CHAPTER 2
LITERATURE REVIEW AND THEORETICAL BACKGROUND

Chapter 2 discusses the literature review and theoretical background. The literature review consists of previous research and current research. At the same time, the theoretical background consists of some theories that provide support to this research, namely Retailing, Impulse Buying, Layout, Planogram, Category Management, Merchandise Hierarchy, and ABC Analysis.

2.1. Literature Review

Literature review is used to determine previous research used as a reference for the current research. It is essential because the processes and methods used in the previous research can be used as references and learning materials so that the current research can produce satisfactory results. The literature section will be divided into two, the first discussion is for previous research, and the second discussion is about the current research.

2.1.1. Previous Research

There are many methods to produce the right layout product. One of which is the Activity Relationship Chart (ARC) used by Indrawati (2019). In this context, the Activity Relationship Chart shows the distance and influence between one product to another. The closeness between the products that influence each other could increase the desire of customers to buy. This research utilized product classification from sales.

Based on the research conducted by Restiana (2016), product display improvements are arranged using analyzing customer behavior in traditional and modern retails for improvement. The data retrieval process was obtained by identifying the business processes in a store. This business process helped understand the store's process flow in arranging and determining products' appearance on the racks. Data collection was also carried out by observing and making questionnaires to determine customer behavior in the store.

Hidayatno *et al*. (2009) also used customer behavior to improve product displays in a store. The tool used in this research is the Eye-Tracker installed on an infrared camera and connected to a computer to identify the customer's eye movement patterns and direction in selecting products. When operating, the infrared would

light up towards the customer's eye to create a strong reflection in the eye. Illumination entered the retina and was mostly reflected to aid in the tracking process. Thus, customer behavior can be seen through a computer connected to an infrared camera.

The research conducted by Haryanto *et al*. (2018) used the 5S method to improve product displays. The naming of 5S is derived from the combination of the first letters of the Japanese term as *Seiri, Seiton, Seiso, Seiketsu,* and *Shitsuke,* which are then termed in English as Sort, Set in order, Shine, Standardize, and Sustain. The basis of this 5S movement is the determination to hold work-place elections, organize, clean, choose conditions, and maintain the habits needed to carry out a job properly. The steps taken in this research were classifying goods according to categories, categorizing slow and fast-moving goods using the Pareto Chart concept, making layouts of retail, and analyzing goods.

Based on the research conducted by Leolita (2012), product display improvement can conducted by using ABC analysis. This analysis has arranged merchandise performances by ranking the, using several measures to determine which goods are allowed to run out (out-of-stock) and which goods need to be removed from stock (deleting stock). This research also uses a category management method to place each product into categories according to its type.

2.1.2. Current Research

The current research focuses on improving product displays using ABC Analysis to identify the products' contribution in sales, Category Management, and Merchandise Hierarchy on customer preference with the support of observations, interviews, and sales data for nine months from the point of sales (POS). The preparation of product displays is based on the existing product categories that are still messy in the arrangement, namely the medicine category.

2.2. Theoretical Background

The theoretical background contains the theories used to help construct and improve the product displays, divided into sub-chapters to explain the theory in-depth.

2.2.1. Retailing

Retail is a collection of business activities that aim to add value to customers' products and/or services for their personal use carried out by a person called a retailer. A retailer is an individual or business organization that sells products and services to customers (Levy and Weitz, 2007).

Retail business in Indonesia can be categorized based on its nature, namely traditional and modern retails. Traditional retailers are small and straightforward retailers, such as roadside grocery stores and retailers in traditional markets. Traditional retail business groups have small capital with simple facilities. On the other hand, modern retail is some retail traders or large retailers with some big outlets and complete and modern shop facilities. Modern retailers' concepts are supermarkets (self-service), hypermarkets, minimarkets, and department stores (Soliha, 2008).

2.2.2. Impulse Buying

Impulse buying is the urge to buy a product that is not planned before. This situation often occurs when the customer is shopping. There are two factors called internal and external factors that can influence impulse buying. The internal factor is the customers' habits and moods when they are shopping. The external factor is the factor created by the store environment. The store environment is one of the retail marketing related to creating a shopping atmosphere. There are three aspects of the store environment (Rahmasari, 2010), they are:

a. Store planning is the placement of goods as well as a department within a shop.
b. Merchandising is a method of presenting products offered in-store.
c. Visual communication is how retail helps prospective customers find products and get to know retail better through writing and pictures.

All the store elements help customers become more comfortable seeing all the products, allowing impulse buying.

