

Development of an Effective Strategy to Possibly Eliminate Unnecessary Time Consumption in Retail Store Operations

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Abstract

Retail store operations are the processes which make a retail store to run on daily basis. It's the day-to-day functioning of a store. Every personnel working in the retail organization should ensure that the firm is performing to its greater extent. They should work to achieve their targets and proper functioning of the store in all aspects. Likewise with any business, the objective is productive development. With the changing demands in consumer behaviour be it a brick-and-mortar store / click and mortar store, the operating methods of a retail store has to be devised and shaped according to the demand. Though all the process in a retail store is performing well, there are some time-consuming process and certain places where manual errors occur. This paper concentrates on analysing retail store operations and to devise strategies that will eliminate enormous manual time consumption and improve efficiency in the store operations. Business through WhatsApp is the need now to sell the products. In this competitive world, its much important for a retail store to do something which retains the existing customers and pull new customers. Virtual tours can empower stores to view their products 24/7. Virtual tour is now an advertising device that can help to acquire new clients and customers. It's the most ideal approach to precisely show what the store truly resembles. Automation allows a retail organization to increase their productivity. Automating the distribution centre makes the process faster and the products reach the stores timely. The devised strategies for streamlining the store operations provides best possible practice suggestions to overcome the problems identified.

Keywords: Store operations, retail, automation, virtual tour, efficiency, time.

1. Introduction

Retail store operations refers to every activity that keep the store working great. It incorporates individuals the board, production network, store design, cash tasks, actual stock, ace information the executives, advancements and estimating, etc. Retail Operations includes dealing with the everyday elements of retail foundations. Retail Operations experts oversee retail foundations consistently, and are answerable for amplifying store benefits – For the locales and for the geologies. Important areas in a retail store are store management, cashing, warehouse management, facility management and visual merchandising. Each department under the responsibility of the head personnel.^[8]

Store manager is the head person of a store who is liable for administering the day-by-day tasks of a store, ensuring it runs easily and adequately. He is responsible for all the activities carried out in a store right from planning business strategies, encouraging the sales teams, training the staff, and solving issues in the store. Assistant store manager helps in the work of store manager. Each department in the

store will have a department manager who is responsible for the sales and stock maintained in their respective departments. Daily reports should be maintained and submitted to the store manager. Brand staff will be working in each department for their brand; selling their products. Brand staff should report to the department managers on the sales and stock on daily basis. In cashing, head cashier works for retail establishments and direct the action of different cashiers. He also looks after depositing the cash each day, allocating tills to the cashier and etc. Warehouse manager is responsible for inward, outward and stock maintained in floor. Facility manager is responsible for maintenance of the store, safety, cleanliness, housekeeping and security. He oversees the work and ensures that the basic facilities are provided timely and well maintained. Visual Merchandising plays an important role of directing people without oral communication. They are the silent sellers of a retail store.

Every personnel working in the retail organization should ensure that the firm is performing to its greater extent. They should work to achieve their targets and proper functioning of the store in all aspects. Likewise with any business, the objective is productive development. What makes retail one of a kind are the obscured lines between clients, providers, items, and the actual business. With the changing demands in consumer behaviour be it a brick-and-mortar store / click and mortar store, the operating methods of a retail store has to be devised and shaped according to the demand. Though all the process in a retail store is performing well, there are some time-consuming process and certain places where manual errors occur. This project is carried out to study the retail store operations and devise strategies that will eliminate enormous manual time consumption and improve efficiency in the store operations. To analyse and evaluate the retail store operations. To indicate the processes which consumes more time and reduces the efficiency despite the software application followed by the store. To derive a strategic plan and streamline the store operating process with additional best practice suggestions to be included in the application.

