

THE IMPACT OF INVENTORY MANAGEMENT PRACTICES ON CUSTOMER SATISFACTION IN SUPERMARKETS

Research dissertation presented in partial fulfilment of the requirements
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Declaration

I dedicate my dissertation work to my family and my friends. A special feeling of gratitude to my loving parents whose words of encouragement and push for tenacity ring in my ears. My brother has never left my side and is very special. And a special mention to my supervisor who supported me during this research.

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Abstract

The respective research study has introduced the critical position of inventory management within the retail sector, and particularly the supermarkets, where satisfaction is usually associated with the availability of products and proper stock control. The introduction has also delineated how appropriate inventory practices play a pivotal role in competitive advantages and also in lessening operational costs while the demands of the customer are able to be fulfilled in a timely manner. The section of Review of Literature also covers available studies on different strategies in managing inventories, such as JIT and EOQ, and the application of advanced technologies, like EPOS. In particular, it accentuates the shortcomings of literature; the scant numbers of comprehensive studies that directly link inventory management practices to customer satisfaction but within a supermarket context. This research study addresses these knowledge gaps in helping understand better how supermarkets can use effective inventory management to enhance customer satisfaction and operational improvement. The following paper also discusses how inventory management practices affect customers' satisfaction with supermarkets, and as such, it focuses on Tesco. A mono-methods approach was used in this study, wherein quantitative surveys were employed in data gathering for customers and staff of Tesco dealing with inventory management. It was observed from the results that good practices of inventory management, like an automated replenishment system and correct demand forecasting, are positively correlated with high levels of customer satisfaction. It can be gauged from the discussion that these practices reduce stockouts, and improve product availability, and overall shopping experience, thereby fostering customer loyalty. The study concludes that supermarkets have to invest in advanced inventory management technologies and staff training programs to maximize their stock control activities and meet customer expectations. Predictive analytics can further be integrated with ongoing replenishment systems to maintain optimal inventory levels and bottom-line customer satisfaction continuously.

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1.0 Introduction

Inventory management is essential as proper management enables one to know how much of a particular item is available in stock, enabling the company to manage inventories in appropriate quantities or stock to fulfil the customer's needs. The study shows how inventory management helps the company enhance customer satisfaction, which assists in the company's growth and development. Inventory management is one of the critical functions in the retail industry since it affects customer satisfaction and organizational performance. While competing in the supermarket industry, inventory management ensures that the required products are procured and effectively stocked to minimize stock-outs or overstocking issues that help reduce company losses (Tian et al., 2021). The study reflects that supermarkets and grocery stores must keep an accurate inventory to reduce expenses, increase revenues, and satisfy consumers' expectations for product availability. This chapter discusses the inventory management practices of Tesco, the most prominent supermarket chain in the UK, and evaluates the impact of inventory management measures on customer satisfaction.

1.1 Overview

In the supermarket sector, Tesco is a famous retailer and 'multinational grocery seller' headquartered in 'Welwyn Garden City, United Kingdom.' According to its revenue, the company is known as the 'ninth-largest retailer' in the world (World Economic Forum, 2024). Tesco is one of the vital supermarket leaders in the UK. It operates in a competitive environment where consumer satisfaction is a significant factor in market control and financial viability. Proper inventory management is crucial since it enables the organization to have the right products in the correct quantity to meet customers' needs and optimize processes (Orobia et al., 2020). Market demand and customer needs are constantly changing in the supermarket sector. Hence, it is necessary to manage the inventory effectively to fulfil the demand on time, avoiding overtime or stock-out issues.

Hence, inventory management is a sensitive part that needs proper attention from the management to enhance customer experience and to improve overall profit.

Control of inventory reduces cases of stock out and overstock leading to meeting of customer orders on time hence reducing delay (Munyaka, 2022). There is also reliability that tends to improve the customers' loyalty and reliability since the consumers get their wants at the right and precise time. Operational efficiency of order fulfilment refers to how efficiently orders are delivered to the customers and meet their expectations. Moreover, a proper method of managing the inventory is also useful in controlling the spoilage of products by reducing expired or damaged goods, thereby enhancing the general experience of the customer (Kurdi et al., 2022). It is evident that in the supermarket sector, poor inventory control leads to higher operational costs and also impacts customer satisfaction. Inventory management includes accuracy, stock readiness, and promptly delivering orders (Rubel, 2021). Significant disparities in inventory management can inconvenience customers and hamper their journey. Stock readiness helps ensure that the products satisfy the consumers' demand at the right time, avoiding any stock-out issues.

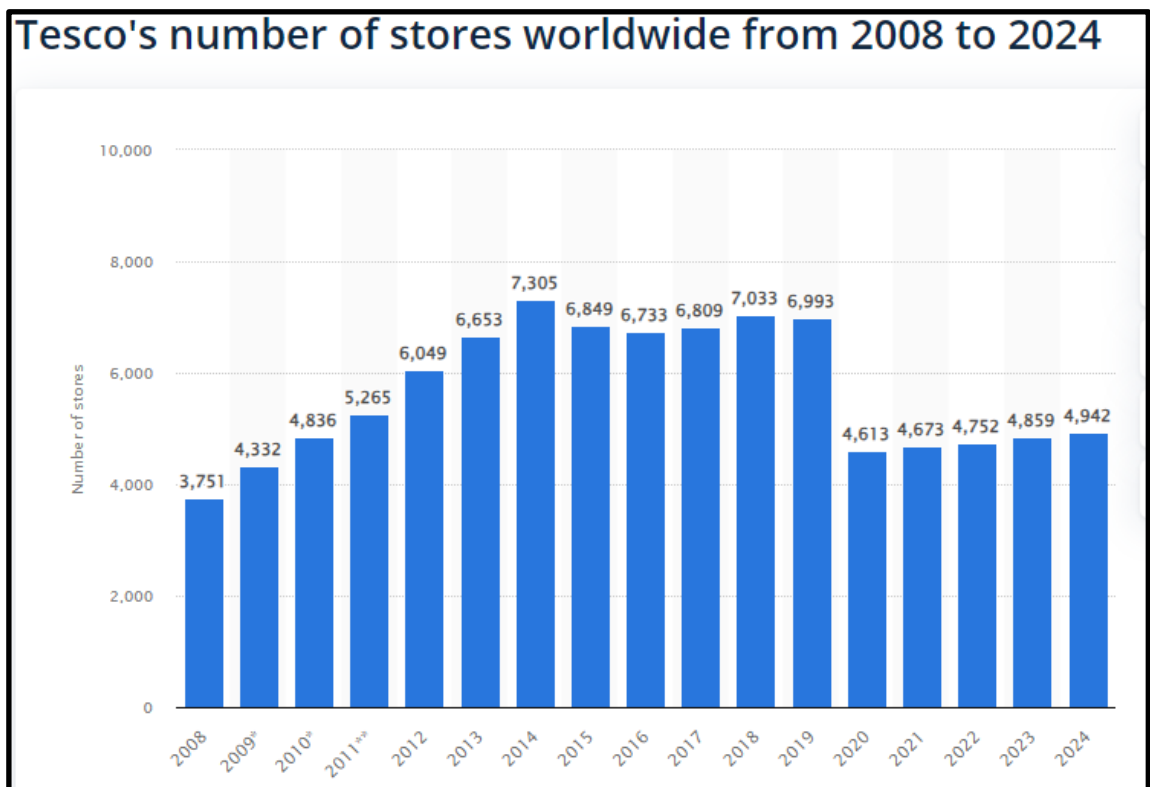


Figure 1: Stores of Tesco

Source: (Bedford, 2023)

The availability of various products in the inventory can fulfil the consumer's different demands and choices, which enriches their purchasing experience. Hence, the research focuses on several important factors that influence the functionality of the inventory management process. In addition, inventory management also impacts the operational efficiency of a company. Tesco has adopted various inventory management strategies that aim to satisfy its customers where demand forecasts are made in the shortest time possible (Meng, 2024). Through inventory management methods, Tesco plans to reduce the incidences of stock out and overstocked items, hence improving the satisfaction level of the customers. However, Tesco faces several challenges while implementing the inventory management strategies due to various factors such as dynamic consumer consumption patterns, supply chain management, distributor channel disruption, lack of support from suppliers, and other logistic-related factors that impact the inventory management process.

1.2 Research Purpose

Effective stock management has become a major strategic issue that supermarkets must address in today's highly competitive environment. TESCO, one of the world's largest retailers, faces challenges while managing its inventory management practices (Smith, 2023). The critical issue is the interaction between inventory processes and customers, where suboptimal inventory control results in customer dissatisfaction and sales loss.

Another factor is that TESCO has a wide range of products with different shelf lives and demand and supply chain requirements. If there is overstocking, the organization incurs wastage and high holding costs (Jauhar et al., 2024). On the other hand, understocking leads to stock-outs and customer dissatisfaction. This challenge is made worse by different factors, such as shifting consumer trends, shifts in demand due to seasonal differences, and unpredicted surges in demand.

Another area for improvement has been the change from traditional single-channel selling to omnichannel retailing (Cai and Lo, 2020). From the customer perspective, TESCO has added home delivery alongside store and click-and-collect. Therefore, the company needs to focus on ensuring the availability of the

products for these services. This comprehensive approach implies that there should be a sophisticated and more adaptable system to account for such necessities across the various zones of sales points.

Furthermore, it is challenging to maintain various inventory stocks for all types of customer segments simultaneously as the company also needs to have high product turnover (Raqib et al., 2020). The main challenge is as follows: to what extent can TESCO continue to operate at a low cost and minimal inventory while maximizing customer satisfaction through high levels of product availability and quality (Meng, 2024). This research aims to analyse the complex problems, the ways of inventory management, and the required implications of these methods on customers at TESCO.

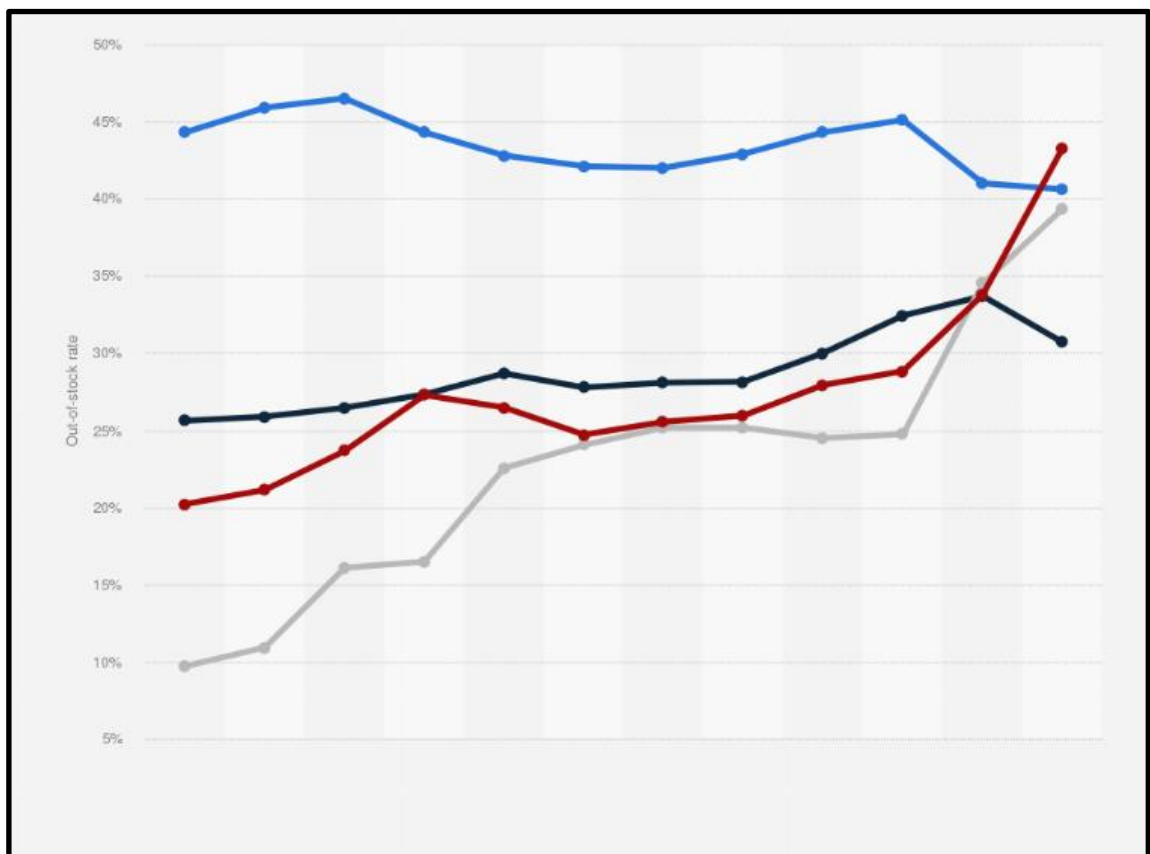


Figure 2: Out-of-stock rates at Tesco

Source: (statista.com, 2022)

In any industrial organization, adequate inventories defend the firm from low quality, dissatisfied clients, increased cost, and liability. Inventory management impacts the supply chain flow, one of the most significant factors in a firm's

success (Mondol, 2021). The study explains the impact of effective inventory management in supermarket sectors, which is critical in retail business and impacts the overall customer experience. Supermarkets mainly compete to provide a good quality and large variety of products at a relatively low price; hence, proper logistical management is critical. Overstocking is a prominent issue affecting every supermarket chain, including Tesco (Riesenegger, 2022).

Most firms' operations experience efficiency gaps due to ineffective stock management that impacts the company's image and affects the company's performance in many ways. Poor inventory control also impacts the supermarket sector's production process, leading to delayed deliveries, poor customer satisfaction, and ineffective resource management (Ghadge et al., 2020). Hence, this research explores Tesco's inventory management processes to understand how to optimize them to improve organizational performance and increase consumer satisfaction. Customer satisfaction is one of the most significant factors defining businesses' success in the retail industry. Customer satisfaction raises retention, long-term business value, and positive brand image. Customer satisfaction implies that the customers are willing to return and even make repeat purchases besides referring family and friends to the store (Phan et al., 2021). Hence, it is essential to examine the nature of inventory management practices and how they impact customer satisfaction to create better strategies to boost customer loyalty and business performance.

The research objectives can help identify the inventory management factors that significantly affect customer satisfaction in Tesco supermarkets. The nature of product demand continues to vary in the supermarket, which makes it essential to review inventory management regularly. The study also shows how inventory management impacts the management of the supply chain since accurate demand forecasts lead to short lead times and quicker delivery of goods to the customer. This research explores the vulnerable insight into the contemporary inventory management practices applicable to Tesco. The potential recommendations regarding the effective practices of inventory management strategies can help to meet customers' needs and market requirements (Blanchard, 2021). It also shows how inventory management thus influences the overall manufacturing processes, the cost of operating the warehouses, and the

ability to meet customer demands. This study highlights the operational process of a UK-based supermarket firm that shows how inventory management impacts customer satisfaction in retail firms.

1.3 Significance of the Study

Inventory management practice not only improves customer satisfaction but also helps in reducing operational costs (HR, 2020). This research provides a comprehensive insight into Tesco's inventory management practices and their effect on overall customer satisfaction. The study reveals the advantages and disadvantages of inventory practices that can help supermarket firms select the best practices for inventory management. Better inventory management can help Tesco reduce operational costs by identifying operational efficiencies to achieve business expansion and profitability. Other supermarket chains can also benefit from the findings of this research since the study presents some key factors that have influenced the performance of the supermarkets.

The information presents an understanding of Tesco's practical experience, which can help improve supermarket management practices to fulfil customers' needs. The research also shows how supermarkets can avoid or reduce issues of stock-outs and overstock by implementing key inventory management strategies that can improve product availability and the overall experience of consumers in the store. The research provides significant information about the efficiency of inventory management processes that can provide a competitive advantage in the retail industry. Therefore, this study can be helpful for Tesco, other supermarket firms, and the retail sector, as the study includes helpful recommendations and valuable information.

1.4 Research Objective

Aim: The research aims to explore Tesco's current inventory management practices and show their impact on customer satisfaction in the supermarket industry.

Objectives:

1. To explore the effective practices of inventory management that can improve TESCO supermarket.
2. To explain the correlation between effective inventory management strategies and supermarket customer experience.
3. To highlight the significant aspects that impact and assess the factors that affect efficient inventory management at supermarkets.
4. Discuss the methods that can help supermarkets control stock and increase client satisfaction.

Research Questions

1. What are the current inventory management practices at TESCO supermarket?
2. How does stock availability impact customer experience in the TESCO supermarket?
3. What is the impact of TESCO's products and services on customer satisfaction?
4. What are the significant challenges faced by the TESCO in inventory management and in implementing strategies for customer satisfaction?

1.5 Structure of the Study

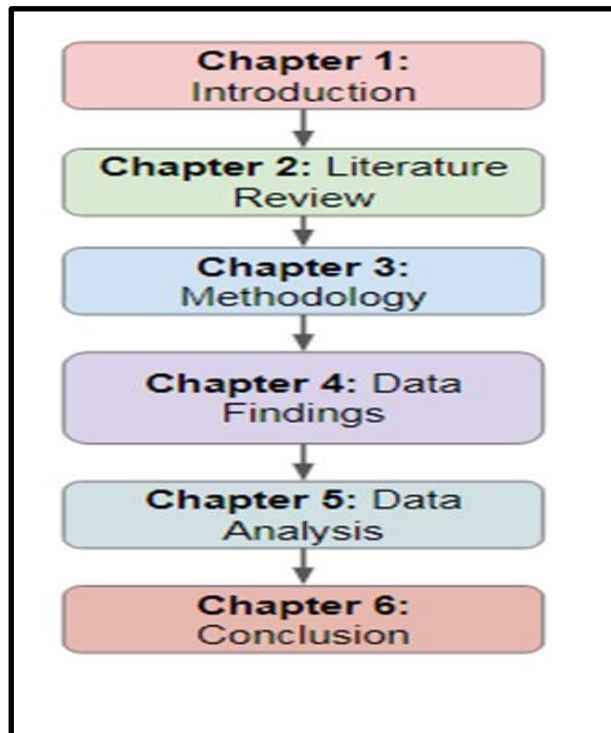


Figure 3: Research Structure

(Source: Self-Created)

Overall, this research consists of six chapters, each of which helps fulfil the research objectives and provides valuable findings. Each chapter includes essential components that explore the 'impact of inventory management practices on customer satisfaction in Tesco supermarket.'

Chapter 1: Introduction—The first chapter includes the research background and the significance of research on the particular topic. It also includes the research aim, objectives, and rationale, showing the crucial factors it will address. This chapter briefly explains Tesco and the significance of inventory management in operating a retail store. It also covers the justification for conducting research and the problem statement.

Chapter 2: Literature Review - In the chapter on literature review, information from secondary sources, such as articles and journals on inventory management and customer satisfaction, is presented (Kraus et al., 2022). This paper integrates significant theories, models, and research findings, displaying the current state of knowledge and areas of deficiency that this research strives to address. This

chapter presents different inventory management techniques that influence customer experience.

Chapter 3: Methodology - The methodology chapter explains the data collection and data analysis process that supports the validity and reliability of the research. This part outlines the research philosophy, data-gathering methods, sampling procedures, and data analysis process (GHR, 2022). This chapter also discusses the ethical issues and the study's limitations to justify the procedures performed in the research properly following ethical guidelines.

Chapter 4: Data Analysis—This chapter includes graphs, charts, and tables that help present the research findings. The research analyses the main findings that help explain the correlation between the inventory management practices implemented by Tesco Company and customer satisfaction.

Chapter 5: Findings and Discussion—This chapter presents an analysis of the collected data that helps in understanding the key findings of this research. It also uses the data collection and analysis results to address the research objectives. This chapter includes a discussion of the implications of the findings for Tesco's inventory management practices and customer satisfaction to answer the research questions.

Chapter 6: Conclusion and Recommendations—The last conclusion chapter provides implications of the findings and also includes specific suggestions for Tesco that can help optimise inventory management and increase customer satisfaction. This chapter equally consists of a summary of the overall dissertation, limitations of the research, and future research suggestions.

1.6 Summary

This research establishes the correlation between TESCO supermarkets' inventory management practices and customer satisfaction. Therefore, the intended study will work towards identifying efficient inventory management practices that can benefit TESCO and satisfy customer needs. This research aims to discuss current practices, explore the relationship between stock

availability and customer satisfaction, and outline significant challenges for inventory management in TESCO and the global retail sector.

This research covers controlling stock, demand forecasting, supply chain management, and information technology in inventory systems. Further, the study explores the impact of such practices on customers by focusing on the specific aspects that relate to product availability, freshness, and convenience in shopping. This study seeks to advance the understanding of retail management and proffer actionable insights for TESCO in improving its inventory processes. This research can increase operational effectiveness, decrease costs, and increase customer satisfaction in TESCO supermarkets. It can also have implications for the rest of the retail sector.

2.0 Literature Review

2.1 Overview

This chapter discusses the already existing literature based on inventory management practices and the customer satisfaction parameters that a retail businessman needs to keep in mind while arranging consumer items in supermarkets. The review's scope will include the theoretical framework, rules and practical theories that can be applied in the modern marketing scenario including the supermarkets. It emphasises the nature of interaction between the customers and the supermarkets. Therefore by integrating the outcomes and observations from the literature review and taking cues from the author's research proposal, the aim is to create a comprehensive and sound theoretical foundation. This foundational theory will help in approaching the study using different dynamics and variables. In this literature review, there will be an elaborate discussion of the Company Overview of Tesco, the Inventory management practices that Tesco implements, how these practices enhance customer satisfaction, the hurdles that Tesco faced previously in terms of its inventory and supply chain management and finally how they could circumvent their inventory and supply chain problems using smart inventory management practices.

2.2 Overview of the Industry and Company

The supermarket industry is the sector of the retail industry that operates large stores for selling a wide variety of food, beverages and household items. These are one kind of stores that offer an easy one-stop shopping experience for consumers with a wide variety of products with competitive prices and various services like checkout counters, parking and also loyalty programs. Supermarkets carry a wide variety of products which includes, fresh produce like fruits, vegetables, meats and dairy (Ltd, 2022). Canned and packaged goods are available. Baking supplies like flour, sugar, and baking powders are also available. The supermarket industry is a vital part of the retail landscape, which provides jobs, supports the local communities and also contributes to the national economy.

Tesco operates in a very comparative supermarket market in the UK, with rivals like Sainsbury's, Asda and Morrisons (Bedford, 2024). Other trends are those in consumer behaviours towards online buying, demands for healthy and sustainable products and rising price sensitivity. Against this background, Tesco reacts to this by investing in digital transformation, private brands and ease of customer convenience and loyalty schemes to retain its market share and competitiveness.

Four of the big supermarkets which are Tesco, Asda, Sainsbury's and Morrisons are facing challenges from Aldi and Lidl, who are offering lower prices and good quality products (IBISWorld, 2024). To compete, Sainsbury's and Asda tried to merge but failed as it was blocked. At the time of the pandemic, the amount of online services grew gradually which caused food sales to increase. However, the crisis of cost-of-living led to a decrease in sales and profits due to the higher amount of energy and labour costs. Regardless of that, the revenue is expected to grow as of the price inflation. In the future, consumers will prioritize those products that are convenient, sustainable and eco-friendly. Supermarkets will invest in electric fleets and sustainable practices (Jagani, Marsillac and Hong, 2024).

Over the next five years, revenue is expected to grow at the rate of 2.1% to £254.9 billion. The industry is currently shifting towards the mode of online shopping, convenience stores and sustainable practices. As shoppers seek quick and convenient shopping options, the major supermarkets are expanding their convenience store chains. This shift is drawing scales away from large-scale stores. Supermarkets are offering convenient locations and shorter shopping trips. This change will align with consumer preferences for speedy shopping experiences, threatening the traditional weekly shopping at supermarkets. Convenience stores are becoming increasingly popular, and supermarkets are investing in this format to stay more competitive.

