is, in the supply chain on a real time basis. But it is not possible for every retailer to adopt this technology as it is expensive which can have a negative impact on the profits of the retailer. Some retailers do not put it to use as it generates a lot of data which may not be put to effective use by the retailer. Some advantages which are offered by RFID technology are –

- a. Reduced Product Theft – As the products contain chips with radio frequency, their position can be tracked very easily which helps reduces theft during transportation, or in the stores.

b. Reduced Out-of –Stock Conditions – RFID facilitates accurate product tracking which reveals the actual status of products in the store. So as soon as most of the products are sold the retailer would be updated and thus stock out situation would never occur.

c. Tracing the product in the store – Sometimes it so happens that in the storage area of the retailer a product may be misplaced. At such a time RFID chips can trace the exact position of the product and thus a sale can be made.

5. Electronic Data Interchange (EDI) - Using Electronic Data Interchange (EDI), business documents are exchanged in a structured format from one computer to another. So that the data which gets transferred electronically is available at the distribution center much in advance of receiving the actual merchandize at the distribution center. As a result receiving and checking of merchandise for further transportation to next destination can be done quickly and readily.

These were some of the innovations that have taken place in the retail industry which squeezes a lot expenses for the retailer and results in better price for the final consumer.

Conclusion

The study revealed that the new electronic innovations can lead to a lot more improved efficiency in the retail sector. It would also let a lot of wastage being reduced. It has been made possible by the incoing of a lot of organised foreign retillers in India and establishment of bigger corporate chains in retil sector.

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