2. Literature review

2.1 Streamlining the retail store operations

Administering a retail store is intricate, and it very well may be hard to realize exactly where to begin when you're streamlining your cycles. However, making retail activities run all the more productively ought to be at the highest point of each retail chief's task, and here are some ways that will make the process flow better than before. Regardless of whether running one store or 500 stores, productivity start with standardizing the operations followed in a store. A bunch of strategies guarantees a quality encounter — for staff and also for consumers — and a consistent administration measure regardless of the number of areas you have. Standardize the operations and increase the productivity. Training the employees is very important as they directly communicate with customers. Employee training session should be provided increase the efficiency. Customer service is important and they should be treated with respect. Whoever is entering store, is the customer of the store. Everything should be made easier for them as customer satisfaction greatly relies on the sale. Automating certain process improves the efficiency of the store. It makes the process more scheduled and organized. It decreases the manual errors, increases the efficiency and reduces the time consumption.^[3]

2.2 Online shopping through WhatsApp

In the recent years, we've seen a genuine shift towards texting applications for contacting each other and people are depending on WhatsApp to complete their business too. Most of the traditional methods of promoting business and people communication came to an end. While organizations burn through billions of dollars yearly overseeing calls, messages, and SMS, individuals would prefer not to look out for hold, get passed from one individual to another. Outbreak of pandemic has clarified that organizations need quick and proficient approaches to support their clients and make deals. WhatsApp has become a basic and advantageous asset in this time. In excess of 175 million individuals consistently message a WhatsApp Business account. Individuals like to message a business to find support and

they're bound to create a buy when they can do as such. WhatsApp is quick turning into a store counter to promote and sell products. Catalogues shows us what's new, what are the products available and assisted organizations with getting sorted out their visits around specific things.^[12]

2.3 Warehouse management

Warehouse management alludes to the oversight of activities in a distribution centre. This incorporates receiving the goods, monitoring, and inventory, and also preparing staff, overseeing delivering, responsibility arranging, and tracking of the products. Warehouse manager oversees the inventory in the store. He should work on three reports daily, inward stock, outward stock and SOH (stock on hand). In general, these tasks spin around receiving the stock and transportation.

Stock receiving: Inward, identify, examining, and inventory.

Transportation: Picking, bundling, checking, gauging, and transporting items from the distribution centre to the store.

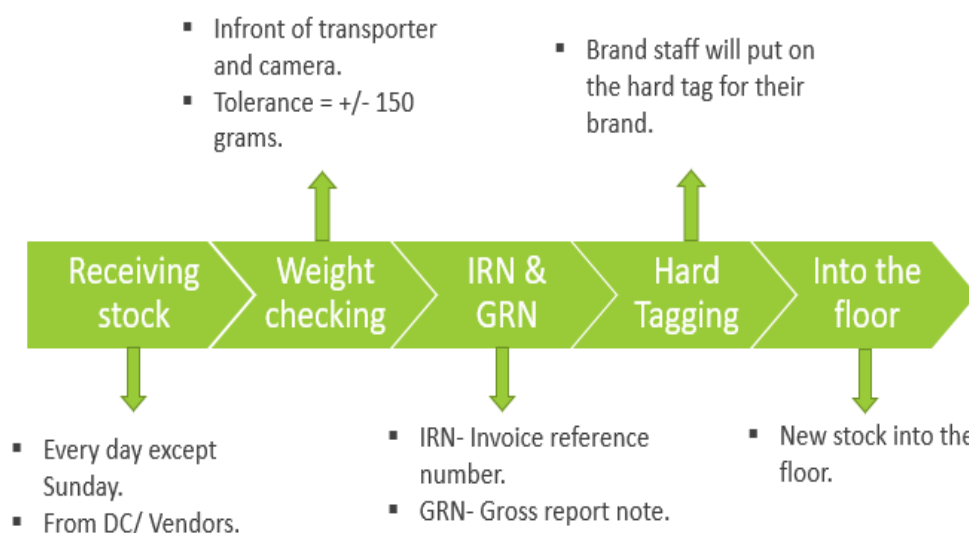


Figure 1: Process flow of warehouse

In a retail store, stocks are received daily except on Sundays. Stocks of the own brands will be despatched from the distribution centres and the stock of the other brands will be despatched from vendors. Once the stock is received, carton boxes should be weighed in front of the transporter and camera. There is tolerance of +/- 150 grams. If the weight varies from the tolerance, carton box should be opened and examined from the products. After scaling, IRN (Invoice reference number) should be generated & GRN (Gross report note) should be updated. It is a process of updating in the system. After updating, hard tags should be fixed in the products. Brand staff should put on the hard tags for their respective brand stocks. After tagging, the stocks are moved into the floor space. The stocks should be kept in the floor within 24 hrs after the arrival of it in the warehouse of the store. This is process flow happening in the warehouse of a retail store.