Food prices reached a 45-year high, which is driving consumers to seek affordable options. As a result of that, discount supermarkets are gaining popularity (Service, 2024). Shoppers are turning to these stores for lower prices on everyday items, which will help them to stretch their budgets further. The surge

in food inflation has made price a top priority for consumers which will lead them to switch from traditional supermarkets to the ones which offer a good amount of discount. London and the southeast have high amounts of disposable incomes, which makes them attractive locations for premium supermarkets. These areas will support the bigger stores which offer unique products that cater to affluent consumers who prioritise quality and exclusivity. This results in premium supermarkets to well represented in those regions, offering speciality products that appeal to the local demographic. This concentration of premium supermarkets shows the areas of high spending power and demand for luxury goods.

The term 'aggressive pricing' is prevalent in Aldi and Lidl operations which has severe consequences for Tesco's supply chain (Fraser, 2024). Tesco has reacted by improving its supply chain and consequently managing its inventory. Aldi and Lidl are focusing on well-developed value propositions, hence Tesco had to adapt and formulate new stock management approaches to counter these new threats.

According to Aiello et al. (2020), Tesco is a big retailer in the UK and worldwide. It was globally the 9th largest retailer in the year 2015 with a stake of £81 billion in sales. Tesco has a loyalty program which is known as the Clubcard, which allows its customers to earn points for their purchases which is done in-store and also online. Customers can use these points to claim prizes and discounts. With customers' consent, Tesco keeps a record of their purchases which is linked to their Clubcard number. The study looks at Tesco's in-store purchases which were done in Greater London in the year 2015. It uses the data from 411 Tesco stores from all over the area. The data is combined and kept private which shows the shopping patterns at different levels, like from the smaller areas to that of the larger areas. This helps the store to understand how people shop in different parts of that area. The study uses the combined and the data which is anonymous as it protects the customer's privacy. It also provides insights into shopping habits in different areas of London, which can be useful further for businesses and researchers.

2.3 Inventory management practices used by Tesco

According to, Meng (2024), the effective management and maintenance of inventory are crucial for grocery retailers to maintain a balance between consumer demand and material supplies. It is important to be able to hold stocks before the necessary supplies run out. Tesco employs a bunch of different inventory management methods including Just In Time (JIT) and Economic Order Quality(EOC) to optimise the collection and stock of its inventory levels. Another research by Slack, suggests that Predicting Algorithms and Data Analytics have enhanced the standards of inventory management practice thereby leading to efficient storage and collection of supplies while minimizing the wastage of supplies. Tesco is heavy-handed in using the latest and the most advanced technologies to garner customer satisfaction and improve customer experience. This includes self-checkout systems, mobile apps for smart shopping and online ordering platforms.

As stated by Marques, Jorge and Reis (2022), other inventory management techniques that Tesco uses frequently include Lean Management, RFID technology, Data Analytics, Cold storage and the Just Time Approach as was discussed earlier. In Lean Management, Tesco refines its supply chain and manufacturing as well as storage processes in a way that reduces waste production. A lean method continuously emphasises the use of the latest technologies to conserve capital and reduce the time and cost of factory operations.

A study cited by Shi et al. (2020), mentioned that most inventories use data-driven, machine-learning analytics tools for inventory replenishment and customer demand-supply tracking. The predictive analysis models help in the advanced collection of consumables and keep the retailer champion prepared with stocks and supplies based on current and ever-changing market demands. Vendor Lead Time or VLT is a great tool that helps track the delivery timings of goods. It mainly calculates the processing time between a customer order and retailer delivery. Apart from using the traditional method of a PTO or predict-to-optimise solution framework, the end-to-end (E2E) framework uses deep learning algorithmic tools for suggesting replenishment of supplies based on input features of consumables without any additional steps in between.

Moreover, Jauhar et al. (2023), mentioned that several deep-learning analytical models help in the prediction of the essential stockpiles necessary for future customer consumption. Tesco uses such learning models in data analytics and market predictions to lead its online business in the major e-commerce platforms and the most frequently used end-to-end or E2E model has greater effectiveness for ensuring business success, as opposed to the PTO frameworks which were previously used. For supply chain management, the E2E model shortens the decision-making process and provides an automatic inventory management solution to supermarket retailers with a greater possibility of scaling and generalising. The E2E concept utilizes input data directly from the ultimate goal, thereby making it a significant practice for supply and inventory chain management situations.

2.4 Enhancing Customer Satisfaction Through Effective Inventory Management in Supermarkets

As mentioned by Mondol (2021), the direct impact of blockchain supply management and Smart Inventory Management can lead to customer satisfaction and quality supply of consumables based on market demand. Smart Inventory management is a difficult task to accomplish as forecasting market demands could be challenging and a little bit tricky. In the retail industry, there are many kinds of goods including convenience, grocery, clothing and luxury lifestyle goods which require a customer base with a variety of choices and vivid purchasing power for all customers. In this context, the Smart Inventory management for Tesco is crucial to ensuring customer satisfaction and the demand-supply chain is so much interrelated to inventory tracking and updation. Scalability of items and categories of consumables in market demand often requires smart inventory and shelf management in real time. Remote Monitoring has become a possibility whereby retailers can easily track the inventory levels to replenish shelved stocks to meet the real-time market demands of the customers. The smart inventory management system has a complete backup of all the data including shelves that are out of stock and those that are already delivered due to ongoing customer demand. Most businesses including Tesco require security backups. The knowledge of inventory

management systems in the business industry can help with the creation of an extremely secure and protective inventory atmosphere with the necessary backups and detailed information about the missing supplies that need to be ordered soon. The latest version of the Smart Inventory Management Systems can help retail shopkeepers create highly secure goods and consumable facilities. There are extra backups created to help retailers access important information during emergency purposes and through double checking of the information saved in the database, any possible supply chain or inventory management errors can be easily avoided. Scalability is another important aspect of maintaining a large customer base. Businesses require specific rooms or spaces to accommodate and secure their supplies. The management of inventory spaces including racks shelves, compartments and pantry racks plays a very crucial role in smart inventory management. Identifying errors and addressing defects through repairs is a key characteristic of Smart Inventory management and it is helpful in quality control, performance control and quantitative assessment of the most demanded products by the existing customer thereby improving customer satisfaction and enhancing their shopping experience to make a greater market outreach involving a larger new customer base.

According to Arasa and Achuora (2020), this study is based on how strategic inventory management practices affect supermarket performance. The study also focuses on some practices like vendor-managed inventory, lean inventory, e-inventory systems, and activity-based costing. The researchers surveyed 113 supermarkets in total. The results showed that these practices impacted the supermarket performance in a positive way, which explains about 32% of performance variation. E-inventory systems had the strongest effect, which was followed by activity-based costing and vendor-managed inventory. Surprisingly, the lean inventory didn't have a greater impact. Based on these findings, the study tells that supermarkets implement e-inventory systems and activity-based costing to improve their overall performance. They suggest the hiring of cost accountants and working more closely with vendors. The researchers also suggest that the government offer tax incentives for e-inventory systems to encourage their use.

This research gives useful insights for supermarkets looking to improve their operations and performance through better inventory management.

On the other hand, the study by Lyimo (2022) explored how customer-supplier relationships affect customer satisfaction in supermarkets. It also focuses on trust, cooperation and communication. The researchers also surveyed 63 people and found that all of the three factors positively impacted the level of customer satisfaction. Trust helps suppliers to understand the needs of the customers and offer quality products. Cooperation allows for information sharing and joint decision-making. Effective communication ensures that customers are informed and their feedback is heard. The study also found that communication has the strongest impact on the satisfaction of the customers which will be followed by trust and cooperation.

2.5 Factors that hinder supermarkets' efficient Inventory Management

The research conducted by Santarek et al., (2022) focused on the identification of factors influencing the efficiency of R-logistics activities in supermarkets. Their study demonstrates several issues that can pose challenges to efficient inventory management. Some of the challenges include poor information systems, lack of coordination between departments, lack of employee training and low understanding of R-logistics advantages. The authors describe that ineffective reverse logistics management can result in inventory management problems and inefficacy, higher costs, and dissatisfied customers. They also highlighted that factors of the external environment like government regulations and competition from other supermarkets affect the management of inventory. By incorporating better technology, increasing the efficiency of staff working for R-logistics and implementing better inter-departmental relations, inventory management and the overall performance of the supermarket can be enhanced.

Ngari and Kamau (2022), analysed the impact of the working capital management cycle on the profitability of retail supermarkets. The study shows several factors that hinder effective inventory management in supermarkets. The major issue of improper handling of cash conversion cycles leads to either inventory shortages

or over-allocation of resources. The management of the inventory in balancing the needs of the customers and the expectations of the suppliers is quite a difficult task. The ineffective credit policies with the customers and suppliers can also create complex inventory control. The authors pointed out that the underlying reasons for inventory problems can be inappropriate financial planning and less accurate forecasting, which can reduce profitability margins as well as customer satisfaction. Effective working capital management practices are a requirement for dealing with related issues and enhancing inventory performance.

Abdi and EMURON (2020) claim that the valuation methods in supermarket inventories significantly impact their productivity. The study reveals that inadequate methods of inventory valuation affect inventory management. According to the authors, such challenges include wrong cost distributions, unstable valuation approaches, and no real-time mechanisms for tracking inventory as required. Such problems can cause improper presentation of financial statements, wrong decision making and ineffective stock management. The study also highlights the significance of proper inventory valuation methods suitable to supermarket operations to improve business performance and inventory control.

The study by Jenkins (2022) outlined some of the key challenges facing organizations such as information tracking including inadequate and inconsistent tracking methods with most organizations relying on paperwork and different software systems and spreadsheets to track data leading to increased errors and reduced efficiency. The inefficiency of a warehouse is another factor with labor-intensive affecting various operations which include receiving, storage, picking, packing, and shipping. Other factors that affect the inventory include inaccurate data due to outdated counting methods and the shifting customer demand regime. According to the article, lack of visibility or access to the identification of stocks and their locations results in either partial or late deliveries. The emergence of omnichannel selling complicates the challenge of making inventory available and stable across multiple shopping points. All these aspects become the major barriers for supermarkets to control inventory and could end up with stock-out situations, overstocked with goods and low customer satisfaction.

This study by Maplesden (2024) outlines key complexities that hinder proper inventory management. The rapid change in consumer preferences serves as a critical challenge given that supermarkets face the challenge of restocking the most demanded products regularly. Biased input data and methods give inaccurate demand estimates and contribute to the problem of inventories. Production scheduling means that there are possible changes in production that can lead to stock out and negative customer impressions. Challenges include inventory defects, wastage, and errors in order, which have been presented as key performance inhibitors in the article.

According to Rosnizam (2020), supply chain management problems that Tesco faced during the years of recession caused a major problem for Inventory Management. Supplies were often kept on hold due to food shortages and there was a logistics problem that Tesco had to circumvent. There were labour shortages, workers were on strike in the entire UK and lorry drivers did not show up to collect supplies. Tesco had to find plans and strategies to minimise the ongoing obstacles to cater to the needs of their customers through the alternate supply chain, transport routes, sourcing items from different countries that could supply cheaper products and implementing sustainable practices to manage their inventory.

2.6 Strategies to overcome the factors that hinder supermarkets' inventory management

The article by Luther (2020) offers solutions for managing inventories across various retail stores such as supermarkets. It highlights the utilisation of automated systems in handling inventory in order to enhance efficiency and accurate information, which is a pivotal measure in enhancing operations. The area that the article discusses comes directly to one of the key issues of supermarket management i.e. excessive inventory and overstocking. This also proposes the methods of data analytics and forecasting as potential solutions to this problem. It also guides managers on how they should best order their inventory through methods such as ABC analysis to ensure that the most crucial items are given the attention they deserve.

Integrating POS with inventories for real-time tracking is shown as one of the crucial approaches for responding to promoting or plummeting sales instantly. It is suggested that inventory should be audited and physically counted regularly to identify any discrepancies.

Care should be taken to train the employees in inventory procedures and controls for proper implementation of controls. The article also emphasizes the enhancement of relationships and communication with suppliers, which can enhance stock management in turn. Suggestions for improving tracking include RFID and barcodes. Further, the turnover rate is referred to as one of the basic measures to address potential problems, while processes should be described to ensure equal quality across operations.

On the other hand, the article by Nelson (2024), discusses how supermarkets are using emerging technologies to address inventory management issues. It underlines the application of artificial intelligence in demand forecasting to address the right stock management another important approach to minimising waste and product shortage. Computer vision and heat mapping in recording the movement of products in a retail store is described as a novel concept in analysing customer behaviour and stock movement. The article underscores the role of analytics as a way of providing insight into data and assisting managers in making decisions rapidly.

Again, the study by Janet, (2021) highlights the measures that can help address barriers to successful inventory management in supermarkets including implementing VMI systems, improving information system applications, and promoting supply chain partnerships. VMI aids in simplifying inventory management since suppliers are in charge of inventory, thus eradicating stock-out situations and enhancing the availability of products. EDI & EPoS implementation ensures the right and up-to-date stock information which minimizes the cases of inaccurate stock and operational costs. Furthermore, trust and commitment between the suppliers and customers through the sharing of information and collaborative planning is vital in inventory management.

2.7 Optimising inventory management to boost customer satisfaction in supermarkets

Mohamud and Mwangi (2021), analyse the effect of continuous replenishment and inventory management on the supply chain performance of retail chain stores. They highlight that the effectiveness of stock management greatly improves customer satisfaction in supermarkets. The study emphasizes inventory management processes like regular restocking to avoid the possibility of a stock out and ensure product availability.

On the other hand, the study by Charles and Jackson (2021) investigates the effects of EPOS systems in managing inventories specifically in supermarkets. This could be understood from their findings as they have identified that EPOS technology is useful for managing stock and enhancing customer satisfaction. They can also be used to figure out essential inventory information including real-time sales data. This system helps the supermarket to sustain an average level of stock, preventing overstocking and a situation of complete stock-out. This results in better product accessibility, influencing customers' satisfaction directly and buyers' experience. The authors said that EPOS-driven inventory management supports more accurate demand forecasting, streamlined reordering procedures, and optimized shelf space. These benefits help to smooth the customers' shopping experience from the store, facilitate check-out quickly, and increase chances of getting necessary items that are in stock. All these factors can increase customer satisfaction inside a supermarket.

In the research by Muhamad and Zulkipli (2024), it is discussed how automation relates to inventory management performance in supermarkets. They have emphasized two significant benefits realized from the implementation of automated inventory systems, which are better inventory management and higher customer satisfaction. This will help the supermarkets to keep the stock level at a maximum with proper optimization, minimize the possibilities of human error in managing stocks and be more responsive to changes in customers' demand. The author highlighted that automating inventories in real-time produces

accurate demand forecasts optimizes reordering mechanisms and improves product availability and consumer satisfaction.

Stocking is also another factor that TESCO supermarkets have to take into consideration to meet its customer needs. Since products are constantly restocked, customers are aware that they can always acquire whatever they need, leading to improved customer satisfaction and business outcomes. On the other hand, the high stockouts can negatively affect the overall satisfaction of the customers and can cause a loss of potential business.

The study by Aişeoğlu and Karaçizmeli (2022) establishes the importance of the Six Sigma method in enabling supermarkets to reduce wastage and overstocking. The study posits that this approach has the potential to enhance customer satisfaction by improving stock management efficiently. By applying the Six Sigma technique, supermarkets can reduce excessive stock and increase the rate at which stockouts are avoided due to improved inventory forecasts. This leads to enhanced product availability, better quality stock and well-arranged product stock which assists in enhancing the purchasing experience of the customer. The authors pointed out that lean inventory management practices decrease costs by delivering benefits that enhance consumer satisfaction.

According to Madhani (2020), the use of Lean Six Sigma in the evaluation of performance enhancements in the retail industry places an improved focus on inventory management. The study signifies that this approach can greatly benefit supermarkets in terms of customer satisfaction by increasing the efficiency of stocks. Lean Six Sigma approaches help in recognizing and eliminating wastes and inefficiencies in inventory management enhancing product availability and accelerating the stock turnover rate. Such enhancements lead to fresh product stocking, neat arrangements and organisation of products on shelves and minimal chances of out-of-stock products that enhance the shopping experience of customers. The author stresses that through Lean Six Sigma in stock management, cost efficiency can be increased with enhanced customer satisfaction.

2.8 Theoretical Framework

The theoretical framework in this study evaluates the effect of IM on customer satisfaction in supermarkets.

The “Theory of Inventory Management” is a theoretical framework that helps in understanding the management of stocks in environments such as supermarkets (Munyaka and Yadavalli, 2022). This theory is comprised of several significant concepts. The “Economic Order Quantity” method aims at establishing a least-cost quantity of orders that enables organizations to reduce the general costs between ordering and holding inventory. In supermarkets, EOQ gives the best quantity that needs to be bought and restocked at one time to avoid stock-outs, while controlling for expenses. Tesco also engages in cross-docking operations (Smith and Sparks, 2020). Tesco’s inventory management considers principles of collaboration in planning, forecasting and replenishment.

The “Safety Stock” concept entails stock to prevent stock out due to fluctuations in demand and supply chain factors while observing high levels of service (Gonçalves, Sameiro Carvalho and Cortez, 2020). For supermarkets seeing that the product is illustrated with a risk of overstock when required safety stock is undertaken, safety stock is vital in managing the conflict between stock availability of critical stock items such as perishable commodities. “Just-In-Time Systems” synchronise the production and inventory requirements of a company with the demand and reduce the inventory holding cost. In a supermarket setting, JIT can be implemented to determine how various items especially fresh produce should be stocked. Tesco’s “One in Front” policy is also consistent with JIT to cut down on the time spent on checkout. In 2015 its product line was reduced by 30% which shows its implementation of JIT as a strategic initiative (Ralls, 2020).

Supermarkets apply most of the theory of inventory where they have to ensure they have enough stock of most or all their products by avoiding having excessive of these products while at the same time avoiding a situation where they nearly exhaust their stocks of these products especially stocks of perishable products.

In “Customer Satisfaction Theory”, the critical appraisal focuses on the customers’ impressions and experiences. The company targets its product quality and product range as the key aspect of the customer satisfaction theory.

Tesco Clubcard's structure assists in fulfilling customer expectations because of individualized product offerings (Pahuja, 2021).

“Product Quality” in supermarkets involves aspects of stock such as how fresh the products are and the type and arrangement of products (Dwi Retno Andriyani, 2024). “Service Quality” aspects include checkout time, employee courtesy, and store navigability. “Perceived Value” assesses to what extent customers feel that they are getting their money’s worth in their transactions. “Customer Expectations” can also be termed as the customer’s state of mind within the shopping environment which can be defined as the beliefs, perceptions, impressions or expectations that consumers have regarding specific shopping locations. According to this theory, satisfaction has a direct effect on loyalty levels and the supermarkets have to ensure that customers are met across noted dimensions.

The theoretical framework of “Service quality theory” is relevant to service quality assessment. As per this theory, tangible aspects of the service environment can include the organization of the actual layout of stores and cleanliness. In terms of the food preparation and delivery organizational capacity to efficiently and effectively deliver quality food in the specified quantity and within the expected time. The speed with which the employees of the competing brands are willing to help customers.

Improved inventory management practices in the context of supermarkets correlate with the identified service quality dimensions. For example, accurate stock records (reliability) will enable customers to find the products they are in search of improving trust and satisfaction. “Supply Chain Management Theory” is a more appropriate theory that puts inventory management in the supply network perspective. The theory is mainly dedicated to the integration and communication between the supply chain connections to enhance effectiveness as well as value to the consumers. It also applies to the right stock holding in supermarkets, it has to conduct the right holding levels while at the same time ensuring better stock availability to customers. Tesco’s effective supply chain management shows the firm’s commitment to incorporating its suppliers to facilitate appropriate stock supply and reduction of wastage (Tesco, 2024).

All these theories provided a holistic framework to analyze the nature of the interaction between the state of inventory management and customer satisfaction in supermarkets. Inventory Accuracy as per the “Inventory Management Theory” is important to have accurate stock records for reliability as well as “Customer Satisfaction Theory” to meet customers’ expectations (Schwarz, 2024). Stock Availability is important from the perspective of EOQ, safety stock, and JIT and it directly relates to the quality of the product which in effect relates to the perceived value or customer satisfaction theory and affects the dependability and speed of delivery of service (the reliability and responsiveness).

2.9 Conceptual Framework

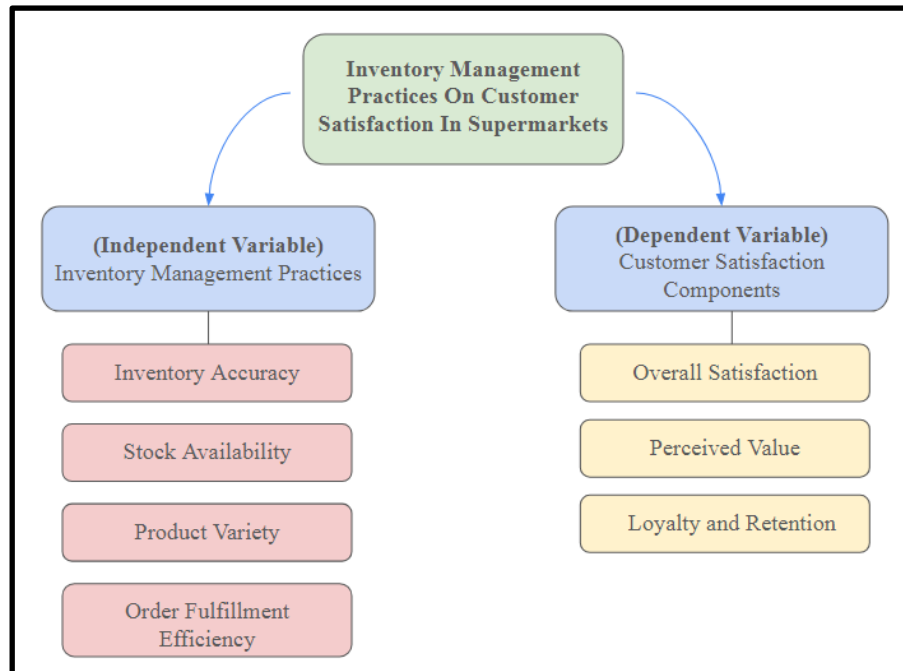


Figure 4: Conceptual Framework

(Source: Self-Created)

The conceptual framework integrates important aspects of inventory management practices and their expected impacts on customer satisfaction in supermarkets. It is used to highlight the interrelation of these factors and provide the source of developing hypotheses and empirical testing.

The framework specifies four primary inventory management practices:

- **Inventory Accuracy:** This evaluates the degree of accuracy in the stock records against the actual stocks held in supermarkets. It includes the efficacy of inventory systems that can be managed to avoid variance and errors in stock.
- **Stock Availability:** This assesses whether supermarkets are capable of adequately restocking their inventory to meet customer demand at any point in time. It consists of factors such as restocking, reordering, shelf stocking and management of seasonal demand instabilities.

- **Product Variety:** This concern focuses on the variation of brands, sizes of products, different flavours, and other speciality products in the store to ensure that they meet the expectations of the consumer (Lestari and Manafe, 2023).
- **Order Fulfilment Efficiency:** This measures the rate of order processing to delivery, covering all the logistical operations from order receipt to delivery. Order fulfilment efficiency encompasses the entire cycle of order fulfilment.