2.2.3. Layout

According to the Merriam-Webster Dictionary (2003), a layout is an arrangement of something laid out. In this case, the layout is very closely related to the product display. A well-ordered product will increase impulse buying. Based on Rapczynsky (2017), there are three kinds of layouts in the retail world. Every kind of layout has its advantages and disadvantages.

a. Grid Layout

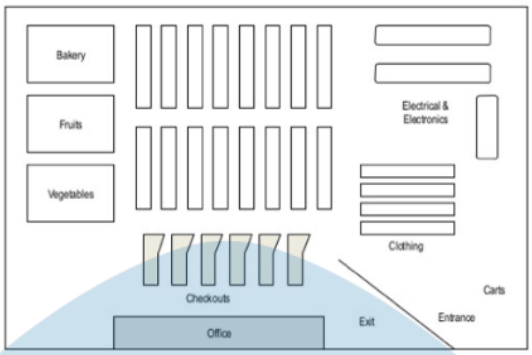

Figure 2.1. Grid Layout

The grid layout, illustrated in Figure 2.1., has parallel aisles with merchandise on shelves on either side of the aisle. The cash register is located at the entrance or exit of the shop. Customers who are only interested in the store's functional features will profit from the grid arrangement. They do not care about the hedonic benefits of a visually appealing design. They want to easily find the products they want to buy and make purchases as quickly as possible. Because this design is very popular, most supermarkets and full-line bargain businesses adopt it. There is a restriction of the grid plan from the retailer's standpoint. Customers are often not exposed to all of the stuff in the store because, due to the height of the racks, they only see products displayed in the aisle they are in (Levy and Weitz, 2011).

b. Racetrack Layout

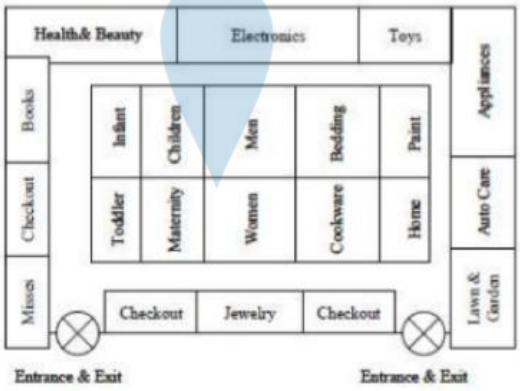

Figure 2.2. Racetrack Layout

The racetrack layout or the loop layout sets up the central aisle that rotates around the shop to guide customer movement around different product categories. This

layout aims to encourage customers to browse all product categories and thereby increase impulse buying. The racetrack is more expansive than other aisles and is defined by a change in flooring surface or color to lead customers along the racetrack. For instance, the aisle flooring in the store is marble-like tile, whereas the department floors vary in material, texture, and color, depending on the desired ambiance. Furthermore, this is one of the drawbacks of the racetrack layout because it costs more. Retail stores that often implement racetrack layouts are clothing retailers (Levy and Weitz, 2011).

c. Free-Form Layout

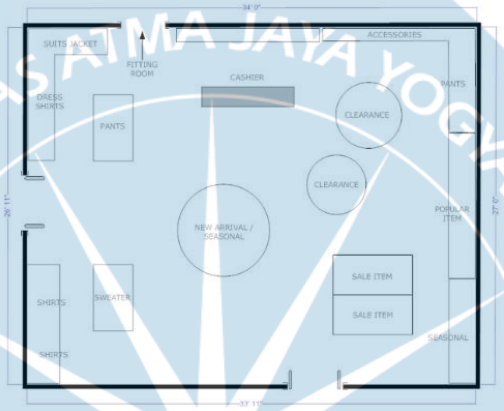

Figure 2.3. Free-Form Layout

Free-form layouts focus on hallways and fixtures in an asymmetric free flow pattern. The main advantage of this layout is that it can enhance the customer shopping experience and shop atmosphere. Customers are encouraged to browse the entire store for various products to increase impulse buying and create a pleasant shopping atmosphere. Therefore, this racetrack layout is expensive. Customers are not naturally drawn around the store because there is no well-defined traffic pattern in racetrack and grid layouts. Therefore, personal selling becomes more needed to encourage customers to investigate the items presented in the store (Ebster and Garaus, 2015; Levy and Weitz, 2011). There are three classifications of the free-form layout, they are (Ebster and Garaus 2015):

i. The boutique layout has a shop-in-store look. The shop-in-store is devoted to a specific category of merchandise or brand manufacturers. Examples of stores that use this layout concept are clothing stores and specialty stores.
ii. The star layout arranges the shop aisles into a star-like pattern. This layout aims to create a luxurious and modern shop feel, so this layout is often implemented by perfume shops, jewelry, and high-end fashion stores.

iii. The arena layout is slightly motivated by the arena's shape in the Roman era, which is oval or round. Product placement is based on rack placement, which is often higher than those in front of the shop or pedestal. Bookstores and record stores often use the arena layout.