3. Main text

3.1 Problems identified

WhatsApp has been an asset as online shopping is made easier through it. Due to the pandemic, retail stores are shifting to chat shop (online shopping through WhatsApp). Staff send the pictures of the products as per the customers requirement. Delivery of product is free, if the customer's place is within 10km radius. If it's over the limit, purchased product will be couriered and charges will be applied. Images of the products from the latest line till the products on offer will be shared with customers as per their needs. Exchange is done. Though making all facilities to shop from home through WhatsApp during this situation, the sales through chat shop is not as expected.

In inventory, the problem arises due to excess or shortage of products. Shortage can be viewed in two ways; transport shortage and physical shortage. Transport shortage refer to missing of product during the transportation of stock from distribution centre to the respective store. The product may either be fallen from the damaged carton box or pilferage by the transporters. Charges will be claimed from the respective logistics if this occurs. Physical shortage, the products might be interchanged. Example: Small size in a product may be swapped with medium size of the same product. This leads to negative inventory of a store. This occurs due to the manual picking of products in distribution centre.

3.2 Suggestions

Analysing the above-mentioned problems in the retail store, suggestions to streamline the store operating process are devised. These suggestions can be helpful to overcome the issues, thereby reducing the unnecessary time consumptions and increasing the overall efficiency of the store. The best practice suggestions are: 1. To create a 360-degree virtual tour of the store which creates an in-store shopping experience for the customers. Therefore, resulting in the increased sales through WhatsApp. 2. To automate the picking process in distribution centre which will avoid manual errors and reduce the time consumption.

3.3 360-degree virtual tour

Many think a 360-degree virtual tour is set of images hung together and "run" like a screen show. The client can hit "play" or navigate the static pictures however that's it. No zooming in, no seeing what's over yonder in the corner, no exploring everywhere of what's in the picture. Technically, a 360 Virtual Tour is a set of 360-degree panoramic revolving pictures, "Stitched" together to frame a full, 360° perspective on an area. Uncommon cameras, focal points, innovation, and strategies are accustomed to unite a visit into a visual encounter for the watcher. 360-degree virtual tour comprises of a high- resolution images, called "spins". Customers can easily access the virtual tour and has full authority over what they need to take a gander at and can zoom in or out to improve the scene they're seeing. Further, text, audio, direction, can also be included in the tour.[4]

To make a 360-degree virtual tour, firstly to choose a camera which can capture 360-degree photos and videos. There is a wide range of cameras available for creating a virtual tour. Then, capture images and videos in the location that you choose. Then, checking the audio and synchronizing it in accordance. Next is stitching the images together. This is a very important step in making of 360-degree virtual tour. This is where you add sound, add effects, add directions and stitch the pictures and videos together. And the virtual tour is created.

Virtual tours can empower organizations with stores to view their products 24/7. Its more effective that high resolution images as it permits likely clients to focus in on specific items that get their advantage. Virtual tour is now an advertising device that can help to acquire new clients and customers. It creates an augmented view of images in a store that allows the customers feel like they are inside the store. It's the most ideal approach to precisely show what the store truly resembles.

3.4 Automated picking in warehouse

Automation in warehouse is the execution of automated or semi-automated innovations that upgrade the manual picking process. Robotized distribution centre picking can likewise decrease strolling time and minimizes the picking paths, coordinate with your current WMS and backing precise picking and pressing. Most commonly used automated picking systems are: pick to light, voice picking, mobile scanner based picking and collaborative mobile robots. Recently, robots are highly utilised in warehouse for order picking. The process flow of robotized picking should be as shown below.