On the other hand, the customer satisfaction aspect of the framework outlines three key components:

- **Overall Satisfaction:** This entails the analysis of customers' overall impression of supermarket stores based on the availability of the product, quality of service, ease of shopping and the physical appearance of the supermarket (Habaragoda and Wathsala, 2021).
- **Perceived Value:** This shows the features and benefits customers experience during their shopping period and the comparison of the cost incurred. It shows their perception of the quality and the degree of superiority of products and services offered at the supermarket with the prices.
- **Loyalty and Retention:** This captures potential re-purchase intentions and the willingness to recommend to other people which results from enhanced customer satisfaction. It measures the degree of loyalty that customers have towards the supermarket brand and their potential to maintain a relationship with the brand.

According to the conceptual framework, these inventory management practices affect the elements of customer satisfaction directly. The effectiveness of inventory accuracy in increasing overall satisfaction and perceived value leads to reduced chances of stock-outs and positively influences the customer's perception of the supermarket's reliability (Hickins, 2023). Higher availability of inventory is hypothesized to enhance satisfaction and loyalty as customers can always find their preferred products. In order to increase overall customer satisfaction and perceived value the needs and preferences of customers are required to be met successfully. Efficient order management is expected to

increase satisfaction and customer loyalty due to the ease of the purchasing process from the time of order placement to delivery.

This conceptual framework is useful in guiding the research ensuring data collection processes as well as data analysis methods in the research. It enables a systematic analysis of various aspects of inventory management and their influence on various dimensions of customer satisfaction in the supermarket environment. It draws the connection of the dependent and independent variables aligning with the research objective. Through the empirical testing of the proposed relationships, the research seeks to offer a clear understanding of the effectiveness and benefits of various inventory management practices that affect customer satisfaction. This insight can assist supermarkets in focusing, prioritising and aligning their inventory management for value creation and improvement in customer experiences, loyalty, and organizational performance.

The conceptual framework proposes several hypothesized relationships:

- The enhanced accuracy of inventory management is expected to positively influence overall customer satisfaction and perceived value by minimizing chances of stock-outs or stock differences which enhances customer reliability and loyalty.
- Overall customer satisfaction and loyalty are also anticipated by Higher Stock Availability which is used to ensure that diverse products are always available for the customers to meet their preferences and requirements.
- In order to enhance the Overall Satisfaction and Perceived Value it is proposed to implement Greater Product Variety as customers have different preferences and needs.
- Customer satisfaction and loyalty can be ensured by efficient order fulfilment and in-store environment which combines the functionality of Purchase, Payment, Delivery and Returns for a smooth shopping experience (ANENE, 2020).

These hypotheses imply that improved inventory management practices positively influence the level of customer satisfaction as well as loyalty in supermarkets.

2.10 Literature Gap

Although theoretical and empirical studies have been conducted on the factors influencing inventory management and customer satisfaction in retail sectors, there is still a major research void regarding the cross-sectional relationship between inventory management practices and customer satisfaction in supermarkets. Existing research has highlighted the various aspects of inventory management and customer satisfaction individually, but little research has analysed the interconnection of the particular inventory management techniques to different factors of customer satisfaction in the supermarket setting.

Inventory management and customer satisfaction are often examined separately where either operational aspects of inventory management are discussed or the concept of customer satisfaction are elaborated. However, this lacks the alignment of inventory management with customer satisfaction. There is a gap in research that provides actual data regarding the extent to which inventory accuracy, stock availability, product differentiation, and order fulfilment lead to customer satisfaction, perceived value, and loyalty in supermarkets. The dynamic retail environment due to technological innovations and shifts in consumers' shopping patterns has changed and evolved as a consequence of the COVID-19 outbreak (Valaskova et al., 2021). This needs more current insights to focus on the study comprehensively. This research seeks to fill these gaps by offering a theoretical and empirical investigation of the connection between inventory management practices and customer satisfaction in today's supermarkets.

2.11 Summary

The above literature review regarding the impact of smart inventory management on customer satisfaction by TESCO, suggests that it is a crucial process for both the retailers and customers. The market demand keeps on changing. Having handy data analytics software to forecast the changing market trends and

keeping smart inventory facilities like surveillance cams, electronic data readers, RFID, real-time tracking and demand forecasting tools can greatly enhance retailer efficiency in supermarkets thereby improving customer satisfaction. By knowing the market trends, the outreach to new possible customers can be strengthened while the continuous supply of consumer items through inventory tracking could retain the old customer base who were interested in buying a specific kind of product that only this retailer, Tesco, has to offer at a reasonable price. This also enhances the competitive advantage of Tesco, as a retailer in the wider market space, as the specific goods and services which they offer at a reasonable price through smart inventory and supply chain management, might not be available at a different superstore.

3.0 Methodology and Research Design

3.1 Introduction

Saunders' Research Onion framework was used to design the Research. It follows a post-positivist philosophy and a deductive approach to inventory management practices and their effect on customer satisfaction. Objective measurement is combined with an insight into subjective perception in the Research. Established theories are used to formulate hypotheses to be tested in this Research. The mono-method approach to this study involves a quantitative approach administered using self-completed questionnaires in data collection. The research strategy is focused on a survey-based design in which the data analysis, using statistical techniques, will establish relationships between inventory practice and customer satisfaction. This Research offers theoretical refinements as well as practical improvements.

3.2 Research Design

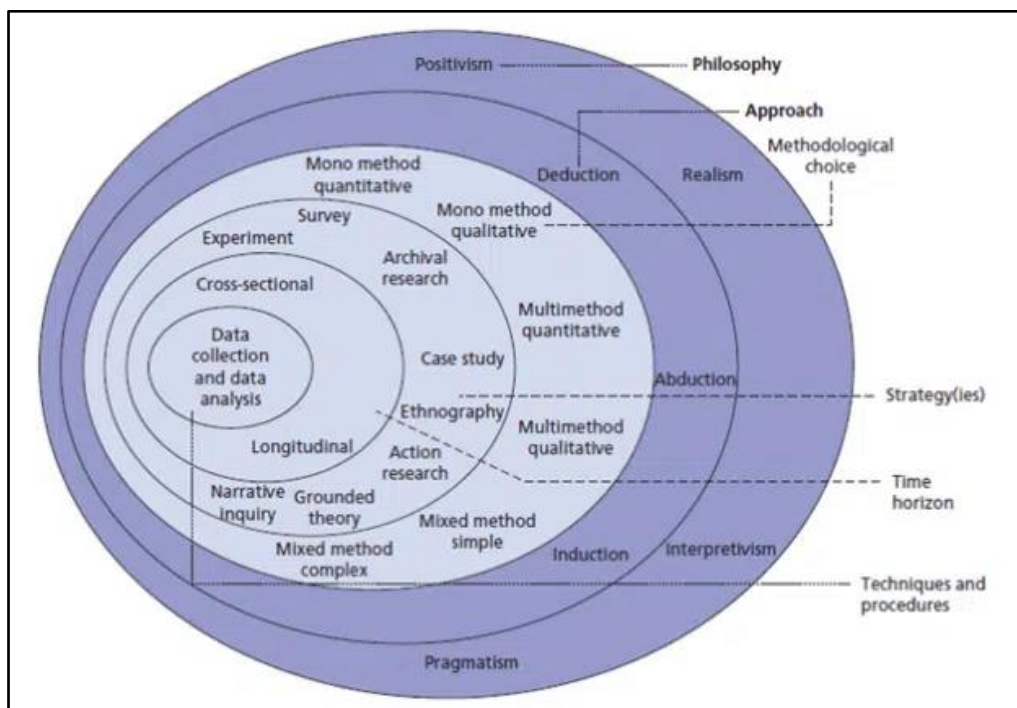


Figure 5: Research onion

(Source: Saunders et al., 2007)

Applied research design has been followed in this study as it aims to address some actual challenges bounding the investigation of inventory management at Tesco. It also serves as a way of coming up with solutions to specific and concrete problems concerning operational issues and inventory management decisions. The Saunder research onion framework has been used to explain each research stage (Mardiana, 2020).

This approach makes it possible to apply quantitative indices to assess the inventory management processes and their reflection on customers' satisfaction levels, relying on the share of quantitative and qualitative analysis. As a result of applying the deductive approach, the Research starts with the premise or theory that has already been developed regarding inventory management and customer satisfaction. Certain propositions are then created from these theories and analysed using acquired data..

3.2.1 Research Philosophy

This Research accordingly employs a “post-positivist philosophy”, where the researcher acknowledges the existence of reality but acknowledges that it is not the only reality; actors' realities matter (Musa and Aldiabat, 2024). Post-positivism incorporates the perspective of positivism with the influence of subjectivity (Maksimovic and Evtimov, 2023). It recognises that while ingredients and inventory management practices can be measured in some ways, customers' perception of satisfaction is in their sight and discretion. Post-positivism does not rule out using quantitative Research to test hypotheses regarding inventory and customer satisfaction. This supports the notion that although quantitative measurements are possible, they are influenced by individuals' perceptions and surrounding conditions. This approach appreciates research findings yet acknowledges that its endeavour is far from being utterly neutral because of such subjective elements.

From such a post-positivist stance, the Research aims to use numbers by administering questionnaires to establish stock control practices and their effects on customer satisfaction. The philosophy influences how data is analyzed, acknowledging that statistical results must be seen from a human perspective

(Fàbregues et al., 2021). This way, it becomes possible to address such issues as the need for quantitative data on one hand while not losing sight of the subjectivity of people's actions on the other. It gives a context by which the extent of the fit between inventory management practices and customers' perceptions and satisfaction levels can be assessed, given that customer perception is generally subjective.

3.2.2 Research Approach

The research method for this study is 'Deductive' since it is critical for systematically developing theories concerning inventory management and consumer satisfaction (Ruwanpathirana and Bandara, 2024). The more concise definition of the deductive research approach is that it is one in which the overall concepts and theories are set up in advance, and it is possible to deduce appropriate hypotheses, which may be tested logically. This clearly differs from inductive Research, which starts with observations to build theories. A deductive type of Research is initiated with an open theoretical frame, which describes concepts and their connection (Casula, Rangarajan, and Shields, 2020). To supplement the program of study, the following theories are used about inventory management theories: Economic Order Quantity (EOQ), safety stock, and Just-In-Time (JIT) systems with customer satisfaction theories including but not limited to Product quality, service quality, and perceived value. Thus, hypotheses are established based on these theories to examine the effects of inventory management practices on customer satisfaction.

The deductive approach is relevant in explanation since it prompts using existing theories to create the structured scientific hypotheses framework (Fardet, Le Bredonchel, and Rock, 2021). It enables the Research to advance knowledge from the existing literature and gives empirical evidence before and after creating theories. It saves time, provides reliability to the findings, and offers meaningful input to enhance the formulated concepts and principles. As such, the use of the deductive approach allows the study to either support or refute theoretical hypotheses regarding the link between the management of inventory and the satisfaction of customers. Besides, it provides the possibilities for improving these theories' practical applications and further developing their theoretical

foundations. In addition, employing empirical data collected through self-completed questionnaires also contributes to a systematic analysis of these relationships and enables a scientific check on the hypotheses.

3.2.3 Research Choice

The Research used a 'Mono-method quantitative' approach (Hossain, 2022). This approach relies on collecting and analysing only numeric information, presenting tangible and unbiased findings about the correlations between inventory control activities and customer satisfaction. Quantitative Research collects numerical data and organises it in a very formal process to use it to investigate patterns or correlations. The quantitative research approach has been used to evaluate customer satisfaction based on different inventory management models. This approach is most appropriate when quantitative information that will enable data generalisation is needed. The primary data has been gathered by distributing self-developed structured questionnaires to Tesco customers. These surveys contained questions with fixed responses to get information about the availability of stocks, order fulfilment speed, product range, and overall satisfaction. The research study obtained quantitative data that indicates customers' impression of inventory management practices. The mono-method quantitative Research has been used to analyse the accumulated data to discover specific patterns and relationships (Amini Farsani, 2022). The information suggested the effects of employing various inventory control measures on customers' overall perception of the business.

This analysis also helped to determine which practices have a more significant influence on customer experience and satisfaction status. The qualitative research method highlighted a quantifiable measurement of inventory management practices' effect on customer satisfaction. It also gives a simple way of measuring relationship intensity and the relative merits of inventory management approaches in improving customers' experience. This research choice enables a deep understanding of the effect of inventory management on customer satisfaction at Tesco by providing quantitative analysis and offering practical recommendations.

3.2.4 Research Strategy and Time Horizon

Since the research questions are posed in a way that lends itself easily to numerical responses, the research strategy for the study incorporated a survey-based quantitative research design (Mills, 2021). This strategy entailed a survey with question-and-answer procedures that gathered only numerical results to determine the connection between inventory management practices and customer satisfaction. Structured surveys were designed to capture information on some critical facets of inventory issues, such as stock status, accuracy, differentiation, and order fulfilment ratio. Surveys comprised closed questions to facilitate clear and tangible results and helped to measure customers' perceptions and satisfaction. For this study, a Two-staged survey has been considered. One has been done among the existing consumer pool of Tesco and a second set of surveys has been done among the employees of Tesco. Implementing this dual approach assisted in attaining a sample with a high level of diversity, improving the results' generality. This research data was analysed using statistical options to describe the related variables. It helped in a detailed analysis of the results and determining the correlation between inventory management practices and customer satisfaction. This analysis allowed us to identify which of the activities have the highest effect on the level of customer satisfaction. The study was conducted to respect the participants' rights in the following ways. The participant identification is kept confidential. All the respondents were explained the study's purpose before being asked any questions.

The Research was cross-sectional by design, and a questionnaire survey will be administered to the customers at one point to understand the current practices of inventory management in Tesco and the resultant levels of customer satisfaction (Thomas, 2020). This timeframe ensured enough density was accrued to note trends in the cases presented. The applicability of the cross-sectional approach methodology was apparent from this study description (Rashmi Ranjan Panigrahi, Sushanta Kumar Mahapatra, and Goutam Tanty, 2024). It makes it possible to assess the status of inventory management and customer satisfaction at a given time. It has the potential to provide actionable information towards improving customer service.

3.2.5 Tools and Techniques

Exploring the inventory management practices at Tesco's impact on customer satisfaction and different research tools and techniques have been utilized. In this study, the surveys are the primary data collection tool, with closed-ended questions. Likert scale tools would allow the researchers to determine the level and nature of client satisfaction and their personal experiences aligned with inventory management used in the business process (Meng, 2024). The survey-taking process was conducted with the help of structured questionnaires based on two bases: taking the survey responses physically in Tesco supermarkets and using the online survey response process to help reach as many respondents as possible. In the data collection process, Microsoft Excel was used to tabulate the questionnaires to ensure data handling accuracy.

In analysing data from the respondents, Critical Path and Critical success factor matrices were used to identify significant factors that impact customer satisfaction and inventory management efficiency. The Microsoft Office tools were beneficial throughout the Research in supporting data collection and analysis tasks. This framework provided an assessment of clarity regarding the impact of inventory practices on customer satisfaction and offered improvement-oriented actionable points on Tesco's operational strategies. These techniques and tools have several advantages for the research process (Muhamad and Zulkipli, 2024). Using the Likert scale and close-ended questions, surveys can collect data capturing quantitative aspects of participants' satisfaction. The dual approach gives a rich, nuanced understanding of customers' experiences. Systematic sampling improves the representative sample, thereby reducing bias and increasing the generalisability of the findings.

3.3 Data Collection Method

The primary data collection process has immensely helped the study of inventory management practices at Tesco as it allowed the collection of relevant data regarding the research topic. The entire data collection process can be conducted within less time.

For this particular research, a Two-staged survey has been conducted. One has been conducted by considering existing customers as respondents and another set of surveys has been done among the employees of the Tesco supermarket. The reason behind conducting this Two-staged survey was to gather data not only from the aspect of customers' satisfaction but also delve into the internal organisational factors that contribute to the inventory management of Tesco. The dual survey process details are disclosed herewith.

	Survey 1	Survey 2
Target Population	Existing buyers of several products from TESCO supermarket chains form different demographics.	Employees of 5 different outlets of the TESCO supermarket chains from different demographics.
Sample Size	100	50
Sampling Method	Random Sampling	Stratified Random Sampling
Mode	Online	Offline
Sample Characteristics	The participants should have a minimum of 1 year of experience as a buyer of Tesco products.	The participants should have a minimum of 1 year of experience as a Tesco employee.

Table 1: Sampling Details

For Survey 1, the Random Sampling method has been selected here as the online customer pool of Tesco is quite wide and by adapting to this method bias has been excluded in participant selection. On the other hand, for Survey 2, the Stratified Random sampling method has been adapted as it is effective in selecting participants as a 'Group' from a definite population while excluding selection bias simultaneously. Stratified random sampling increases the accuracy of the data by differentiating the customer population into different subgroups (Gan and Yan, 2023). In this case, the participants were selected randomly.

Primary data collection for this Research will be based on self-administered questionnaires distributed online and offline process to targeted population in Tesco supermarkets. Questionnaires have used both close-ended and multiple-choice questions. The closed-ended questions will enable the researcher to

arrive at an overall quantitative measure of customers' satisfaction and their attitudes toward the practices regarding inventories. The Research has undergone a pilot test to ascertain its clarity, validity, and reliability (Amgad S.D. Khaled et al., 2023). This has been useful in pre-testing all the instruments and coming up with the correct data used in this study.

Surveys can collect quantitative data using structured questions, such as Likert scale questions, and Multiple-Choice questions. This will provide quantitative insights and a clear overview of the participants' responses and perceptions regarding products available in a store or departmental outlet, pointing to several improvement areas. Furthermore, the online and offline questionnaires give them a broad reach and access to feedback from different customer profiles (Mohamed, 2023).

3.4 Data Analysis Method

In this Research, different statistical techniques have been used to analyse data to determine the relationship between inventory management practices and customer satisfaction. Demographic data and the distribution of critical variables have been summarised with measures of central tendency (Inventory, 2022). Descriptive statistics will provide an overview of the data distribution and variability, which helps set a foundation for advanced evaluation of the research dataset. The next stage is exploratory and confirmatory factor analyses, based on the survey responses, which mainly test the underlying dimensions or factors affecting inventory management and influencing customer satisfaction. This evaluation has established complex relationships between variables and structured them more effectively to understand their interdependencies.

In the final step, the results obtained from the statistical analyses are interpreted in light of previously set research objectives. This interpretation mainly evaluates whether or not the identified inventory management practices significantly influence customer satisfaction at Tesco. The findings will be compared with the research goals, creating an understanding of how inventory practices influence customers' perceptions and satisfaction (Chan, 2024). The results will be used to recommend inventory management strategies to maximize customer satisfaction

and loyalty at Tesco and guide them with actionable points for enhancing their operational practices.

The quantitative data collected will be analysed through statistical tests to establish the correlation between inventory management practices and customer satisfaction. Descriptive statistics regarding measures of central tendency (mean, median) and variability (Standard deviation) will be computed based on demographic variables and their distributions. This foundation analysis will focus on developing trends and variability in the data. Also, cross-validation of the factors through exploratory factor analysis and confirmatory factor analysis will determine the structure and relationships between the identified inventory management practices and the customers' satisfaction. These techniques will help develop insight into intricate relations and enhance variables' structuring.

Descriptive statistics, including central tendencies and variability measures, can help the analyst get acquainted with general data distribution in the survey and variability of the critical variables of customer satisfaction indices (Saghiri, Aktas, and Mohammadipour, 2023).

3.5 Ethical Consideration

Ethical issues are inevitable when Research is conducted on Tesco's inventory management practices and customer satisfaction levels. In this context, one of the essential components of the work is obtaining informed consent. These ethical measures provide the participants with explicit knowledge about the purpose of the study, the procedures to be followed, and the effects of participation.

In the data collection process, fellow researchers have kept several things in mind regarding the non-disclosure of the identity of the participants and maintaining the confidentiality of the information. To limit the accessibility of information about the respondents, the data gathered from the surveys will remove the personal identifiers and store the data in the appropriate database that third parties cannot access (Bhandari, 2021). In this context, the Data Protection Norms legislation 2018 has been followed to maintain data confidentiality, and any data breach and third-party indulgence in the data collection process has been restricted.

Also, as a part of the methodology, the Research will follow ethical guidelines for collecting and analysing sensitive data. To do this, each participant will be informed and required to sign a consent form to ensure that their responses will be used only in this study and will not be disclosed to any other party without their permission. The research undertaking will follow the highest ethical standards, and the researcher will ensure that there will be no conflict of interest when carrying out the study as this would affect the outcome of the research and would not be acceptable.

The study will be sensitive to participants' time and energy through the completion of the Research. As for the questionnaire design, the survey will be kept brief but comprehensive to avoid imposing on the respondents' time as much as possible (Resnik, 2020). The aims and steps of participation will be explained, and facilitation and supervision will be offered so that people can participate in the survey-taking process more comfortably and politely. Stating these ethical considerations allows for maintaining the participants' trust and credibility in the research process, thus contributing to the study's validity and reliability.

3.6 Research Validity and Reliability

It is essential to maintain the validity and reliability of the Research and strive to identify the potential effects of inventory management on the level of satisfaction of Tesco's customers. Valid questionnaires were developed by establishing a well-coordinated design of a numerical form that consists of closed-ended questions such as Likert scales and multiple-choice ones with open-ended questions (Collaborators, 2023). This approach covers the whole spectrum of customers' experiences and perceptions. Introducing the pilot test of the questionnaire has made further improvements in answering the validity questions.

Reliability will be attained by observing a standardized data-gathering procedure and random sampling. The method of sampling applied in this paper is designed in the form of stratified random sampling, catering to all types of customers in terms of particular segments, which minimizes the risk of sampling bias to a large extent (Blog, 2022). Customers will be interviewed onsite and through an online

link to ensure that the data collected meets the company's needs. The Research employs the above practices to produce accurate findings concerning inventory management practices and customer satisfaction.

3.7 Summary

The section on research methodology employs several strategies that helped the researchers effectively conduct the Research. The researchers have used a deductive approach to understand the impact of inventory management on customer satisfaction at Tesco. For this reason, a quantitative research approach has been adopted, and self-administered structured questionnaires have been provided to a sample of Tesco's customers and employees with the help of the Random and Stratified Random sampling methods respectively. The cross-sectional design collects data only at a single point, which will help analyze inventory practices and their effects on customers at that time. The deductive approach gives clear research hypotheses that make the research statements more precise than the inductive approach. The mono-method's choice ensures the results' reliability and the foundations for general conclusions.

4.0 Presentation and Discussion of the Findings

4.1 Overview

This is a summary appendix that reflects the output of the structured questionnaires through customer–staff interaction at the Tesco supermarket chain. The research here is directed toward an assessment of how inventory management practices might impact customer satisfaction. This information accessed from consumers and staff ensures that the research is delved into regarding how the inventory process is influencing the in-store experience and the perceptions of consumers. Collected views on data comprehensively related to the effectiveness of the current practice of inventory in Tesco, the direct link of the same with customer satisfaction, and areas to be enhanced concerning service delivery and operational efficacy.

4.2 Findings

4.2.1 Consumer Response Analysis

Q1. On a scale of 1-5, how satisfied are you with your shopping experience at the TESCO supermarket?			
Options	Responses	Total no. of responses	% of responses
Very Satisfied	51	104	49.04
Satisfied	47	104	45.19
Very Dissatisfied	2	104	1.92
Dissatisfied	1	104	0.96
No Response	3	104	2.88

Table 2: On a scale of 1-5, how satisfied are you with your shopping experience at the TESCO supermarket?