2.2.4. Planogram or Product Display

Planogram is similar to an architectural drawing that can help retailers understand where products can be placed precisely to attract customer attention to buy and increase store profits. The planogram needs to ideally be considered and prepared before the product reaches the store. There are four advantages of planogram (Hudson, 2019), they are:

a. Balance inventory because planograms are very helpful in sorting what products are ideal for sale. By implementing a planogram, the build-up of unsold stock will decrease. Therefore, it can affect the cost of inventory to be cut and will increase inventory turnover.
b. Influence shopping behavior because the planogram can integrate the available products based on customer demand and position each product based on the retailer's goal and higher sale rate.
c. Improve customer service because one of the planogram's foci is to make it easier for customers to shop.
d. Increase store efficiencies because the planogram can ensure an optimal case pack to reduce overstock in the back room. Planograms can also help customers save time in searching for products because of their easy-to-reach placement.

A planogram can be made in four necessary stages (Leolita, 2012):

a. Classifying goods according to category

The first stage of classification is carried out based on the provisions of the category in the retail. This classification can be arranged based on the use of the product and the level of product sales.

b. Categorizing slow and fast-moving items

In the second stage, products are categorized into slow-moving products and fast-moving products. In simple terms, slow-moving products are products that do not sell well or are challenging to sell. Fast-moving products are products that sell well or sell quickly (Utami, 2017).

c. Creating a layout for a retail

The third stage describes retail's initial layout and the size, dimensions, volume, capacity of goods, and placement according to actual conditions.

d. Making goods analysis

The fourth stage is to analyze the appropriate items on the rack without changing the layout. Goods analysis is carried out using various sources, such as expensive cigarettes placed close to the cashier, the capacity of the goods from the rack, and the ease with which the goods are seen.

2.2.5. Customer Preference

Customer preference is a consumer's attitude towards a choice of product brands formed by evaluating various brands in the various choices available (Kotler and Keller, 2012). Customer preferences appear in the purchasing decision process, where customers are faced with a wide choice of products and services with various attributes. Therefore, it can be concluded that preference is a choice taken and chosen by consumers from various available options. By understanding customer preferences, companies as producers of goods and services can design the right strategy to respond to consumer expectations and make it a strategy against its competitors (Putri and Iskandar, 2014).

2.2.6. Category Management

Category management is an approach to handle goods at the category level through a structured classification of the products. (Respatiningsih, 2008). The primary function of category management is to organize each category into its functions. It can help to produce high business results that prioritize customer value. Category management is beneficial in various products to improve the displays' arrangement (Rachmawati, 2011). Category management manages the product category structure in a store. Based on Respatiningsih (2008), the product category structure is an arrangement of products' grouping frameworks. There are two essential functions in conducting product categories (Sudjana, 2005), namely:

a. Classification Function

The classification function of product categories is to place all product items in a framework that builds assortments by sorting them based on the customers' usefulness groups then arranging them in a hierarchical structure.

b. Identification Function

The identification function is a regulatory process of data from an item in the assortment that distinguishes one item from other items.

2.2.7. Merchandise Hierarchy

According to Ray (2010), every retail organization has a merchandise hierarchy. The merchandise hierarchy is a process in determining the level of goods according to customers' behavior in making decisions. It tends to depend on how the customer buys the product. The merchandise hierarchy has levels starting from the store, department, category, sub-category, and other options in its description. The following is a description of the levels with the example case is the shirt:

a. Store is the level to determine the type of retail company that consumers will address to choose a shirt. Examples of the stores are malls, supermarkets, or minimarkets.
b. Department is the level that customers begin to determine more specifically in determining the shirt to be purchased, especially in determining the department. Examples of departments are groceries or apparel.
c. Category is the level that the customers will determine the category of a shirt to be purchased. Examples of the categories are formal shirts, informal shirts, or accessories.
d. Sub-category is the level that customers provide more detailed specifications of the shirt to be purchased. Examples of sub-categories are single-color variety and checkered shirts.
e. Another option is the level that customers provide more detailed information such as size (S, M, L, XL, XXL), price points, color (light or dark). Based on these, the customer finally chooses the particular product.

2.2.8. ABC Analysis

Schroeder *et al.* (2010) stated that ABC analysis is a method of classifying products based on the ranking of values from highest to lowest value and is divided into three major groups called groups A, B, and C. ABC analysis is an inventory application that uses the Pareto principle. This principle focuses on inventory control types of high value or critical inventory rather than low value or trivial.

The ABC analysis divides inventory into three classes based on the value generated by the inventory, they are:

a. Class A is for items that provide high value. In general, class A is represented by 20% of the total existing inventory, and the sales are 80%.
b. Class B is for goods that provide moderate value. In general, class B is represented by 30% of the total inventory, and the sales are 15%.
c. Class C is for the goods that give low value. In general, class C is represented by 50% of the total existing inventory, and the sales are 5%.

Table 2.1. ABC Analysis Classification

Class	Sales	Cumulative
A	80%	80%
B	15%	95%
C	5%	100%