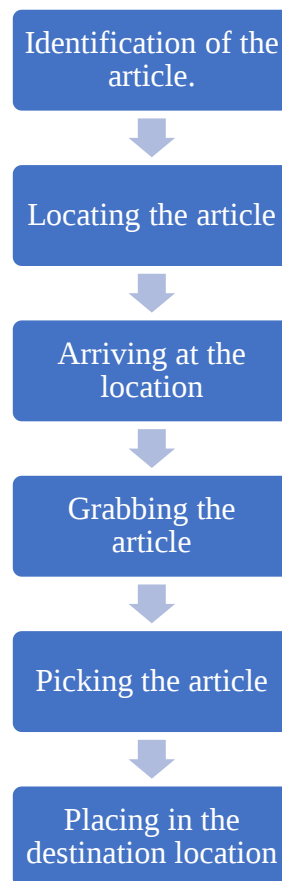


Figure 2: Automated picking process flow

Firstly, identifying the product then, locating the product and arriving at the location next is grabbing and picking the product, finally, placing it in the destination location. Basic coding for pick and place of products using python is ideated. In the code, article number of the products can be fed as object name for locating the product, Example: WLZK2021951Z. Colour and weight of the product can be fed in the parameters for grasping the product by robot, Example: colour- red; weight- 0.25 grams. Destination location can be fed in, thereby the robot places the products in the right destination. Example: carton_box_1. During the replenishment of stocks, the above data for the products to be replenished will be extracted from the WMS of the store and the data will be fed accordingly. The robots will pick only the right products and place in the carton boxes. Automation in picking saves time and is more accurate. This reduces the shortage and excess of products that arrive in the store during replenishment. Thereby, eliminates negative inventory levels.

4. Results and discussions

Retail stores are greatly performing to achieve their targets and to sustain in this competitive world. Despite all the processes being scheduled and organized, there are certain areas where problems occur as mentioned above. Looking deep into the issue, possible practice suggestions are devised in order to avoid the unnecessary time consumed in the retail operations. This in turn increases the productivity and efficiency of the store.

WhatsApp business is need of the hour. Promoting business and increasing the sales through WhatsApp should be focused more. Customers expect newness in each and everything. In this competitive world, its much important for a retail store to do something which retains the existing customers and pull new customers. 360-degree virtual tour brings a lot of new customers. Creating a virtual tour attracts customer and keep them engaged for a longer period. It gives a detailed information of a store as one can zoom into every nook and corner. They can control what they see and at what distance they see. It provides an in-store shopping experience while customers are enjoying shopping from home. Research says, products sold by seeing through a 360-degree virtual tour is greater than that of purchasing products seeing the still images of them. Therefore, it increases the speed and number of sales. Automation is implemented in most of the industries to drive their efficiency. Automated picking robots in warehouse speeds up the picking process and increase the production rates. This reduces the time taken to pick and pack the products during replenishment. They are greatly helpful in picking the accurate products which avoids manual errors. The robots should be programmed in such way that it identifies, locates, picks and place the articles in the destination. This reduces the time in searching the product and avoids picking the wrong products. Automating the distribution centre makes the process faster and the products reach the stores timely.

Thus, the above suggestions to streamline the retail store operations are devised in order to eliminate the unnecessary time consumption which reduces the productivity. Also, to increase customer engagement and improve the sales of the store which is the ultimate aim of a retail chain.

5. Conclusion

This project is all about identifying the problems in retail store operations and to provide best possible practice suggestions. Analysing the retail store operations, strategies have been devised to overcome the problems identified. The suggestions provided, reduces the time consumed and greatly improves the efficiency of the store. Store can implement these suggestions seeing their financial aspects. 360-degree virtual tour will greatly drive the sales as it engages customer and creates a real time shopping experience. Suggestion for automated picking process has been devised for one robot. The same way, it can be programmed for many robots with advanced programming to make picking more precise. The parameters can also be tuned as per the needs in the code and the process of warehousing can be done in a shorter span reducing the errors and time consumed.

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