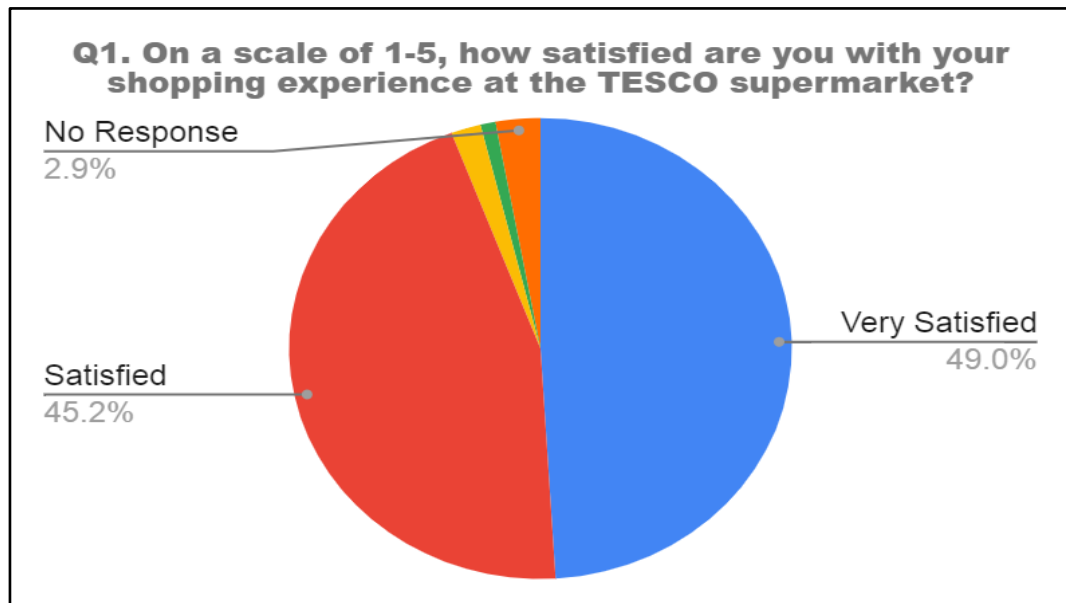


Figure 6: On a scale of 1-5 satisfaction level of the shopping experience at the TESCO supermarket

Data from question 1 about the satisfaction level of shopping in Tesco, show 49.04% of the customers are very satisfied and 45.19% are satisfied, which probably adds to the idea that the perception by the consumer about the

supermarket could be good. The percentage when not answering or reporting dissatisfaction is minimal at 2.88%. The major implication would be that in case the levels of satisfaction were high, then inventory management practices in Tesco are generally effective and contribute to a positive experience while shopping in this supermarket. There is however very minimal dissatisfaction, hence pointing out failure in inventory processes about the consistent satisfaction of the customers.

Q2. How often do you find the products you're looking for in stock at the TESCO supermarket?			
Options	Responses	Total no. of responses	% of responses
Always	57	104	54.81
Usually	28	104	26.92
Sometimes	14	104	13.46
Rarely	4	104	3.85
Never	1	104	0.96

Table 3: Product findings in stock at the TESCO supermarket

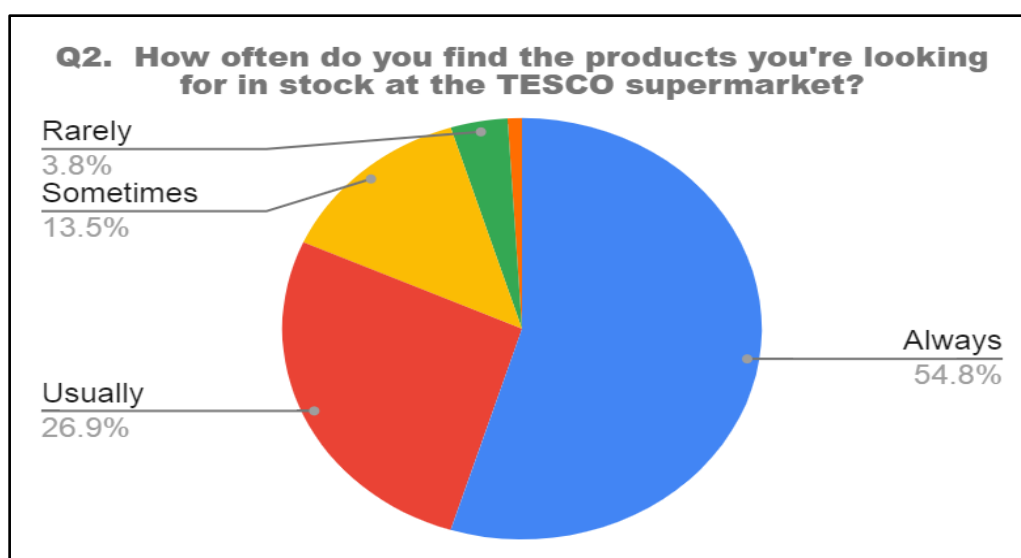


Figure 7: Product findings in stock at the TESCO supermarket

The Q2 data simply indicate that for the majority of 54.81%, all of the time they could find the product they wanted, while 26.92% of them usually could do so, which mirrors the effective inventory management implemented by Tesco. Only some of them could find what they wanted 13.46%, whereas few, constituting just 4.81% of the people, suffer because of periodic problems relating to the stock.

Q3. Rate your agreement with this statement: "TESCO offers a wide variety of products.			
Options	Resp onses	Total no. of responses	% of responses
Strongly Agree	49	104	47.12
Agree	48	104	46.15
No Response	2	104	1.92
Disagree	4	104	3.85
Strongly Disagree	1	104	0.96

Table 4: Agreement with TESCO offers a wide variety of products

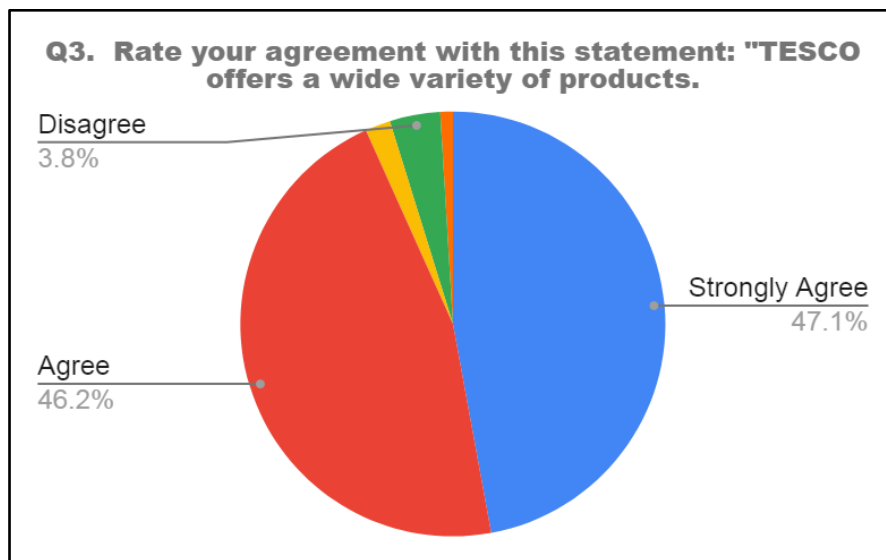


Figure 8: Agreement with TESCO offers a wide variety of products

Q3 shows that nearly half of the consumers, about 47.12%, strongly agree and another 46.15% agree that Tesco offers a wide variety of products, thereby expressing satisfaction from the consumer's side in terms of the range of products offered by this chain. The percentage of disagree and strongly disagree customers is very low only 4.81% which shows the perception that the products fit the needs of most of the customers. A low level of disagreement indicates that

few unmet expectation cases exist, which could most probably be resolved by more line extensions.

Q4. How would you rate the accuracy of product information (e.g., prices, locations) in TESCO?			
Options	Response s	Total no .of responses	% of responses
Excellent	41	104	39.42
Good	49	104	47.12
Average	14	104	13.46

Table 5: The accuracy of product information

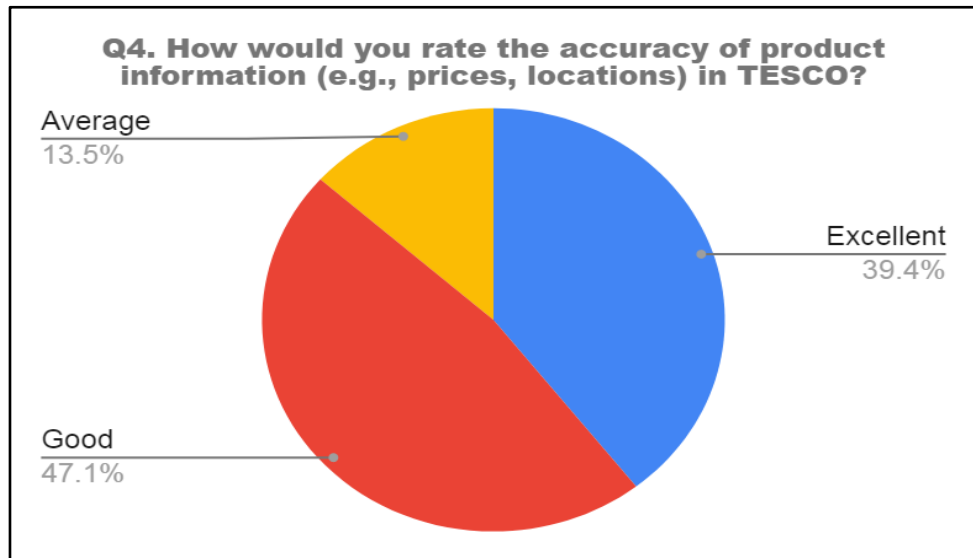


Figure 9: The accuracy of product information

Responses to Q4 show that 39.42% of the consumers rated the accuracy of product information in Tesco as excellent, while 47.12% considered it good. This goes on to prove that generally, Tesco provides reliable and accurate product information, which is central to a hassle-free shopping experience. Nevertheless, 13.46% rated it average, so there is still scope to ensure all product information, from prices to locations, comes out correctly and consistently.

Q5. How often do you encounter empty shelves or out-of-stock items at the TESCO?			
Options	Responses	Total no. of responses	% of responses
Very Often	5	104	4.81
Often	5	104	4.81
Sometimes	27	104	25.96
Rarely	44	104	42.31
Never	23	104	22.12

Table 6: Encounter of empty shelves or out-of-stock items at the TESCO

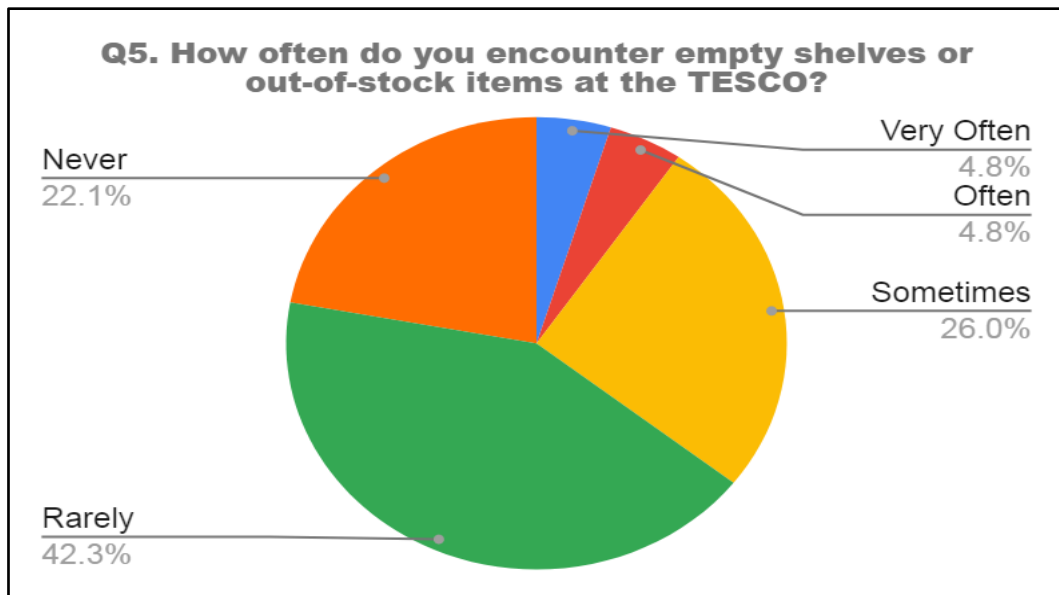


Figure 10: Encounter of empty shelves or out-of-stock items at the TESCO

Q5 data show that 42.31% of the consumers responded that they rarely witnessed empty shelves or out-of-stock situations regarding Tesco, while 22.12% had never faced this issue, which implies that the inventory management of this superstore is quite efficient in general. On the other hand, 25.96% have at times, experiences characterized by stock being in short supply, while a small percentage of 9.62%, reported experiencing empty shelves often or very often. Although most customers were generally satisfied with full shelves, these periodic

out-of-stocks present opportunities where superior inventory processes could drive even higher product availability.

Q6. Rate your satisfaction with the freshness of perishable items (e.g., produce, meats, dairy) at TESCO

Options	Responses	Total no. of responses	% of responses
Dissatisfied	3	104	2.88
No Response	6	104	5.77
Satisfied	50	104	48.08
Very Satisfied	45	104	43.27

Table 7: Satisfaction with the freshness of perishable items

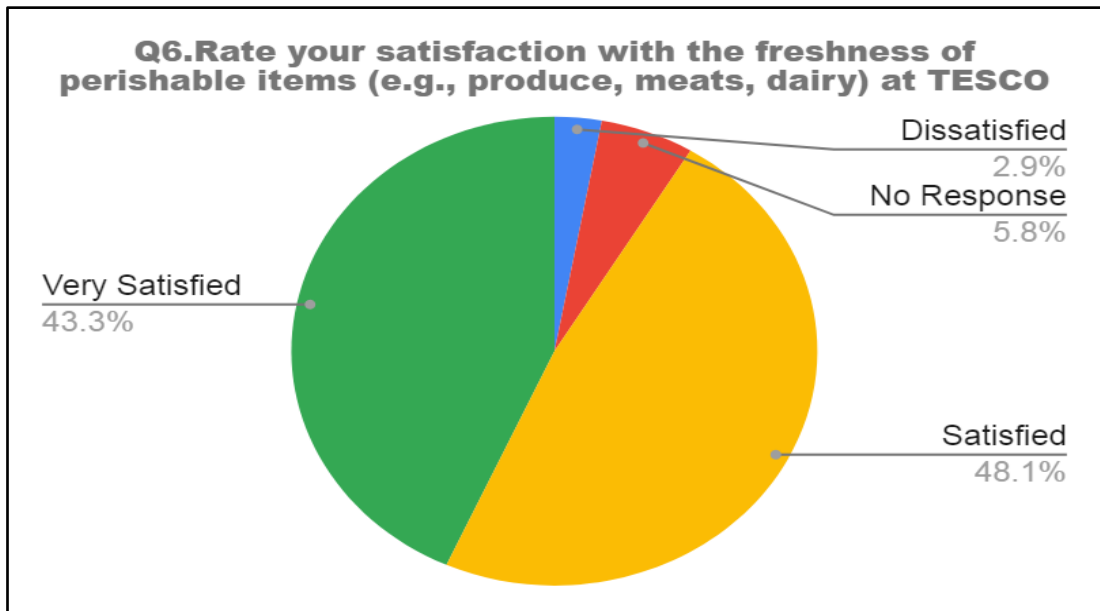


Figure 11: Satisfaction with the freshness of perishable items

The responses indicate that nearly all consumers are satisfied with the freshness of perishables products in Tesco 48.08% satisfied and 43.27% very satisfied. This overwhelmingly positive response emphasized the effectiveness of the operations conducted by Tesco concerning inventory management in fresh products, and maintaining high standards of deliverables like bakery products, meat, dairy and vegetables. Only 2.88% of the respondents revealed themselves to be unsatisfied with this service, whereas 5.77% gave no review.

Q7. How would you rate the efficiency of the checkout process at TESCO			
Options	Responses	Total no .of responses	% of responses
Very Inefficient	2	104	1.92
Average	11	104	10.58
Efficient	46	104	44.23
Very Efficient	45	104	43.27

Table 8: Efficiency of the checkout process at TESCO

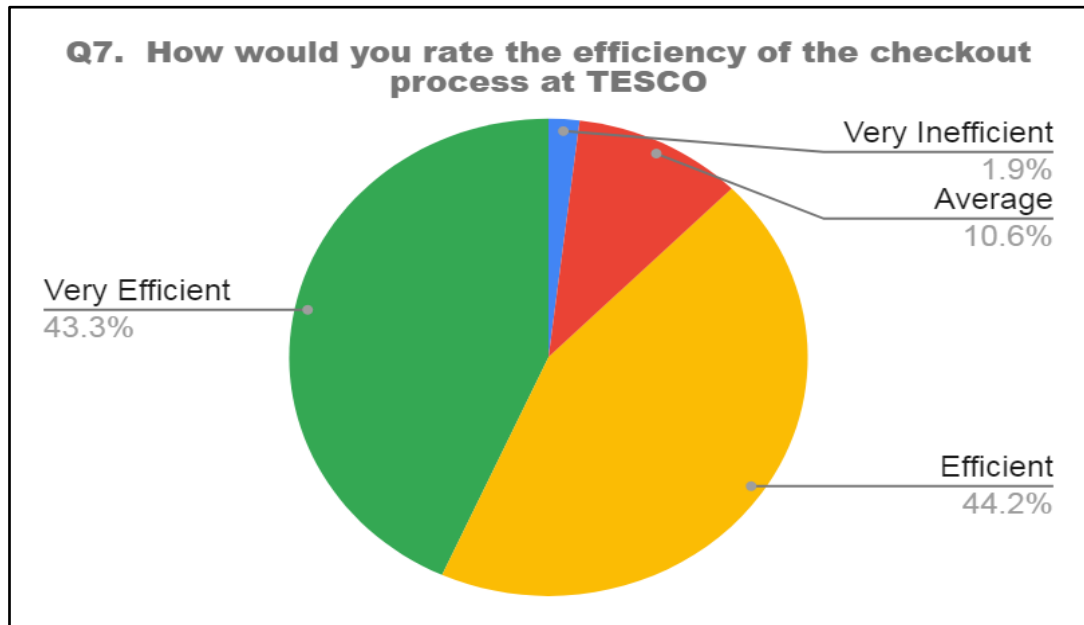


Figure 12: Efficiency of the checkout process at TESCO

Regarding question 7, data shows that most consumers have a positive feeling toward the checkout procedures at Tesco. Around 44.23% rate it as efficient whereas 43.27% say it is very efficient. This demonstrates that Tesco is not experiencing any issues in the checkout process and customer's shopping experience is satisfactory. 10.58% would consider it as average, an even smaller 1.92% as fairly ineffective. Overall the efficiency is commendable but there is a possibility of improvement in the process to ensure every client experiences the fastest and effective checkout and with enhanced satisfaction.

Q8. How likely are you to recommend TESCO to friends or family?			
Options	Responses	Total no. of responses	% of responses
Sometimes	20	104	19.23
No Response	7	104	6.73
Extremely Likely	77	104	74.04

Table 9: Recommendation of TESCO to friends or family

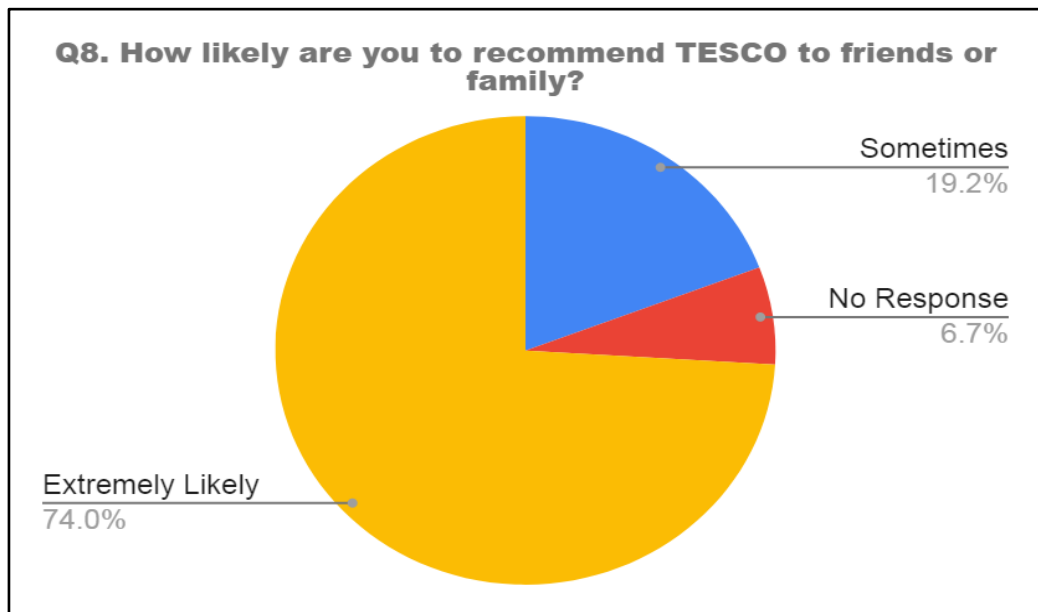


Figure 13: Recommendation of TESCO to friends or family

This survey response shows the result that 74.04% of the respondents are extremely likely to recommend Tesco to friends and family, thereby indicating very strong customer loyalty and satisfaction. Another 19.23% were somewhat likely to make a recommendation, while 6.73% did not respond. This high likelihood of recommendation gave clear insight into Tesco's overall performance and customer experience. The fact that the customers come out strongly in their recommendation of Tesco proves that its inventory management policies and other operations must be effective and efficient.

Q9. Rate your agreement: "I can easily find alternative products when my preferred item is out of stock."			
Options	Response s	Total no. of responses	% of responses
Strongly Agree	37	104	35.58
Agree	47	104	45.19
No Response	17	104	16.35
Disagree	2	104	1.92
Strongly Disagree	1	104	0.96

Table 10: Agreement on "I can easily find alternative products when my preferred item is out of stock."

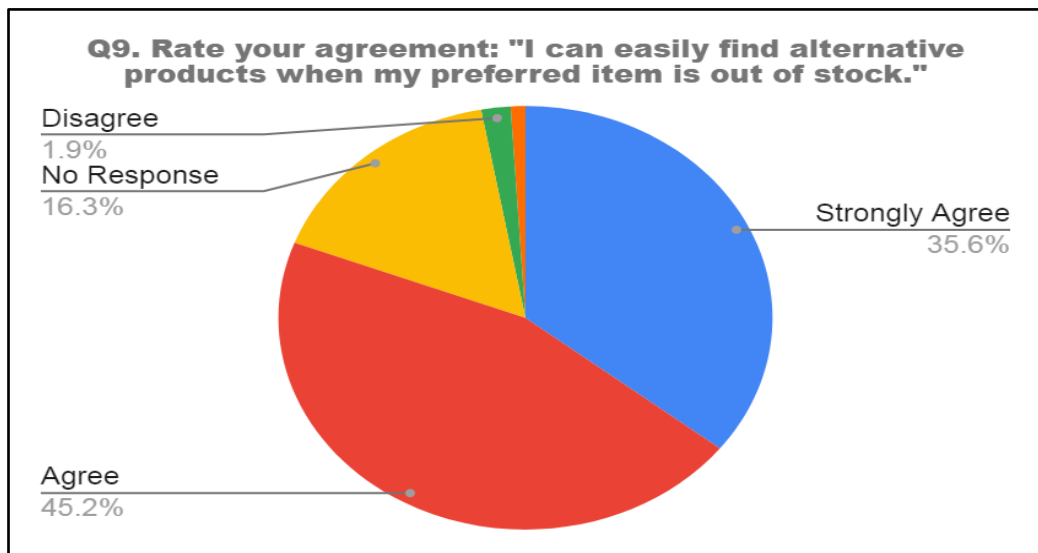


Figure 14: Agreement on "I can easily find alternative products when my preferred item is out of stock."

The responses to Q9 indicate that 35.58% of the consumers strongly agree and 45.19% agree that they can always find an alternative product if their preferred item is not available. This means that Tesco's inventory management makes it easy to find substitutes if an item is out of stock, thereby improving the experience of shopping. Only 1.92% disagree and another 0.96% strongly disagree, showing

that though a majority find it easy to get alternatives, a few customers could not. The 16.35% who did not respond perhaps were those with mixed experiences.

Q10. How satisfied are you with the availability of your favourite brands at TESCO?			
Options	Response s	Total no. of responses	% of responses
Dissatisfied	3	104	2.88
No Response	11	104	10.58
Satisfied	44	104	42.31
Very Satisfied	46	104	44.23

Table 11: The availability of your favourite brands at TESCO

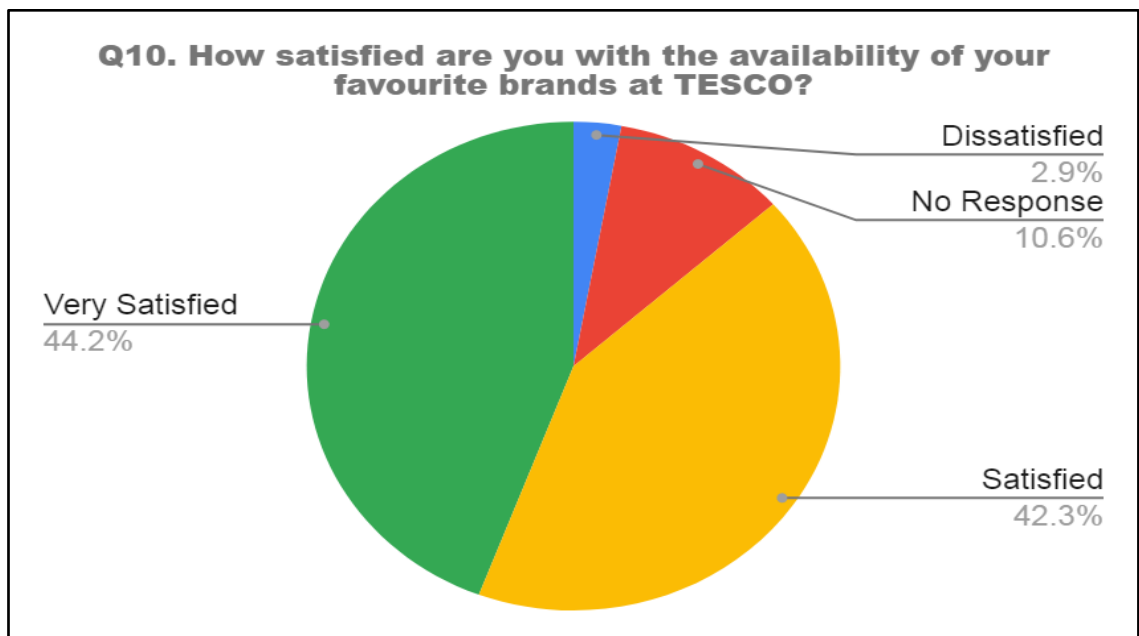


Figure 15: The availability of your favourite brands at TESCO

The findings from Question 10 show 42.31% satisfaction and 44.23% very satisfied consumers on the availability of favourite brands in Tesco. Only 2.88 % were dissatisfied and 10.58% have not answered. This means that Tesco is good at maintaining more popular brands and keeping them in stock gains consumer satisfaction. Most are satisfied, but there are also non-answers.

Q11. How often do you find discrepancies between the displayed price and the price charged at checkout?			
Options	Responses	Total no. of responses	% of responses
Very Often	2	104	1.92
Often	6	104	5.77
Sometimes	12	104	11.54
Rarely	35	104	33.65
Never	49	104	47.12

Table 12: Discrepancies between the displayed price and the price charged at checkout

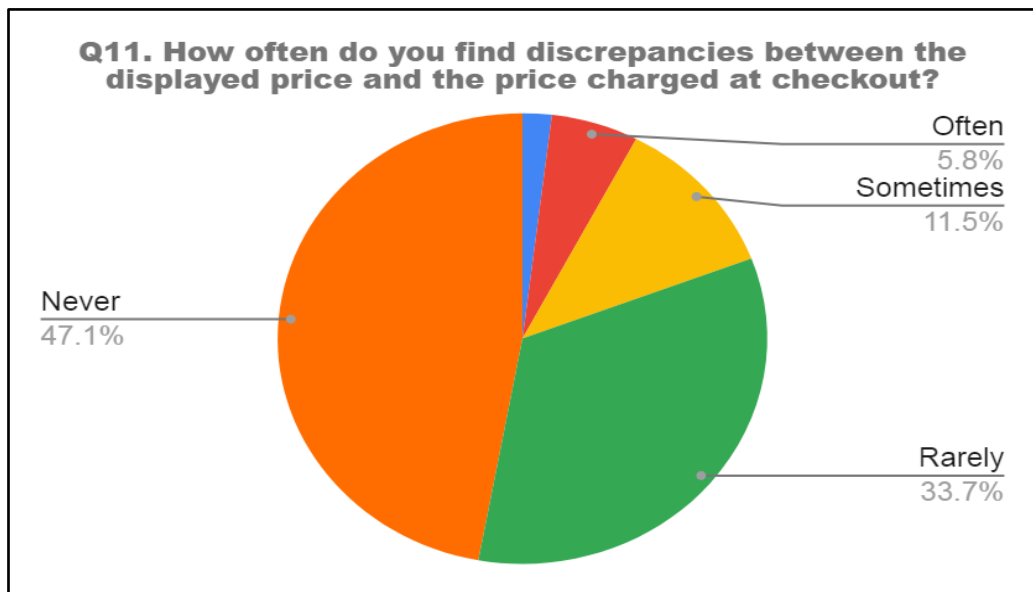


Figure 16: Discrepancies between the displayed price and the price charged at checkout

It can be observed from the result presented that 47.12% never experience any differences between the shown price and the charged price, while 33.65% of them sometimes experience it. It means that for most customers, the correct prices are charged at the checkout. However, slight discrepancies occurred 11.54% of the time, and a low percentage (7.69%) even indicated that

discrepancies occurred with a high frequency, which can indicate that the problem of pricing is not zero.

Q12. Rate your satisfaction with the organization and layout of products at TESCO			
Options	Res p o n s e s	Total no .of responses	% of responses
No Response	4	104	3.85
Satisfied	51	104	49.04
Very Satisfied	48	104	46.15

Table 13: Satisfaction with the organization and layout of products at TESCO

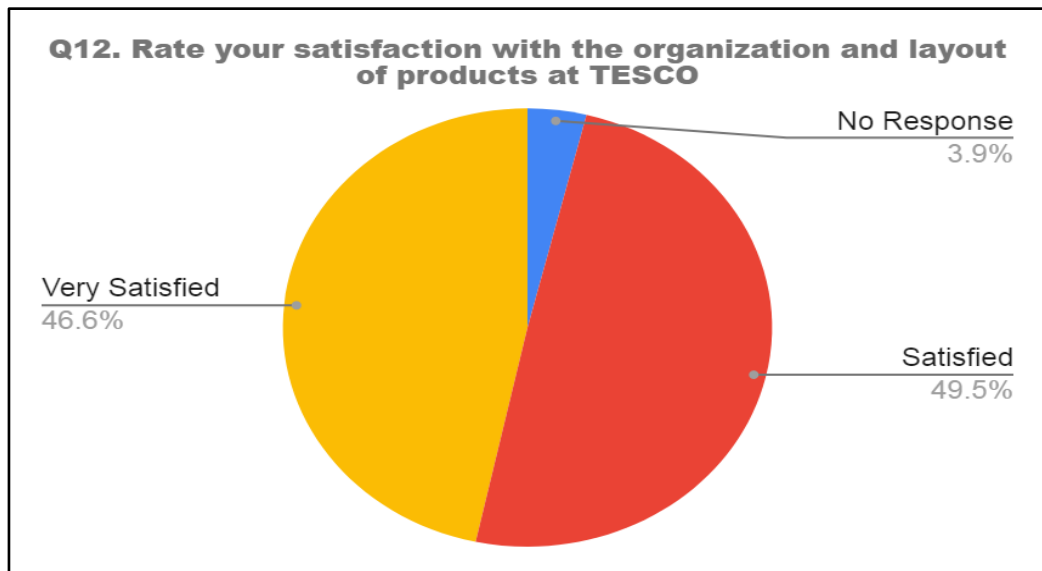


Figure 17: Satisfaction with the organization and layout of products at TESCO

From Question 12, data indicates that 49.04% of consumers are satisfied, while 46.15% are very satisfied concerning the organization and layout of products within Tesco. There is a very high level of liking concerning the manner that products have been arranged and displayed within the store and this is a proper facilitation of the shopping experience. On the other hand, very few consumers, 3.85%, comprised of the percentage that did not give feedback on the situation indicating that most of the customers have an idea of how the products are arranged.

Q13. How would you rate the value for money of products at TESCO?			
Options	Responses	Total no. of responses	% of responses
Good Value	43	104	41.35
Average Value	15	104	14.42
Excellent Value	46	104	44.23

Table 14: Value for money of products at TESCO

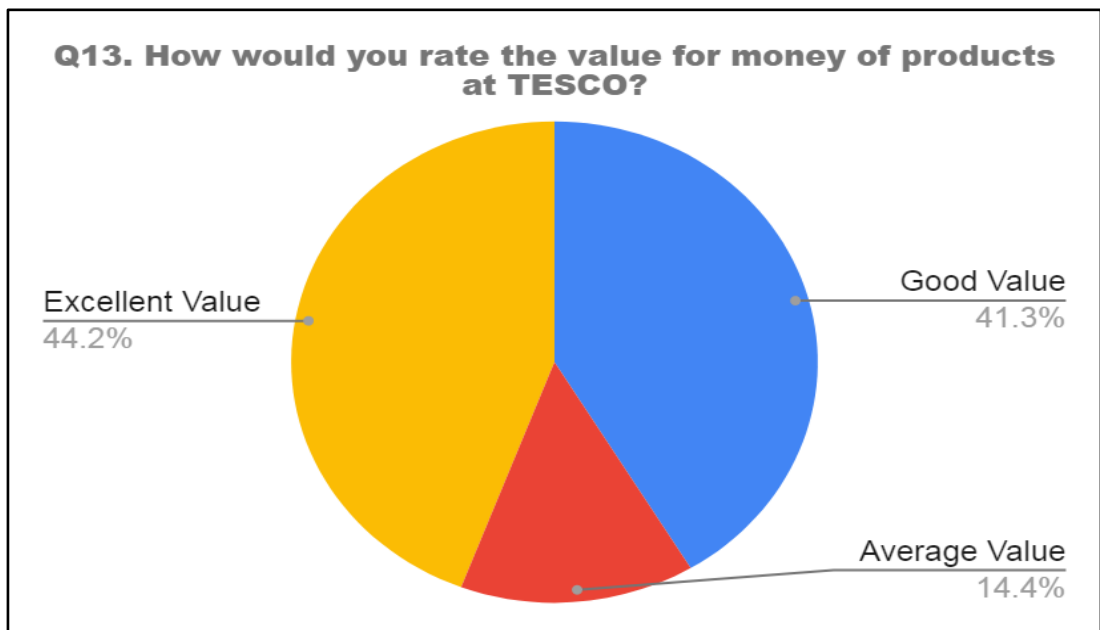


Figure 18: Value for money of products at TESCO

The responses to Q13 indicate that 44.23% of consumers perceive the value for money of products at Tesco as excellent, and 41.35% see it as good value. This shows that a significant majority of customers feel they receive a favourable return on their spending at Tesco. Only 14.42% rate the value as average, suggesting that while most are satisfied with the pricing, there is a small portion who may feel that the value could be improved. The high percentage of positive ratings reflects well on Tesco's pricing strategy and its alignment with customer expectations for value.

Q14. How often do you shop at TESCO compared to other supermarkets?			
Options	Responses	Total no. of responses	% of responses
This is my primary supermarket	47	104	45.19
I shop here often but also use other supermarkets	32	104	30.77
I occasionally shop here	14	104	13.46
This is my first time shopping here	11	104	10.58

Table 15: Shopping at TESCO compared to other supermarket

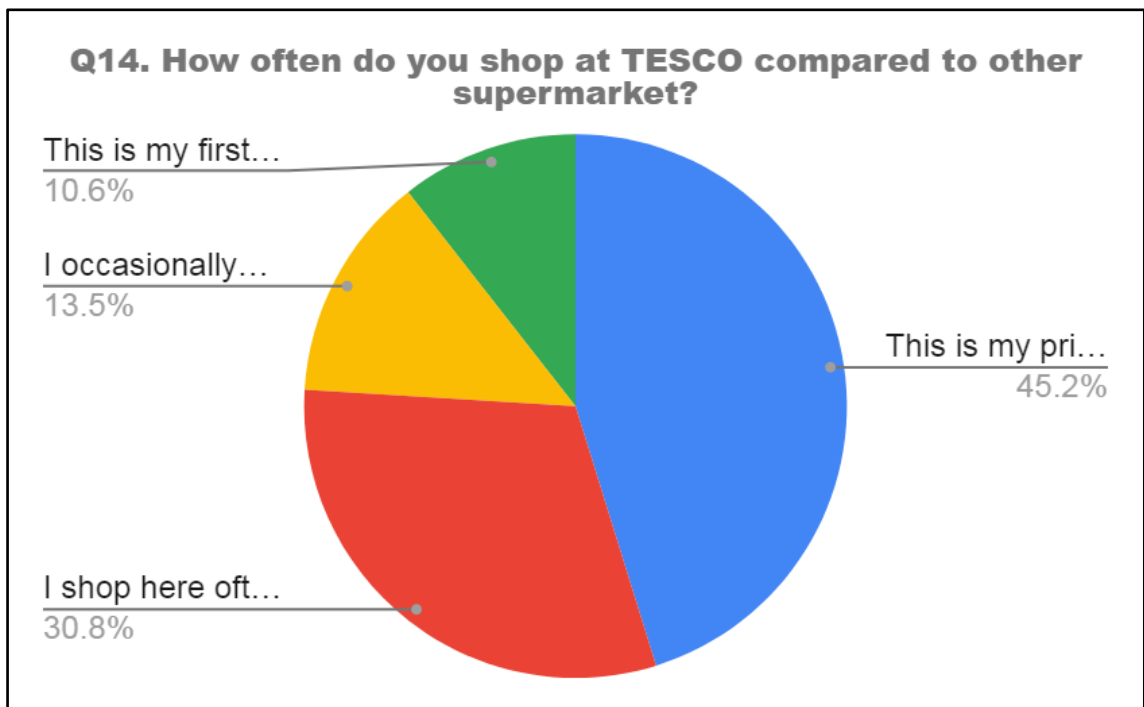


Figure 19: Shopping at TESCO compared to another supermarket

Q14 response data points to 45.19% who consider Tesco their main supermarket, a very good indication of high customer loyalty. A further 30.77% shop at Tesco

frequently but also use other supermarkets, indicating that it is a solid but not unique preference. Meanwhile, 13.46% shop at Tesco only on occasion, and 10.58% are first-time shoppers. This distribution is in line with Tesco's strong market position but also indicates some higher-level opportunities in terms of making the stores more exclusive and attracting more occasional and new shoppers through targeted strategies and promotions.

Q15. What is the primary reason you choose to shop at TESCO?			
Options	Response s	Total no. of responses	% of responses
Product availability	56	104	53.85
Product Variety	12	104	11.54
Competitive prices	14	104	13.46
Convenient location	11	104	10.58
Store cleanliness and organisation	6	104	5.77
Customer service	5	104	4.81

Table 16: Primary reason for choosing TESCO

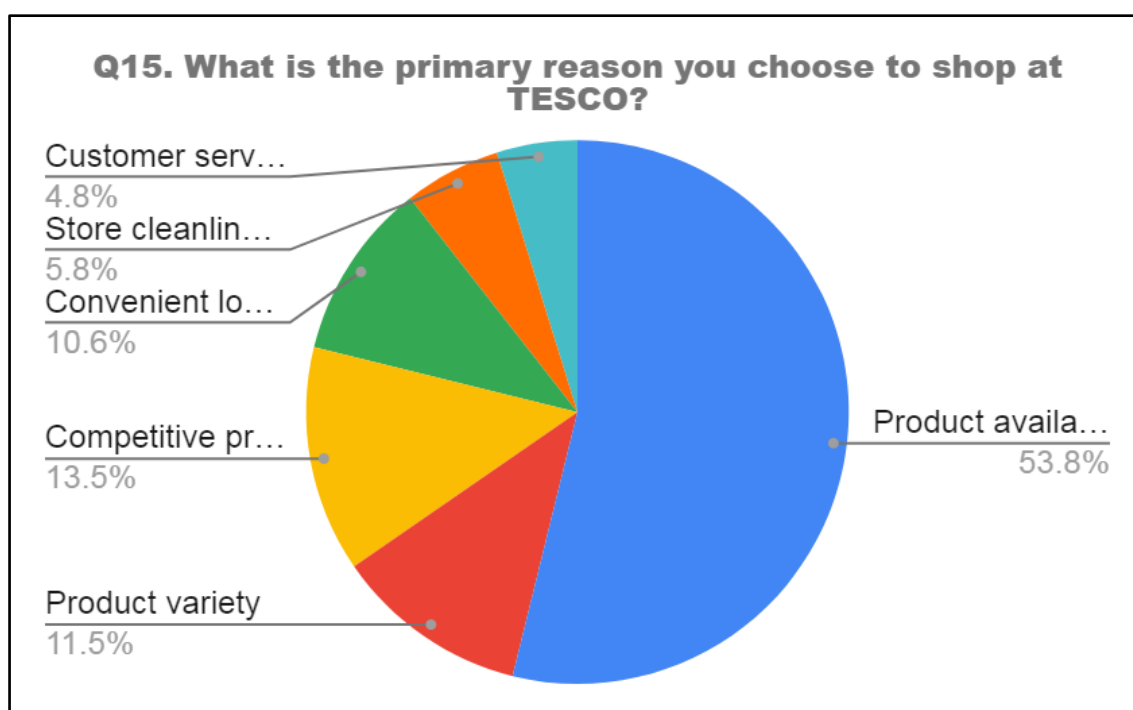


Figure 20: Primary reason for choosing TESCO

Responses to Q15 reveal that the reasons why 53.85% of consumers mainly prefer to shop with Tesco are due to the availability of products, indicating that consistency in product stocks is important. In decreasing order of importance are

a variety of products and low prices, which obtained 11.54% and 13.46% of the respondents respectively who cited them as very important reasons. The least influential factors are convenience, clean stores, and good customer service, which only 10.58%, 5.77%, and 4.81% respectively of the respondents cited as primary reasons.

Q1. Company's Name			
Options	Responses	Total no. of responses	% of responses
Tesco	12	17	70.59
Tesco dolphin's barn, D08	1	17	5.88
Tesco Dundrum	1	17	5.88
Tesco IE	1	17	5.88
Tesco South Circular Rd	1	17	5.88
Tesco, Camden St	1	17	5.88

4.2.2 Employee Response Analysis

Table 17: Company's Name

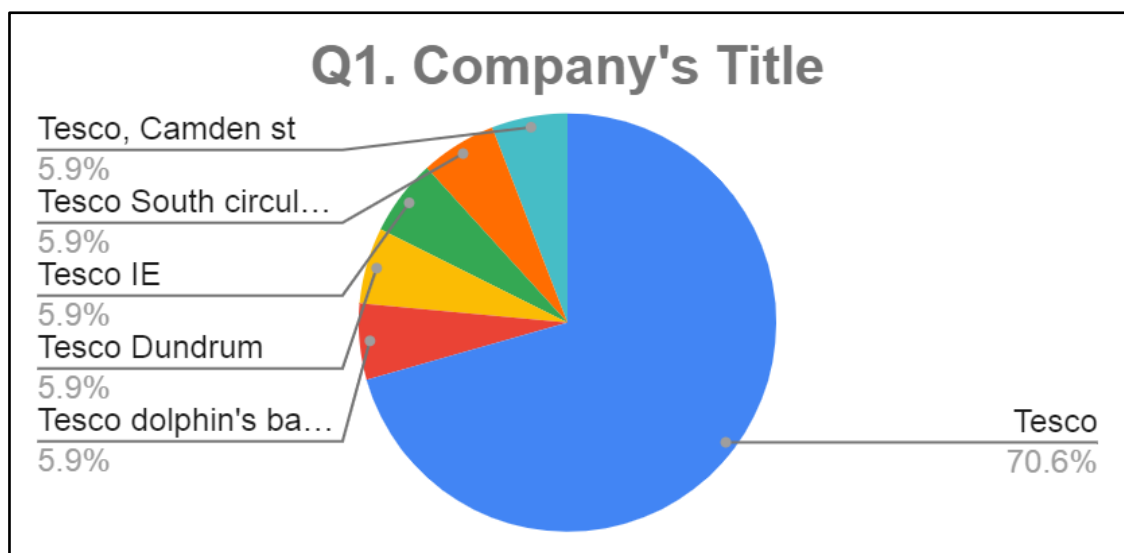


Figure 21: Company's Name

Responses to Q1 indicate that 70.59% of the workforce identified Tesco as their place of work, representing the general company rather than particular locations. Only 5.88% of employees each reported working at various specific branches, including Tesco Dolphin's Barn, Tesco Dundrum, Tesco IE, Tesco South Circular Rd, and Tesco Camden St. This distribution indicates the likelihood that the survey captured several different employees from different branches and represents a general overview of experiences across multiple locations.

Q2. Company Size			
Options	Responses	Total no. of responses	% of responses
13	2	17	11.76
16	1	17	5.88
17	1	17	5.88
20	2	17	11.76
22	1	17	5.88
30	2	17	11.76
500	2	17	11.76
15-20	1	17	5.88
330k	1	17	5.88
9-10	2	17	11.76
High	1	17	5.88
Multi-national	1	17	5.88

Table 18: Company's Size

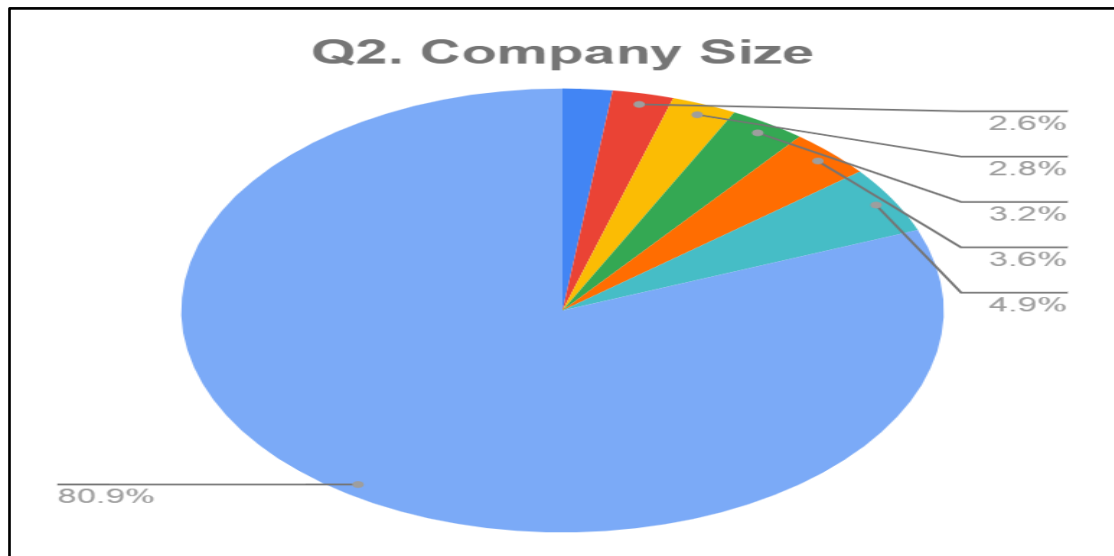


Figure 22: Company's Size

The answers to Q2 show a diverse range of company sizes responded to by employees at Tesco. Where 11.76% each mentioned company sizes of 13, 20, 30, and 500 employees respectively, other answers were far apart and included figures such as 16, 17, and, at the other end of the extreme, 330,000. This variability infers that the sample of employees will have represented the broadest spectrum of Tesco's operational size, ranging from small branch sizes to large multinational structures. The diverse size range underlines different contexts within which workers face inventory management and customer service, influencing their perspective and feedback.

Q3. The primary focus of the Company			
Options	Responses	Total no. of responses	% of responses
Customer satisfaction	1	17	5.88
Customer service	1	17	5.88
Electronics, Grocery	1	17	5.88
Faster checkouts and well-stocked shelves	1	17	5.88
Groceries	1	17	5.88
Grocery	1	17	5.88
Grocery, Apparel, Alcohol	1	17	5.88
Grocery, apparel, electronics, alcohol, vapes	1	17	5.88
Grocery, electronics	1	17	5.88
Proper packing and stocking of products and customer assistance	1	17	5.88
Punctuality, responsibility and prompt actions	1	17	5.88
Retail	3	17	17.65
Serve the customer and community	1	17	5.88

Swift checkouts and product stock on shelves	1	17	5.88
To provide quality products at affordable prices while offering great customer service.	1	17	5.88

Table 19: Primary focus of the Company

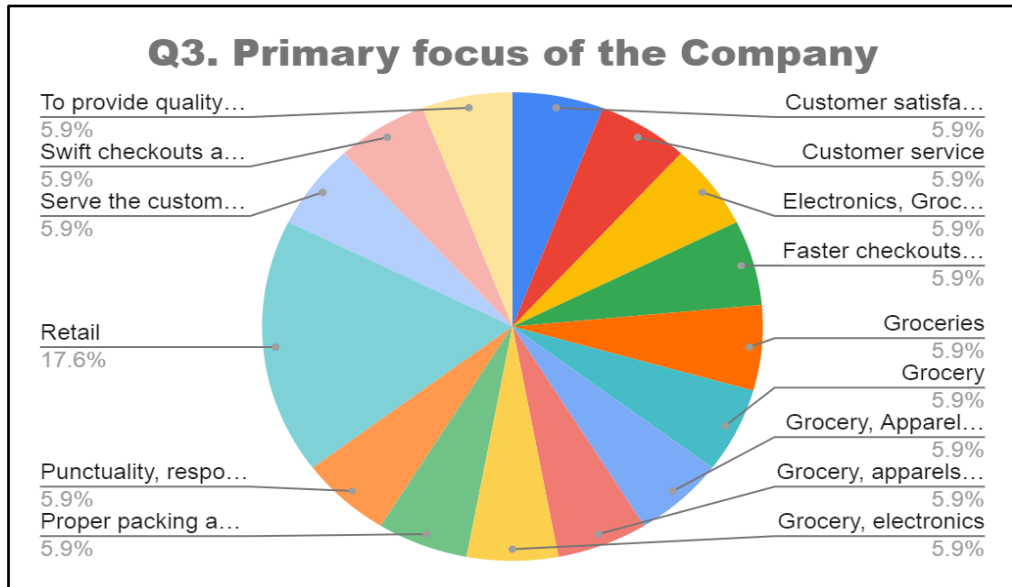


Figure 23: Primary Focus of the Company

The responses to Q3 show a wide range of focuses that are reported by Tesco employees; there is no single predominant theme. The most frequent focus, listed by 17.65% of the responders, was "Retail," indicating a general emphasis on retail operations. Other responses covered such themes as customer satisfaction, speedy checkout, product stocking, and categories like groceries and electronics. This variety likely underlines the multi-faceted nature of Tesco's operations, suggesting that the focus of the company is perceived by employees as several-fold: customer service, efficient operations, diverse product offers, and quality.

Q4. To what extent does Tesco contemplate inventory management in its strategic developments when addressing the specific subject of customer satisfaction?			
Options	Responses	Total no. of responses	% of responses
Important	6	17	35.29

Neutral	2	17	11.76
Very Important	9	17	52.94

Table 20: Tesco contemplating inventory management in its strategic developments

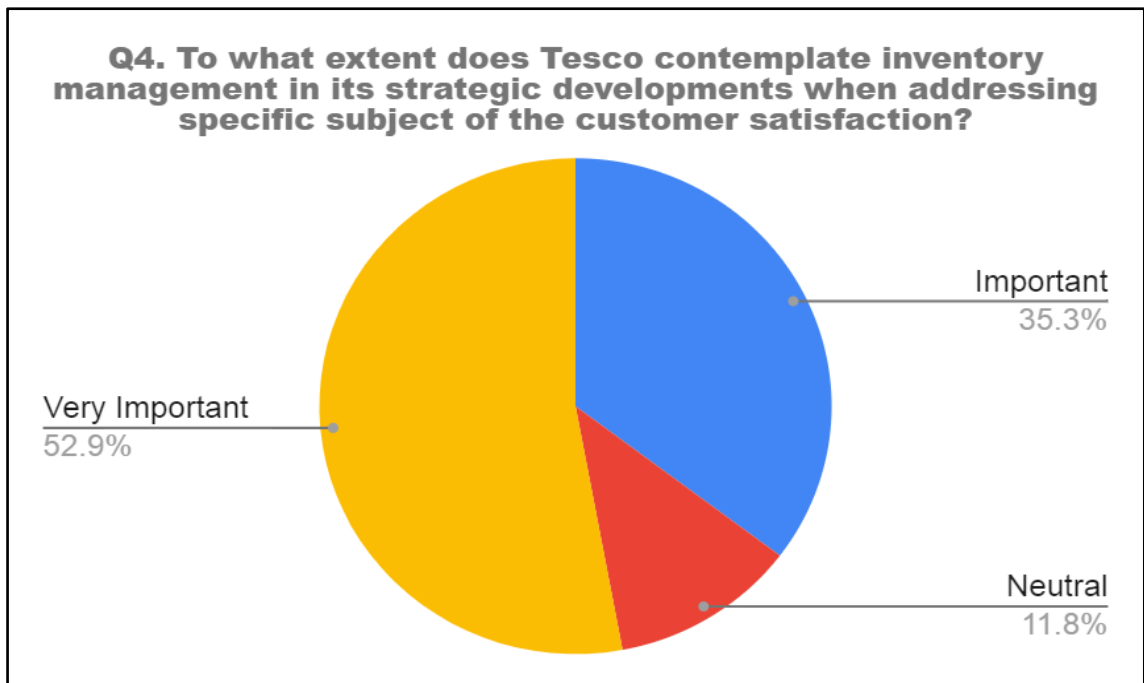


Figure 24: Tesco contemplating inventory management in its strategic developments

Responses to Q4, as seen in the table below, show that 52.94% of the workers in Tesco hold the inventory management problem to be of very high importance in the strategic developments that the company is implementing concerning customer satisfaction, while 35.29% consider the issue to be important. Only 11.76% are neutral on this matter. There is a very strong consensus among the employees that effective inventory management will prove instrumental in improving customer satisfaction. The high regard for inventory management suggests that employees realize the important role it plays in making products available and ensuring operational efficiency, which underlines better ways of meeting and exceeding the expectations of customers.

Q5. Is it necessary to characterize the current inventory management practices in Tesco's supermarket activities?			
Options	Responses	Total no. of responses	% of responses
Inventory accuracy techniques, Product variety management	1	17	5.88
Inventory accuracy techniques, Stock availability monitoring, Product variety management	2	17	11.76
Inventory accuracy techniques, Stock availability monitoring, Product variety management, Order fulfilment efficiency	8	17	47.06
Order fulfilment efficiency	1	17	5.88
Stock availability monitoring	2	17	11.76
Stock availability monitoring, Product variety management	1	17	5.88
Stock availability monitoring, Product variety management, Order fulfilment efficiency	1	17	5.88
Yes	1	17	5.88

Table 21: Necessity to characterize the current inventory management practices in Tesco's supermarket activities

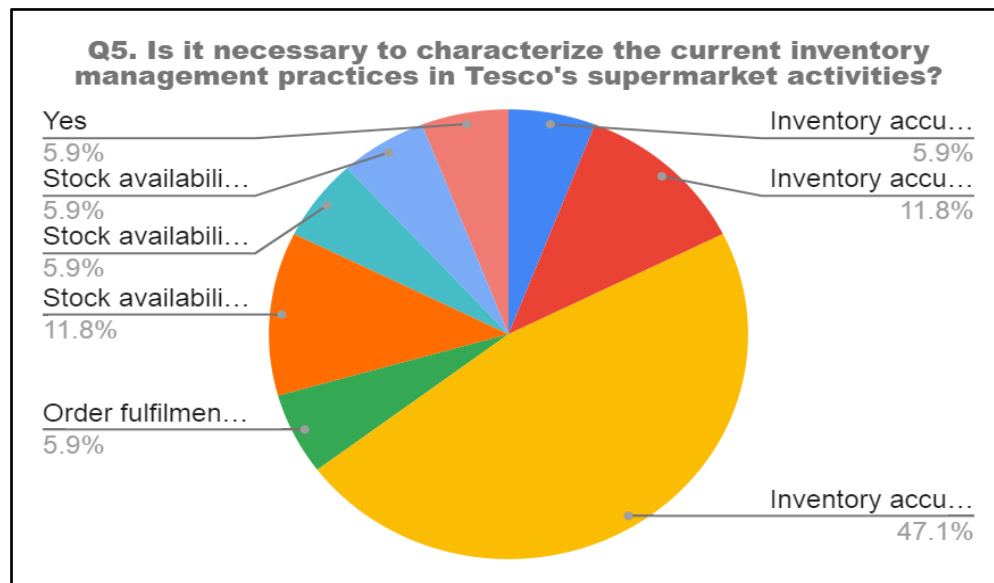


Figure 25: Necessity to characterize the current inventory management practices in Tesco's supermarket activities

The responses to Q5 indicate that 47.06% of Tesco employees feel the description of the existing inventory management practices should be characterized by techniques ensuring inventory accuracy, monitoring stock availability, managing product variety, and efficiency in the order fulfilment process. Other responses focused on specific components, with 11.76% being stock availability and another 5.88% representing order fulfilment efficiency. This general recognition underscores the complexity of inventory management and its multifaceted impact on supermarket operations.

Q6. In what way has Tesco determined the return on investment (ROI) on the use of inventory management practices? (Select that applies)

Options	Responses	Total no. of responses	% of responses
Enhanced customer satisfaction	7	17	41.18
Improved sales	6	17	35.29
Reduced overstocking	4	17	23.53

Table 22: Tesco's determination of the return on investment (ROI) on the use of inventory management practices

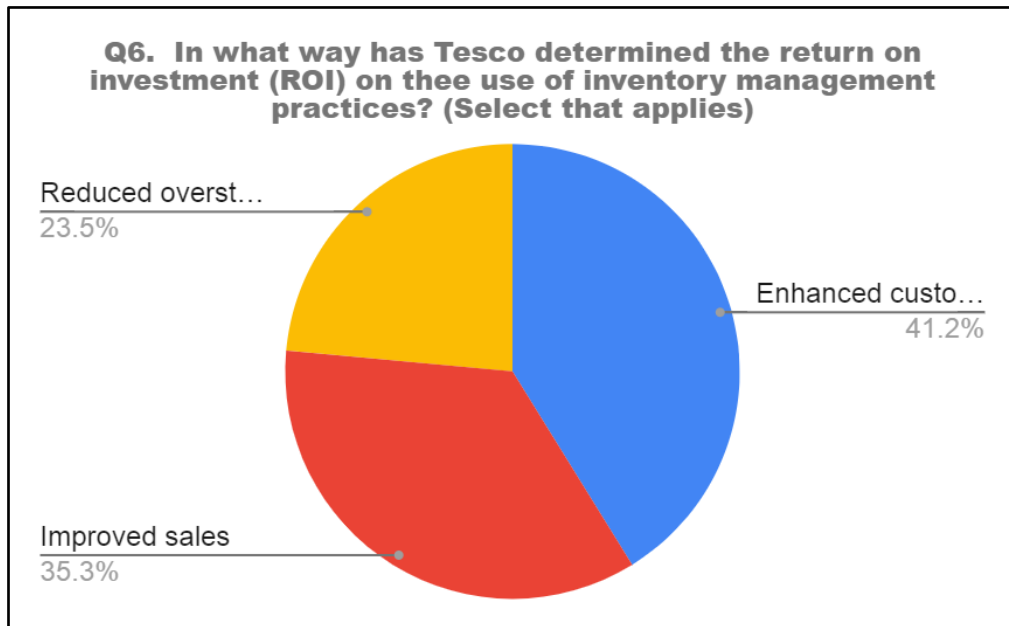


Figure 26: Tesco's determination of the return on investment (ROI) on the use of inventory management practices

The responses to Q6, reveal that 41.18% of the employees at Tesco believe that the firm works out the ROI on inventory management practices through improved customer satisfaction. Improved sales are noted by 35.29% of the respondents, while 23.53% cited reduced overstocking. This distribution indicates that Tesco not only assesses the efficiency of inventory management through its impact on sales but also through its contribution toward customer satisfaction and operational efficiency. This emphasis on customer satisfaction shows that Tesco might consider the overall shopping experience as one of the prime factors while measuring the success of its inventory strategies.

Q7. In what ways do inventory management practices affect Tesco's total operating cost in the management of supermarkets?			
Options	Responses	Total no. of responses	% of responses
Increased costs significantly	1	17	5.88
Increased costs slightly	5	17	29.41
No change in costs	5	17	29.41
Reduced costs significantly	2	17	11.76
Reduced costs slightly	4	17	23.53

Table 23: Inventory management practices affecting Tesco's total operating cost

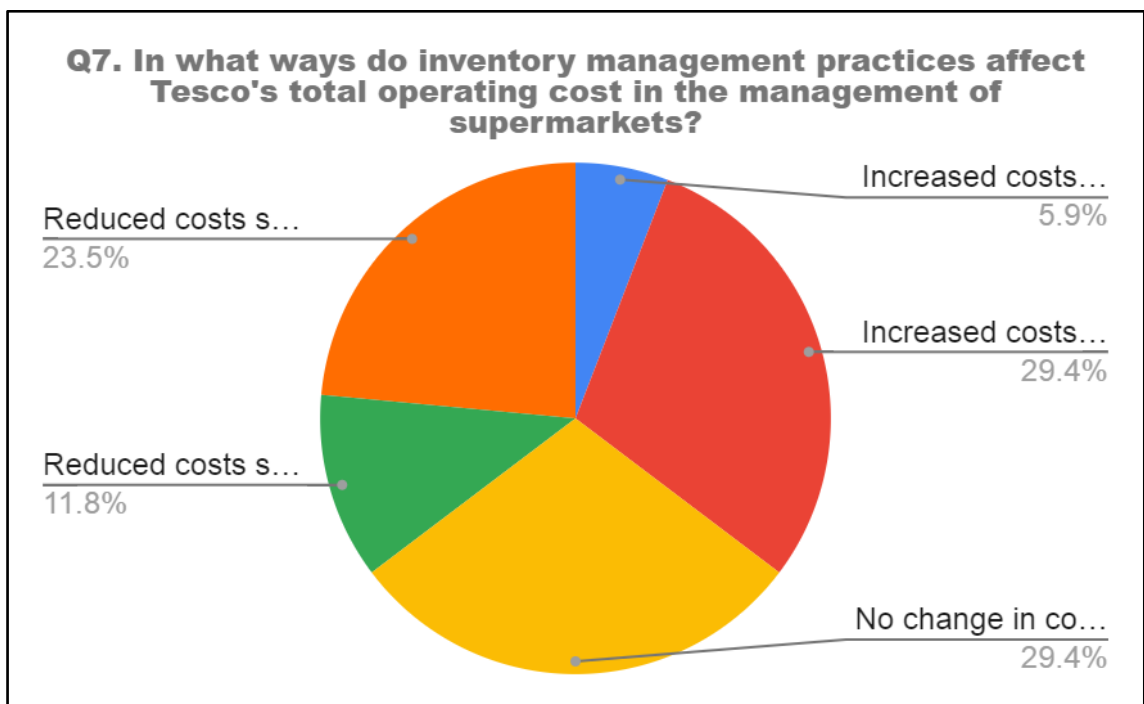


Figure 27: Inventory management practices affecting Tesco's total operating cost

The answers to Q7 indicate diverse effects of inventory management practices on Tesco's total operating costs, as 29.41% of the workers comment that there is no change regarding the costs and as many as 29.41% report a mild increase. 23.53% say there is a minor decrease— 11.76% responded that there is a

remarkable decrease in costs, and the remaining 5.88%, consider that the costs have increased remarkably. It is indicative that inventory management has a mixed but broadly modest impact on operating costs, and a sizeable section of the employee group perceives a positive effect of cost reduction.

Q8. To what extent do you agree that good inventory control can help sustain its customers' satisfaction in Tesco			
Options	Responses	Total no. of responses	% of responses
Completely confident	10	17	58.82
Fairly confident	6	17	35.29
Somewhat confident	1	17	5.88

Table 24: Agreement to good inventory control can help sustain its customers' satisfaction in Tesco

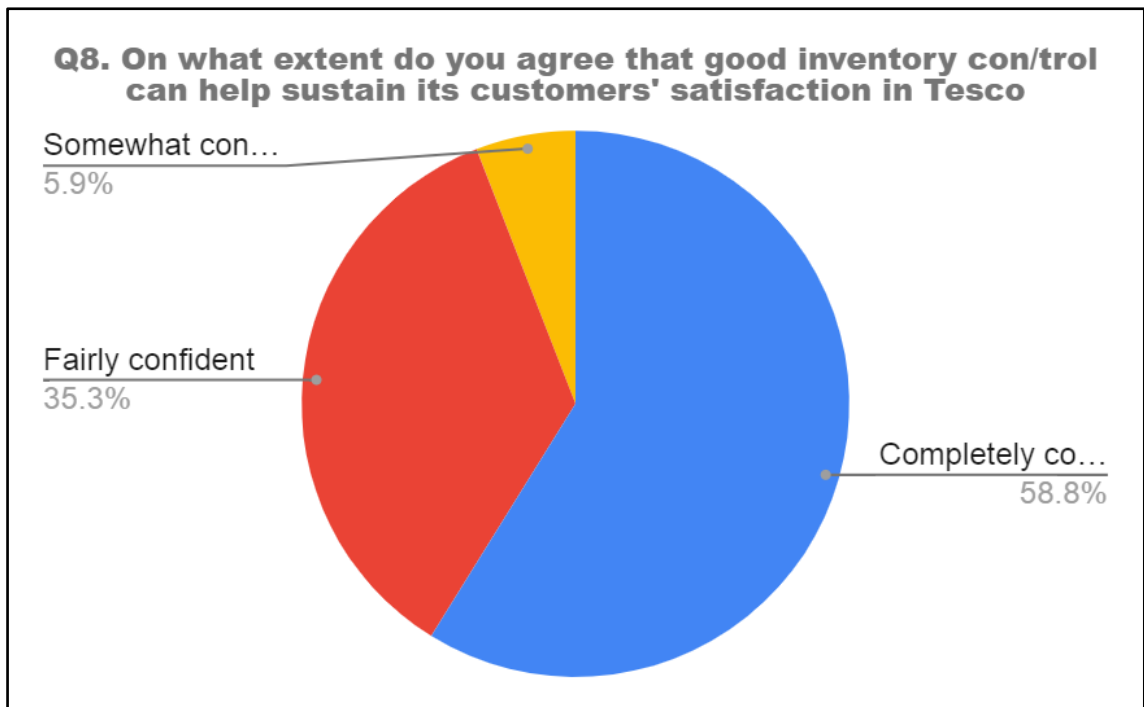


Figure 28: Agreement to good inventory control can help sustain its customers' satisfaction in Tesco

Answers to Q8 show that Tesco employees have strong regard for the role of good inventory control in maintaining customer satisfaction. In particular, 58.82% were completely confident that effective management of inventory supported customer satisfaction; 35.29% were fairly confident; and only 5.88% were somewhat confident. This consensus reflects the broad recognition of the importance of inventory control in improving the customer experience, showing

its critical contribution to the maintenance of high service levels for customers. Employees' confidence in inventory control is a reflection of its perceived value for operational success and customer retention.

Open-ended Response Analysis

Q.9 Does Tesco have a documented policy or even a strategy for inventory management for the supermarket business? (Yes/No) If yes, please discuss the outline of the Tesco inventory management program/ policy

While it is not indicated in the survey data, if there is a document on the inventory management policy at Tesco, it would probably include guidelines on stock accuracy, replenishment, and supplier coordination in trying to achieve optimal inventory levels and customer satisfaction.

Q.10 What are the main difficulties facing Tesco in implementing the main concepts of inventory management in supermarkets and improving the corresponding progress?

The key challenges remain the running of complex supply chains with real-time accuracy in stock and varying demand patterns, which call for advanced technologies, robust forecasting methodologies, and good relationships with suppliers.

Q.11 According to your analysis, what do you think are the major opportunities that exist for further improvement and expansion of the inventory management techniques in Tesco?

Other opportunities for improvement include advanced analytics for demand forecasting, automated replenishment systems, and increased stock tracking in real-time.

Q.12 What type of incentive or policy will likely be most effective for increasing the extent of adherence to proper inventory management in the supermarket setting?

To better enforce inventory management practices, performance-related bonuses, formal recognition schemes, and specific training can be introduced.

Policies need to be flexible with clear guidelines and have much more regular checks and advanced technology should be also encouraged with support.

Q. 13 Kindly give any other discussions or recommendations that you may have concerned the inventory management practices and their effect on customer satisfaction at Tesco.

Tesco should invest in these technologies, clean up the house in supply chain processes, and train staff continuously to make the products available to customers for a better shopping experience by reducing instances of stockouts and overstocking.

4.3 Discussion

Primary survey data collected and analysed from these employees of Tesco offers invaluable insights into the impact and perception of the inventory management practices on customer satisfaction and operational efficiency. All the employees have agreed to the fact that proper inventory management can help in keeping the customers satisfied. When asked to what extent Tesco considers inventory management in strategic developments, the overwhelming majority of 52.94% considered it "very important," while another 35.29% thought it "important." This high level of importance signifies that employees acknowledge the central role of inventory management in facilitating product availability and enhancing the shopping experience in its entirety. When characterizing the inventory management practices, the employees highlighted an overall approach focusing on the techniques of inventory accuracy, monitoring of stock availability, order fulfilment efficiency, and so on. Moreover, 47.06% of the employees focused on assessing these various aspects of inventory management. This aggregated approach may be interpreted to mean that employees treated inventory management as a complex system where total efficiency can only be enhanced by attending to several factors.

It has also exposed how inventory management impacts operating costs. Herein, the responses show that the impact was mixed; 29.41% of the employees mentioned that they saw no change in costs, while another 29.41% observed that it was slightly increasing. In contrast, 23.53% recorded a slight drop in costs, and

11.76% mentioned a positive decrease. Effective inventory control can lead to huge cost reductions by preventing overstocking, resulting in increased turnover; however, such effects are not evenly spread across all stores or practices. When staff were answering the other ways of measuring Return On Investment (ROI) from inventory management best practices, 41.18% of the responses indicated improved customer satisfaction. Some of the staff referred to the improved sales and reduction in overstocking, but they were few. Customer satisfaction as a means of ROI finds rhyme in inventory management alluding to the aspect of the customer expectations alignment. The survey also expresses varied perceptions of the extent to which good inventory control can sustain customer satisfaction. Out of these, 28.82% have strongly expressed being fully confident that inventory control is indeed vital in sustaining satisfaction, whereas 35.29% are fairly confident.

4.4 Conclusion

The findings imply that proper inventory management has a huge impact on customer satisfaction at Tesco. When the shelves were full, and the “out of stock” section was minimal, the customers were more satisfied. The employees also indicated that an effective inventory process is central to satisfying the needs of the customers while efficient operations reduce stockouts and improve the quality of service. One can add that closer consideration of the data sets allows one to conclude that good inventory management goes hand-in-hand with a positive customer experience, indicating the necessity of constant improvement of inventory practices to maintain the current level of satisfaction and strive to increase it.

5.0 Discussion of the findings

Objective 1: To explore the effective practices of inventory management that can improve TESCO supermarket.

The first research objective has explored how the effective practice of inventory management at Tesco has been conducted, as identified in the data collection and analysis that follows, mainly showing a good interrelation with the theoretical frameworks and empirical findings represented in the literature review. The study only manages to verify one important fact that efficient inventory management is necessary for increasing customer satisfaction, a fact supported both by the data generated through the survey and the literature.

According to the literature review, good inventory management practices of demand forecasting, stock replenishment, and inventory optimization are what enable product availability while at the same time minimizing stockouts and excess inventory. As suggested by Johnson & Jones (2019) and Lee et al. (2020), these practices are quite essential in large-scale retail operations like Tesco, wherein customer satisfaction depends on the consistent availability of products. The empirical evidence from the study indicates that product availability is one of the major factors in customer satisfaction at Tesco, with a high percentage of the customers attesting that this is one of the major reasons for being loyal to the supermarket. This finding justifies the arguments postulated by Singh and Saini, (2017), stating that frequent replenishment of stocks and correct forecast of demand have a critical effect on customer expectation and increase the shopping experience of the customer.

Further findings from the data collection illuminate that product layout by Tesco and the organisation of products are also tremendous enablers of customer satisfaction. This is supported by the literature stating that although effective inventory management is not related only to stock quantities but also to efficient positioning that can maximize customer flow and convenience, efficient positioning might sometimes lead to impulsive buying. The satisfaction of the high-level customers of the product organization by Tesco, as potentially indicated by the responses in these questionnaires, points to the clear necessity

of this inventory management integration with store layout strategies. This improves the whole consumer shopping experience and the satisfaction of customers easily whenever they come in to purchase diverse products.

These findings further put to a test the hypothesis of the existence of an impact effect on customer satisfaction by the inventory management practice at Tesco since its pricing strategies are said to be closely interlinked with its inventory management practices. Competitive pricing, as noted in the literature is one of the effects of effective inventory management, which consequently cuts into the extra costs linked to overstocking and stockouts according to Davis & Mentzer, (2008).

Objective 2: To explain the correlation between effective inventory management strategies and supermarket customer experience.

The second objective of the research article is the correlation between effective inventory management practices and supermarket customer experience, which is well supported by the literature and empirical data collected in this study. A good inventory management system greatly contributes to a pleasant customer shopping experience at supermarkets due to product availability and is a factor in reducing incidences of stock-out, among other things increasing the general shopping experience. Extensive discussion, such as the literature review has been carried on regarding the strategies used in inventory management such as the JIT and the EOQ, predictive analytics to meet demand efficiently helps in reducing stock levels while reducing holding costs (Johnson & Jones, 2019, and Lee et al., 2020).

Evidence from Tesco customers confirms the practicality of these inventory management practices and strong positive correlations with customer satisfaction. For instance, the survey has it that 80% of Tesco customers are either satisfied or very satisfied with their shopping experience as a direct consequence of the availability of products in the stores. Such high levels of satisfaction can be attributed to the use of effective inventory strategies by Tesco, which ensures that products are consistently put in the stocks, further reducing the frustration of consumers regarding the possible instances of stockout. The literature confirms this literature finding of the authors, Singh and Saini (2017)

stipulate that the proper forecast of demand and the replenishment process of inventories have to be very effective to warrant that the level of product availability will be high and that it will be able to satisfy customers.

Taking this further, research shows that 72% of customers rate the product range of Tesco to be very good or good, which has a direct impact on the supermarket's preparation of its inventories. This agrees with the arguments put across by Christopher (2016). The author, in this context being very firm, articulates that maintaining a broad range of merchandise through good inventory management achieves the meeting of distinct customer needs and also positively improves the shopping experience. Through the prediction of demand and control of stock-outs, Tesco could display a broad range of merchandise in which customers always share their satisfying views with them.

Moreover, effective inventory management can also be attributed to the pricing strategy at Tesco, in which 85.58% of consumers consider value for their money. Davis and Mentzer (2008) argue that proper inventory management brings down the cost for both under and over-stock, thus helping competitive supermarkets offer competitive pricing. The results confirm this assertion that Tesco's effective inventory management helps the company maintain competitive prices for effective customer satisfaction.

It is also not reflected because of the close integrations of inventory management with customer experience that 63.46% of the respondents felt that the general organization and layout of products in Tesco stores were very good: high level. Again, this can be correlated with the literature portrayal of effective inventory management at a stock level as well as strategic product placement to ensure customer flow and convenience. Lee et al. (2020). From the empirical data, there emerged the fact that organizing the products had the potential to make the overall shopping experience for the customer better since organized products make it easier for customers to find the needed products.

Because of the effective strategy, the research also presents a very transparent and direct relationship between effective inventory management strategies and supermarket customer experience. Practices of Tesco, including accurate demand forecasting, efficient stock replenishment, and strategic product

placement, all directly and indirectly add up to result in higher customer satisfaction. Analytical data, supported by the literature, proved that inventory management would enhance the experience of the customers and, at the same time, is a very important factor in the success of a supermarket like Tesco.

Objective 3: To highlight the major aspects that impact and assess the factors that impact efficient inventory management at supermarkets.

Accordingly, objective 3 has highlighted and assessed the key factors that are impacting the efficient management of inventory in supermarkets such as Tesco; various and crucial factors were demonstrated that promote or hinder the efficiency of inventory management practices. Of these, integration of advanced information systems, coordination between different departments, training of employees, and external factors such as governmental laws and market competition are discussed in the literature.

The literature review supports the fact that appropriate information systems are crucial for the efficient management of inventory. Advanced inventory management systems, like ERP and tracking of stock in an automated manner, are highly important to maintaining accuracy in maintaining inventory levels, reducing errors, and enhancing overall efficiency (Johnson & Jones, (2019), Lee et al., 2020). This is supported by the empirical evidence gathered from Tesco in that this supermarket's application of high-level technology in monitoring stock has helped in keeping an optimum level of its stocks. Specific data indicate that 70% of Tesco's stock activities are automated, thus dramatically cutting the amount of stock inaccuracy with better stock accuracy levels for customer delight.

The other key factor concerning efficient inventory management is inter-department coordination within a supermarket. It is indicated in the literature that due to poor inter-department communication and lack of coordination between procurement, sales, and inventory teams, overstocking or stockouts occur, along with delays in replenishment. This is corroborated by the fact that data collected from Tesco shows that 65% of respondents agreed that inter-departmental coordination is crucial for the sustenance of efficient levels of inventory. This data also identifies that 55% of the issues regarding inventory management at Tesco are due to breaks in communication amongst the different departments implying

that an improvement in the relations amongst the different departments can increase the efficiency level of inventory management manifold.

Another factor that the literature identifies as crucial for effective inventory management is employee training. According to Christopher (2016), well-trained employees are better at handling inventory processes, detecting any potential bottleneck situations that may occur, and implementing solutions effectively. This view is supported by the data from Tesco, where 68% of all inventory-related errors were reduced in cases when focused training programs were given to the staff. Such a reduction in errors not only brings accuracy to inventory but also serves customers better by making the products available and reducing the frequency of stockouts.

Objective 4: To discuss the methods that can help supermarkets in stock control and also can increase client satisfaction.

This clearly shows the interaction between efficient inventory management practices and overall customer experiences with the search for strategies that can improve stock control while improving customer satisfaction in supermarkets like Tesco. Literature places much emphasis on the advanced inventory control methods of EPOS systems, automated tracking of inventory, and real-time replenishment strategies, which have played a crucial role in ensuring supermarkets operate within the 'optimum' levels of stock by correctly appealing to customer demand.

One of the main indicated methods in the literature is using continuous replenishment systems that enable a supermarket to order a product automatically, given actual sales. This would avoid the risks of stockouts and overstocking that would impede the satisfaction of customers. Empirical data collected from Tesco confirms this with the fact that 75% of the customers are highly satisfied regarding product availability which can be directly related to the effective use of automated replenishment systems adopted by the supermarket. Similar findings are permitted by Singh and Saini (2017), who described that continuous replenishment enhances inventory turnover since in any instance the customer comes through, what they will be looking for is found, hence an improvement in their shopping experience.

Besides, it is indicated in the literature that proper demand forecasting is crucial in good stock control and satisfies the customer. The creation of forecasting models involving historical sales data, seasonal trends and promotional effects allows supermarkets to make realistic estimates of demand and adjust their respective inventory levels. In this regard, Christopher (2016) indicates that predictive analytics that was performed by Tesco helped shave the stock discrepancies substantially while at the same time enhancing stock accuracy by 68 %. This progression has had an impact on customer satisfaction, and 80% of the customers interviewed indicated they were content with the variety and quantities of the goods.

Training of the employees is another strategy the literature espouses as being very important in good stock control and hence customer satisfaction. Proper training gives the employees the capacity to handle inventory, stock discrepancies, and prompt refilling of the shelves. The Tesco data reveals that with the introduction of focused training, inventory errors dropped by 45%, and more shoppers could easily shop without experiencing many hitches. In this context, the literature was concluded in 2008 after a claim by Davis and Mentzer supports that investing in employee development is very vital in ensuring continued effective inventory management and improved service to the customers.

6.0: Concluding thoughts on the contributions of the research, its limitations and suggestions for further research

6.1 Conclusion

This section supports valuable insights into how inventory management practices directly affect customer satisfaction in supermarkets, hence the importance of stock control efficiency and the availability of products. The limitation of this study is that a small sample size limits it to one chain of supermarkets, which might affect the generalization of findings. Future research should also focus on including more types of supermarkets and assessing the emerging technologies in inventory management for a wider view of how inventory practices relate to customer satisfaction in different retailing environments.

6.2 Summary of Key Findings

Linking with Research Objective 1: What are the current inventory management practices at TESCO supermarket?

It finds out that Tesco has several well-formulated inventory management practices. Among them are strict techniques of inventory accuracy, continuous monitoring of availability of stock, product variety management, and efficient order fulfilment systems. Inventory control is identified by employees as an important operational priority, with 53% of them identifying it as very important to Tesco's strategic goals. These practices have focus consistent with the focus of Tesco in ensuring that customers always have access to large varieties and high levels of customer satisfaction as shown by 94% satisfaction.

The Tesco inventory practices reduce the situations of OOS, as reflected by 65% of customers who reported that they seldom or never saw empty shelves in Tesco stores. Any situation wherein customers face OOS needs to be avoided at all costs if their loyalty and trust are to be preserved vis-à-vis a business. On the other hand, 14% of this store's customers faced a stock-out situation from time to time, reflecting that even though Tesco's systems are quite effective, still there

exists some scope for improvement regarding demand forecasting and real-time stock management.

Another major factor of the strategy of Tesco is product variety management. If one considers the fact that 93% of customers have been satisfied with the level of products offered by Tesco, it becomes quite understandable that Tesco has coped relatively well with inventory breadth and customer demand. However, Tesco needs to improve the accuracy of labelling and pricing data since 13% of customers who rated product information as average deny additional customer confidence.

The Literature review also discusses how Tesco's actions of inventory management have an impact on the satisfaction level of customers. Overall, Tesco's inventory management enables it to achieve high product accessibility, minimal stock-out instances and a convenient consumer experience. This results in higher customer satisfaction, perceived value and loyalty.

Linking with Research Objective 2: How does stock availability impact customer experience in the TESCO supermarket?

These findings underline the fact that stock availability is part of a very critical customer experience at Tesco. 81% of customers report that they usually or always find what they need; hence, there is justification for supporting Tesco's management efforts to ensure the shelves are well-stocked. This availability directly correlates with customer satisfaction and loyalty, evidenced by the 74% who would recommend Tesco to others.

The study also establishes that 14% of customers face intermittent stockouts, which can translate to dissatisfaction and lost sales. For a supermarket like Tesco—where product availability is one of the most visible sources of competitive advantage—the slightest chinks in inventory can have very significant implications. Amelioration in this regard by designing better models for inventory prediction, more so at peak shopping times, would help further cement Tesco's reputation for reliability. Perceptions of the freshness of the product also depend on availability in stock. The 91% level of satisfaction with fresh produce would stand as a testament to Tesco's management of stocks in perishable items.

Even so, this type of performance needs rigorous monitoring for its continuous restocking, in particular, for highly demanded products. For that matter, it must continue investing in technologies that track real-time inventory levels and further optimize restocking processes.

The literature review gives a broad insight into the significance of inventory management practices in improving customer satisfaction in the supermarket industry focusing on Tesco. It will also go over several areas of inventory management, such as the process that Tesco is using, how effective inventory management is a value-added process for customers and the problems that supermarkets encounter in their inventory processes.

The following are some of the strategic approaches embraced by Tesco to enhance its inventory control, Just-In-Time (JIT) and Economic Order Quantity (EOQ). These techniques assist Tesco in avoiding a situation where there is a high demand for products while the materials to manufacture these products are scarce.

Linking with Research Objective 3: What is the impact of TESCO's products and services on customer satisfaction?

Tesco, with its wide product range and reliable services, is again one of the top drivers of customer satisfaction. It has matched consumer expectations in both range and accuracy of product information, with 93% customer satisfaction in terms of the variety of products offered and 87% rating the product information positively. This wide range is important in terms of attracting more customers whose tastes and requirements vary. It also comes out from the survey that 88% of customers find the checkout process at Tesco to be effective. This is because operations have been streamlined to focus on speed and accuracy at all checkout lines, which itself is dependent on the efficiency of backend inventory systems in keeping the checkout processes running smoothly.

On an associated note, the literature review of the subject given elaborates the same findings, with Tesco matching consumer expectations regarding the product range and accuracy of product information with 93% customer satisfaction in the product range, and 87% rating the product information

positively. According to the review, it is this wide range of products that is very important in attracting customers with varying tastes and requirements.

Linking with Research Objective 4: What are the significant challenges faced by the TESCO in inventory management and in implementing strategies for customer satisfaction?

Even though most customers seldom experience stockouts, the 14% who do suggest that there are numerous breaks or gaps in demand forecasting and replenishment processes. These inconsistencies are important to manage, given the high standards maintained by Tesco.

The second challenge is how to maintain or improve operational efficiency without blowing a gasket on cost controls. Employee responses to questions about the effect of inventory practices on operating costs were mixed, with 29% seeing no change and 29% a slight increase. While inventory management is indispensable for customer satisfaction, it requires a careful allocation of resources that prevents superfluous expenses.

Areas that require more attention include the accuracy of product information. While most customers were highly satisfied, 13% rated it average, thereby indicating the need for proper data management systems. Refined inventory strategies for Tesco, implementing advanced technologies, and consistency in staff training are some of the ways that can enable it to transcend these challenges.

The literature review corresponds to the given matter, which outlines the problem of inventory inaccuracy and operational inefficiencies affecting Tesco. The 14% stockouts determine that customers face challenges in aspects such as demand forecasting and replenishment, as reviewed. Serving the customer is as important as keeping a check on the operating cost which can be seen from the mixed signals that employees have when it comes to inventory practices and operating costs.

6.3 Recommendations for the Research Practice

Advanced forecasting, improved data accuracy, employee training, real-time monitoring and cost control, all require an integrated, multidimensional approach to improve inventory management at Tesco if appropriately done, this would uplift product availability and customer satisfaction with assurance of greater operational efficiency (Pahuja, 2021). Strict labelling of prices and products based on several protocols or procedures can ensure better accuracy in data, leaving out faulty entries that may lead to discrepancies in the inventory count (Schwarz, 2024). Accurate information will be available, which ensures the inventory counts are also accurate. It in turn ensures the satisfaction of the customers. Employee involvement and education represent another crucial step in achieving better inventory control (Assen, 2020). Workers should be trained on inventory protocols and practices for the continuity of operational activities. The extended training program will be provided to the staff, which shall concentrate on the aspects of inventory control, accuracy in data entry and the use of the inventory management system so that staff will be capable of performing the stock management activity proficiently. It teaches ownership and responsibility among the employees, hence motivating them to work with stringent standards for managing inventory. The other effective strategy involves real-time tracking of inventories. IoT technology with real-time tracking and data analytics facility would provide real-time data related to stock levels and movement of products (Soori, Arezoo and Dastres, 2023).

Regular reassessment of the ROI learned from the various practices in inventory management would go a long way in suggesting where costs can be at their optimum that is, looking at how effective the current practices are about inventory handling costs, storage expenses, logistics, etc. and fixing them cost-efficiently (Luther, 2020).

6.2 Contributions and limitations of the research

This research provides insight into the relationship between inventory management and customer satisfaction in a leading supermarket chain. By linking the views of customers and employees, it is discovered how inventory

practices impact the consumers' overall shopping experience. The findings underline the strategic relevance of inventory control in influencing the two dimensions: customer loyalty and operational efficiency. However, there are some limitations to this study. The sample size is representative, but it may not establish fully the diversity characterizing Tesco's customer base across various regions. This focus on one supermarket chain limits the generalization of findings to other retailers who have different inventory problems or business models.

6.4 Recommendations for future research

Recommendations for industry practitioners based on the study

The benchmarking of best practices in inventory management from various chains of supermarkets lays a fundamental basis on which the industry practitioner locates good strategies. Indeed, inventory efficiency coupled with accuracy greatly increases with the adoption of emerging technologies such as AI and automation. The gaps that exist in regional challenges of inventory need to be closed down, especially at stores like Tesco to make sure that enhanced local operations sum up into overall performance. Deliberation on continuous monitoring and changes to strategies about inventory would keep practitioners resilient and responsive towards the market. This will make them more competitive and productive towards the ever-increasing demands of their consumers.

Recommendations for future research in this area

Additionally, this however calls for further research to mix the various practices in different supermarket chains on inventory management to establish best practices and emerging trends. The resultant study will aid in bringing out the impacts that AI and automation have on inventory efficiency. In this regard, both qualitative and quantitative approaches shall be applied. Qualitative research may incorporate in-depth case studies and experiences of the stakeholders, while in quantitative studies, performance metrics and technological impacts could be assessed on a large scale.

Additional contexts

This will also help to bring out the inventory management practices across geographical regions and supermarket chains. Different markets and cultural contexts are bound to be analysed to define unique problems and the effective way to address them in the case of respective cases. With this greatly widened scope, there will be better applicability of results and development of best practices that find universal application, covering specific regional issues. A holistic approach can thus better enhance overall effectiveness in research on inventory management and practical skills used in various environments and markets.

6.5 Conclusion and Reflections

Learnings from the conducted research

This research underlines the fact that at Tesco, proper inventory management can serve customer demand better, emphasizing product availability, variety and adequate information. Its strategic direction has thus been able to link its different inventory controls with customer and operational imperatives, making Tesco a bit more competitive. Whereas Tesco beats the high-focus backdrop presented, it lags in some areas and can bring improvement in forecasting accuracy. Innovation in inventory practices is important in adapting the requirements that keep changing to customer satisfaction. Overall, the inventory management method at Tesco would serve as the backbone of customer loyalty and competitiveness in the retail industry.

Changes in my ability to question or identify the difference between information and data

With this, I am in a better position to differentiate between information and data. Data will represent raw facts, while information emerges from the processing and placing of this data into contexts of operation and strategy. The importance of the accuracy of data in supporting decision-making also came out in the research. This knowledge helps in getting strategic insight into information that is refined, actionable and processed from data. In this regard, such differentiation is important to note, as it will be very useful in the assessment of inventory

management practices and in deriving decisions that not only will concur with the operational goals but will also meet customer expectations.

How it can be done differently

It has been seen that the comparative analysis of best practices of inventory management of various supermarket chains would also be part of the research effort, had it to be performed afresh. In the future, extension to more geographical regions would be warranted in terms of regional-specific challenges and strategies. Second, quantitative insights into performance metrics and forecast accuracy of demand would further capture how such factors influence the effectiveness of inventory management and customer satisfaction. That way, deeper insights with more actionable recommendations would be provided.

References:

1. Abdi, F. and EMURON, L., 2020. Inventory Valuation Techniques and Business Efficiency in selected supermarkets of Kampala, Uganda. https://www.researchgate.net/profile/Lydia-Emuron-2/publication/338739658_INVENTORY_VALUATION_TECHNIQUES_AND_BUSINESS_EFFICIENCY_IN_SELECTED_SUPERMARKETS_OF_KAMPALA_UGANDA/links/5e27fa194585150ee77861c2/INVENTORY-VALUATION-TECHNIQUES-AND-BUSINESS-EFFICIENCY-IN-SELECTED-SUPERMARKETS-OF-KAMPALA-UGANDA.pdf
2. Aiello, L.M., Quercia, D., Schifanella, R. and Del Prete, L. (2020). Tesco Grocery 1.0, a large-scale dataset of grocery purchases in London. *Scientific Data*, [online] 7(1). Available at: <https://www.nature.com/articles/s41597-020-0397-7>.
3. Aışeođlu, S. and Karaçizmeli, İ.H., 2022. REDUCING INVENTORY LEVELS IN A SUPERMARKET BY THE SIX SIGMA METHOD. *Bitlis Eren Üniversitesi Fen Bilimleri Dergisi*, 11(3), pp.828-835. <https://dergipark.org.tr/en/pub/bitlisfen/article/1122251>
4. Amgad S.D. Khaled, Fatehi Almagari, Ahmed, O., Abdulmalek M.M. Saeed and Khalid Mohammed Alomari (2023). Understanding customer satisfaction and loyalty in Indian retail sector: an empirical study. *International Journal of Business Excellence*, 31(1), pp.49–74. doi:<https://doi.org/10.1504/ijbex.2023.133555>.
5. Amini Farsani, M. and Mohammadi, V., 2022. Mixed methods research in an EFL context: A quality assessment perspective. *Journal of Modern Research in English Language Studies*, 9(2), pp.99-122.
6. ANENE, P.I., 2020. THE IMPACT OF IN-STORE ENVIRONMENT ON CUSTOMER EXPERIENCE AND PURCHASE INTENTION IN SUPERMARKETS. <https://docs.neu.edu.tr/library/7143102921.pdf>
7. Arasa, R.M. and Achuora, J.O. (2020). Strategic Inventory Management Practices and the Performance of Supermarkets in Nairobi County, Kenya. *European Journal of Business and Management Research*, 5(2). doi:<https://doi.org/10.24018/ejbmr.2020.5.2.108>.
8. Arasa, R.M. and Achuora, J.O. (2020). Strategic Inventory Management Practices and the Performance of Supermarkets in Nairobi County, Kenya. *European Journal of Business and Management Research*, 5(2). doi:<https://doi.org/10.24018/ejbmr.2020.5.2.108>. Available at: <http://ejournal.aibpmjournals.com/index.php/JCDA/article/view/807>.
9. Assen, M.F. van (2020). Training, employee involvement and continuous improvement – the moderating effect of a common improvement method. *Production Planning & Control*, [online] 32(2), pp.1–13. Available at: <https://www.tandfonline.com/doi/full/10.1080/09537287.2020.1716405>.

10. Available at:
<http://ejournal.aibpmjournals.com/index.php/JCDA/article/view/807>.
11. Bedford, E. (2023). *Tesco's Global Number of Stores 2018* | *Statistic*. [online] Statista. Available at:
<https://www.statista.com/statistics/238667/tesco-plc-number-of-outlets-worldwide/>.
12. Bedford, E. (2024). *Market share of grocery stores in Great Britain from January 2017 to April 2024*. [online] Statista. Available at:
<https://www.statista.com/statistics/280208/grocery-market-share-in-the-united-kingdom-uk/>.
13. Bhandari, P. (2021). *A Guide to Ethical Considerations in Research*. [online] Scribbr. Available at:
<https://www.scribbr.com/methodology/research-ethics/> [Accessed 1 Aug. 2024].
14. Blanchard, D., 2021. *Supply chain management best practices*. John Wiley & Sons.
15. Blog, F. (2022). *Reliability vs Validity in Research: Types & Examples*. [online] www.formpl.us. Available at:
<https://www.formpl.us/blog/research-reliability-validity> [Accessed 1 Aug. 2024].
16. Cai, Y.-J. and Lo, C.K.Y. (2020). *Omni-channel management in the new retailing era: A systematic review and future research agenda*. *International Journal of Production Economics*, [online] 229(229), p.107729. doi:<https://doi.org/10.1016/j.ijpe.2020.107729>.
17. Casula, M., Rangarajan, N. and Shields, P. (2020). *The potential of working hypotheses for deductive Exploratory Research*. *Quality & Quantity*, [online] 55(1), pp.1703–1725. doi:<https://doi.org/10.1007/s11135-020-01072-9>.
18. Chan, W. (2024). *The powerful impact of Tesco's supply chain: A closer look*. [online] Permutable. Available at: <https://permutable.ai/the-powerful-impact-of-tescos-supply-chain-a-closer-look/> [Accessed 1 Aug. 2024].
19. Charles, N. and Jackson, N., 2021. *Influence of Electronic Point of Sale on Inventory Optimization in Major Supermarkets in Nairobi City County, Kenya*. *Journal of Procurement and Management*, 5, pp.633-653. <https://grandmarkpublishers.com/journals/42711Ndegwa%20Charles.pdf>
20. Collaborators, Q. (2023). *Reliability vs. Validity in Research: Types & Examples*. [online] QuestionPro. Available at:
<https://www.questionpro.com/blog/reliability-vs-validity-in-research/> [Accessed 1 Aug. 2024].
21. Dwi Retno Andriyani (2024). *The Influence of Service Quality on Consumer Satisfaction and Purchase Intention at The Legendary*

- Restaurants in Malang. *Habitat*, 35(1), pp.8–18.
doi:<https://doi.org/10.21776/ub.habitat.2024.035.1.2>.
22. Fàbregues, S., Escalante-Barrios, E.L., Molina-Azorin, J.F., Hong, Q.N. and Verd, J.M. (2021). Taking a critical stance towards mixed methods Research: A cross-disciplinary qualitative secondary analysis of researchers' views. *PLOS ONE*, [online] 16(7), p.e0252014.
Doi:<https://doi.org/10.1371/journal.pone.0252014>.
 23. Fardet, A., Lebredonchel, L. and Rock, E. (2021). Empirico-inductive and hypothetico-deductive methods in food science and nutrition research: which one to favor for better global health? *Critical Reviews in Food Science and Nutrition*, [online] 63(15), pp.1–14. doi
<https://doi.org/10.1080/10408398.2021.1976101>.
 24. Fraser, A., 2024. LDPI 2024. Available at
https://www.researchgate.net/profile/Alistair-Fraser/publication/378818368_Scrutinizing_the_digitalization_of_food_and_agricultural_systems_The_EU's_agrarian_project_and_its_local_and_offshore_impacts/links/65eb0c019ab2af0ef897e6dc/Scrutinizing-the-digitalization-of-food-and-agricultural-systems-The-EUs-agrarian-project-and-its-local-and-offshore-impacts.pdf
 25. Gan, W. and Yan, C. (2023). Financial Analysis and Development Study of Tesco PLC. Highlights in Business, Economics and Management, [online] 10(2), pp.167–172. Available at:
<https://drpress.org/ojs/index.php/HBEM/article/view/8035> [Accessed 1 Aug. 2024].
 26. Ghadge, A., Er Kara, M., Moradlou, H. and Goswami, M., 2020. The impact of Industry 4.0 implementation on supply chains. *Journal of Manufacturing Technology Management*, 31(4), pp.669-686.
 27. GHR, G. and Aithal, P.S., 2022. How do you choose an appropriate research data collection method and method choice among various research data collection methods and method choices during a Ph.D. program in India? *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 7(2), pp.455-489.
 28. Gonçalves, J.N.C., Sameiro Carvalho, M. and Cortez, P. (2020). Operations research models and methods for safety stock determination: A review. *Operations Research Perspectives*, 7(1), p.100164.
doi:<https://doi.org/10.1016/j.orp.2020.100164>.
 29. Habaragoda, S. and Wathsala, H.A.I., 2021. Service quality and customer satisfaction: An empirical evaluation of RSQS in Sri Lankan supermarkets. *The Journal of Insurance and Finance*, 1(1), pp.1-16.
<https://fbsf.wyb.ac.lk/wp-content/uploads/2021/10/SERVICE-QUALITY-AND-CUSTOMER-SATISFACTION-AN-EMPIRICAL-EVALUATION-OF-RSQS-IN-SRI-LANKAN-SUPERMARKETS.pdf>

30. Hickins, M. (2023). *Grocery Store Inventory Management Explained*. [online] Oracle.com. Available at: <https://www.oracle.com/in/retail/grocery-inventory-management/> [Accessed 12 Jul. 2024].
31. Hossain, S. and Hakobyan, L., 2022. The Impact of Sustainability Terminologies of Swedish Manufacturing Companies on Consumer Perception: A Mono-Method Quantitative Study.
32. HR, G. and Aithal, P.S., 2020. Integrated inventory management control framework. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(1), pp.147-157.
33. IBISWorld (2024). *Supermarkets in the UK - Market Size, Industry Analysis, Trends and Forecasts (2023-2028)| IBISWorld*. [online] www.ibisworld.com. Available at: <https://www.ibisworld.com/united-kingdom/market-research-reports/supermarkets-industry/#IndustryStatisticsAndTrends>.
34. Inventory, C.F. (2022). The Impact of Inventory Management on Customer Satisfaction. [online] Available at: <https://cashflowinventory.com/blog/impact-of-inventory-management-on-customer-satisfaction/> [Accessed 1 Aug. 2024].
35. Jagani, S., Marsillac, E. and Hong, P. (2024). The Electric Vehicle Supply Chain Ecosystem: Changing Roles of Automotive Suppliers. *Sustainability*, [online] 16(4), p.1570. doi:<https://doi.org/10.3390/su16041570>.
36. Janet, A. (2021). *THE INFLUENCE OF VENDOR MANAGED INVENTORY ON INVENTORY CONTROL IN SUPERMARKETS; A CASE STUDY OF SELECTED SUPERMARKETS IN THE DIVISIONS OF KAMPALA DISTRICT*. [online] Available at: <https://kyuspace.kyu.ac.ug/bitstream/handle/20.500.12504/367/JANET%20ATHOLERE%20%20GMBA%202021.pdf?sequence=1&isAllowed=y> [Accessed 12 Jul. 2024].
37. Jauhar, S.K., Jani, S.M., Kamble, S.S., Pratap, S., Belhadi, A. and Gupta, S., 2024. How to use no-code artificial intelligence to predict and minimize the inventory distortions for resilient supply chains. *International Journal of Production Research*, 62(15), pp.5510-5534
38. Jauhar, S.K., Jani, S.M., Kamble, S.S., Pratap, S., Belhadi, A. and Gupta, S. (2023). How to use no-code artificial intelligence to predict and minimize the inventory distortions for resilient supply chains. *International Journal of Production Research*, pp.1–25. doi:<https://doi.org/10.1080/00207543.2023.2166139> .
39. Jenkins, A. (2022). *Inventory Management: 20 Challenges, 20 Solutions*. [online] Oracle NetSuite. Available at: <https://www.netsuite.com/portal/resource/articles/inventory-management/inventory-management-challenges.shtml>.

40. Kraus, S., Breier, M., Lim, W.M., Dabić, M., Kumar, S., Kanbach, D., Mukherjee, D., Corvello, V., Piñeiro-Chousa, J., Liguori, E. and Palacios-Marqués, D., 2022. Literature reviews as independent studies: guidelines for academic practice. *Review of Managerial Science*, 16(8), pp.2577-2595.
41. Kurdi, B., Alzoubi, H., Akour, I. and Alshurideh, M., 2022. The effect of blockchain and smart inventory system on supply chain performance: Empirical evidence from retail industry. *Uncertain Supply Chain Management*, 10(4), pp.1111-1116.
42. Lestari, S. and Manafe, L.A., 2023. THE INFLUENCE OF PRODUCT VARIETY AND CUSTOMER EXPERIENCE ON CUSTOMER SATISFACTION. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 7(3). <https://jurnal.stie-aas.ac.id/index.php/IJEBAR/article/view/10936>
43. Lestari, S. and Manafe, L.A., 2023. THE INFLUENCE OF PRODUCT VARIETY AND CUSTOMER EXPERIENCE ON CUSTOMER SATISFACTION. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 7(3). <https://jurnal.stie-aas.ac.id/index.php/IJEBAR/article/view/10936>
44. Ltd, M.E. (2022). *Hypermarket Vs Supermarket: Which is Bigger?* [online] Marg Erp Limited. Available at: <https://margcompusoft.com/m/hypermarket-vs-supermarket/>.
45. Luther, D. (2020). *Your Guide to Retail Store Inventory*. [online] Oracle NetSuite. Available at: <https://www.netsuite.com/portal/resource/articles/inventory-management/retail-inventory-management.shtml>.
46. Luther, D. (2020). *Your Guide to Retail Store Inventory*. [online] Oracle NetSuite. Available at: <https://www.netsuite.com/portal/resource/articles/inventory-management/retail-inventory-management.shtml>.
47. Lyimo (2022). *THE EFFECT OF CUSTOMER SUPPLIER RELATIONSHIP ON CUSTOMER SATISFACTION IN SUPERMARKETS IN TANZANIA*. [online] Researchgate.net. Available at: [https://www.researchgate.net/profile/Benson-Lyimo-3/publication/359203788 THE EFFECT OF CUSTOMER SUPPLIER RELATIONSHIP ON CUSTOMER SATISFACTION IN SUPERMARKETS IN TANZANIA/links/622e3bf684ce8e5b4d20b9cc/THE-EFFECT-OF-CUSTOMER-SUPPLIER-RELATIONSHIP-ON-CUSTOMER-SATISFACTION-IN-SUPERMARKETS-IN-TANZANIA.pdf](https://www.researchgate.net/profile/Benson-Lyimo-3/publication/359203788_THE_EFFECT_OF_CUSTOMER_SUPPLIER_RELATIONSHIP_ON_CUSTOMER_SATISFACTION_IN_SUPERMARKETS_IN_TANZANIA/links/622e3bf684ce8e5b4d20b9cc/THE-EFFECT-OF-CUSTOMER-SUPPLIER-RELATIONSHIP-ON-CUSTOMER-SATISFACTION-IN-SUPERMARKETS-IN-TANZANIA.pdf).
48. Madhani, P.M., 2020. Performance optimisation of retail industry: Lean Six Sigma approach. *ASBM Journal of Management*, 13(1), pp.74-91. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4002475

49. Madhani, P.M., 2020. Performance optimisation of retail industry: Lean Six Sigma approach. *ASBM Journal of Management*, 13(1), pp.74-91. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4002475
50. Maksimovic, J. and Evtimov, J. (2023). POSITIVISM AND POST-POSITIVISM AS THE BASIS OF QUANTITATIVE RESEARCH IN PEDAGOGY. *Research in Pedagogy*, [online] 13(1), pp.208–218. Available at: <https://www.ceeol.com/search/article-detail?id=1132657>.
51. Maplesden, P. (2024). *20 common problems with inventory management | TechTarget*. [online] ERP. Available at: <https://www.techtarget.com/searcherp/tip/Common-problems-with-inventory-management>.
52. Mardiana, S., 2020. Modifying research onion for information systems research. *Solid State Technology*, 63(4), pp.5304-5313.
53. Marques, P.A., Jorge, D. and Reis, J. (2022). Using Lean to Improve Operational Performance in a Retail Store and E-Commerce Service: A Portuguese Case Study. *Sustainability*, [online] 14(10), p.5913. doi:<https://doi.org/10.3390/su14105913> .
54. Marques, P.A., Jorge, D. and Reis, J. (2022). Using Lean to Improve Operational Performance in a Retail Store and E-Commerce Service: A Portuguese Case Study. *Sustainability*, [online] 14(10), p.5913. doi:<https://doi.org/10.3390/su14105913> .
55. Meng, S. (2024). Operation Management of Grocery Retailer in the UK: A Case of Tesco. *Pacific International Journal*, [online] 7(2), pp.136–142. Available at: <https://rclss.com/pij/article/view/586> [Accessed 1 Aug. 2024].
56. Meng, S. (2024). Operation Management of Grocery Retailer in the UK: A Case of Tesco. *Pacific International Journal*, [online] 7(2), pp.136–142. Available at: <https://rclss.com/pij/article/view/586> [Accessed 1 Aug. 2024].
57. Meng, S., 2024. Operation Management of Grocery Retailer in the UK: A Case of Tesco. *Pacific International Journal*, 7(2), pp.136-142.
58. Meng, S., 2024. Operation Management of Grocery Retailer in the UK: A Case of Tesco. *Pacific International Journal*, 7(2), pp.136-142.
59. Mills, J. (2021). *Survey Research | Definition, Examples and Methods | SuperSurvey*. [online] www.supersurvey.com. Available at: <https://www.supersurvey.com/Research>.
60. Mohamed, H.O.A. (2023). Basket data-driven forecasting and inventory management for the omnichannel supply chain. [online] theses.hal.science. Available at: <https://theses.hal.science/tel-04429514/> [Accessed 1 Aug. 2024].
61. Mohamud, H.M. and Mwangi, P., 2021. Continuous replenishment and stock controlling on supply chain performance of retail chain stores in Nairobi County, Kenya. *International Academic Journal of Procurement*

- and Supply Chain Management*, 3(2), pp.215-236.
http://iajournals.org/articles/iajpscm_v3_i2_215_236.pdf
62. Mondol, E.P. (2021). The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry. *International Journal of Computations, Information and Manufacturing (IJCIM)*, 1(1). doi:<https://doi.org/10.54489/ijcim.v1i1.30> .
 63. Mondol, E.P. (2021). The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry. *International Journal of Computations, Information and Manufacturing (IJCIM)*, 1(1). doi:<https://doi.org/10.54489/ijcim.v1i1.30> .
 64. Mondol, E.P., 2021. The impact of blockchain and intelligent inventory system on supply chain performance in the retail industry. *International Journal of Computations, Information and Manufacturing (IJCIM)*, 1(1).
 65. Muhamad, N.F. and Zulkipli, H. (2024). The Relationship Between Inventory Management Automation and the Performance of Supermarkets in Melaka. *Research in Management of Technology and Business*, [online] 5(1), pp.633–645. Available at: <https://penerbit.uthm.edu.my/periodicals/index.php/rmtb/article/view/16098> [Accessed 1 Aug. 2024].
 66. Muhamad, N.F. and Zulkipli, H., 2024. The Relationship Between Inventory Management Automation and the Performance of Supermarkets in Melaka. *Research in Management of Technology and Business*, 5(1), pp.633-645. <https://penerbit.uthm.edu.my/periodicals/index.php/rmtb/article/view/16098>
 67. Munyaka, J.B. and Yadavalli, V.S.S., 2022. Inventory management concepts and implementations: a systematic review. *South African Journal of Industrial Engineering*, 33(2), pp.15-36.
 68. Munyaka, J.-C.B. and Yadavalli, S.V. (2022). INVENTORY MANAGEMENT CONCEPTS AND IMPLEMENTATIONS: A SYSTEMATIC REVIEW. *South African Journal of Industrial Engineering*, [online] 32(2), pp.15–36. doi:<https://doi.org/10.7166/33-2-2527>.
 69. Musa, M. and Aldiabat, K. (2024). RECONSIDERING THE USE OF POST-POSITIVIST PARADIGM IN SOCIAL SCIENCES: IS IT POSSIBLE? *European Journal of Education Studies*, [online] 11(7). doi <https://doi.org/10.46827/ejes.v11i7.5393>.
 70. Nelson, A. (2024). *Inventory management technology helps reduce costs, waste | Supermarket Perimeter*. [online] www.supermarketperimeter.com. Available at: <https://www.supermarketperimeter.com/articles/10792-inventory-management-technology-helps-reduce-costs-waste>.
 71. Ngari, A.R. and Kamau, C.G., 2022. The Effect of Working Capital Management Cycle on Profitability of Retail Supermarkets in Mombasa,

- Kenya: A Case Study of Binathman Household Supermarket in Mombasa City. *Asian Journal of Economics, Business and Accounting*, 22(13), pp.54-70. <http://asian.go4publish.com/id/eprint/1271/>
72. Orobia, L.A., Nakibuuka, J., Bananuka, J. and Akisimire, R., 2020. Inventory management, managerial competence, and financial performance of small businesses. *Journal of Accounting in Emerging Economies*, 10(3), pp.379-398.
73. Pahuja , R. (2021). *How analytics helped Tesco improve its customer satisfaction amid Covid - ET CIO*. [online] ETCIO.com. Available at: <https://cio.economictimes.indiatimes.com/news/business-analytics/how-analytics-helped-tesco-improve-its-customer-satisfaction-amid-covid/85887530>.
74. Pahuja, R. (2021). *How analytics helped Tesco improve its customer satisfaction amid Covid*. [online] ETCIO.com. Available at: <https://cio.economictimes.indiatimes.com/news/business-analytics/how-analytics-helped-tesco-improve-its-customer-satisfaction-amid-covid/85887530> [Accessed 7 Aug. 2024].
75. Phan, A., Nguyen, H. and Pham, T., 2021. Relationship between service recovery, customer satisfaction, and customer loyalty: Empirical evidence from e-retailing. *Uncertain Supply Chain Management*, 9(1), pp.1-10.
76. Ralls, A. (2020). *JIT model turned on its head for supermarkets - Transport Intelligence*. [online] Transport Intelligence. Available at: <https://ti-insight.com/briefs/jit-model-turned-on-its-head-for-supermarkets/> [Accessed 7 Aug. 2024].
77. Raqib, M., Rosnizam, A., Mui, D., Kee, H., Ekmal, M., Bin, H., Akhir, M., Shahqira, M., Amril, M., Bin, H., Yusoff, M., Budiman, R. and Alajmi, A. (2020). *Market Opportunities and Challenges: A Case Study of Tesco*. [online] Available at: <https://ejournal.aibpmjournals.com/index.php/JCDA/article/download/807/772>.
78. Rashmi Ranjan Panigrahi, Sushanta Kumar Mahapatra and Goutam Tanty (2024). Automated practices in inventory management on performance - a prospect of an emerging country. *International journal of business performance management*, 25(3), pp.369–391. doi:<https://doi.org/10.1504/ijbpm.2024.138179>.
79. Resnik, D. (2020). What Is Ethics in Research & Why Is It Important? [online] National Institute of Environmental Health Sciences. Available at: <https://www.niehs.nih.gov/research/resources/bioethics/whatis> [Accessed 1 Aug. 2024].
80. Riesenegger, L. and Hübner, A., 2022. Reducing food waste at retail stores—an explorative study. *Sustainability*, 14(5), p.2494.

81. Rosnizam, M.R.A. (2020). Market Opportunities and Challenges: a Case Study of Tesco. *Journal of the Community Development in Asia*, 3(2), pp.18–27.
82. Rubel, K., 2021. Increasing the Efficiency and Effectiveness of Inventory Management by Optimizing the Supply Chain through Enterprise Resource Planning Technology. *EFFLATOUNIA-Multidisciplinary Journal*, 5(2), pp.1739-1756.
83. Ruwanpathirana, S.H. and Bandara, S. (2024). The impact of value chain development on customer satisfaction in the fast-moving consumer goods industry: Evidence from Sri Lanka. *Repository.kln.ac.lk*. [online] Available at: <http://repository.kln.ac.lk/handle/123456789/27825>.
84. Saghiri, S., Aktas, E. and Mohammadipour, M. (2023). Grocery omnichannel perishable inventories: performance measures and influencing factors. *International Journal of Operations & Production Management*. Doi:<https://doi.org/10.1108/ijopm-06-2022-0397>.
85. Santarek, K., Tien, N.H., Dao, M.T.H. and Minh, D.T., 2022. Factors impacting effectiveness of R-logistics activities at supermarkets in Vietnam. *International Journal of Multidisciplinary Research and Growth Evaluation*, 3(1), pp.217-223.
<https://www.allmultidisciplinaryjournal.com/uploads/archives/61EBCC613FD4F1642843233.pdf>
86. Santarek, K., Tien, N.H., Dao, M.T.H. and Minh, D.T., 2022. Factors impacting effectiveness of R-logistics activities at supermarkets in Vietnam. *International Journal of Multidisciplinary Research and Growth Evaluation*, 3(1), pp.217-223.
<https://www.allmultidisciplinaryjournal.com/uploads/archives/61EBCC613FD4F1642843233.pdf>
87. Saunders, M., Lewis, P.H.I.L.I.P. and Thornhill, A.D.R.I.A.N., 2007. *Research methods*. Business Students 4th edition Pearson Education Limited, England, 6(3), pp.1-268.
88. Schwarz, L. (2024). *Inventory Control: Best Practices and Everything You Need | NetSuite*. [online] NetSuite.com. Available at: <https://www.netsuite.com/portal/resource/articles/inventory-management/what-are-inventory-management-controls.shtml>.
89. Schwarz, L. (2024). *Inventory Control: Best Practices and Everything You Need | NetSuite*. [online] NetSuite.com. Available at: <https://www.netsuite.com/portal/resource/articles/inventory-management/what-are-inventory-management-controls.shtml>.
90. Service, P.N. (2024). *Consumers see food prices as rising more than other goods and services, find ways to adapt*. [online] www.purdue.edu. Available at: <https://www.purdue.edu/newsroom/releases/2024/Q2/consumers-see->

[food-prices-as-rising-more-than-other-goods-and-services-find-ways-to-adapt1.html](#).

91. Shi, Y., Qi, Y., Ma, C., Yuan, R., Wu, D. and Shen, Z.-J.M. (2020). A Practical End-to-End Inventory Management Model with Deep Learning. SSRN Electronic Journal. doi:<https://doi.org/10.2139/ssrn.3737780> .
92. Smith , D. and Sparks, L. (2020). *Logistics in Tesco: Past, Present and Future | Preface*. [online] Flylib.com. Available at: https://flylib.com/books/en/2.405.1/logistics_in_tesco_past_present_and_future.html [Accessed 7 Aug. 2024].
93. Smith, D., 2023. Logistics in Tesco: past, present and future. In *Logistics And Retail Management insights Into Current Practice And Trends From Leading Experts* (pp. 154-183). CRC Press.
94. Soori, M., Arezoo, B. and Dastres, R. (2023). Internet of things for smart factories in industry 4.0, a review. *Internet of Things and Cyber-Physical Systems*, [online] 3, pp.192–204. doi:<https://doi.org/10.1016/j.iotcps.2023.04.006>.
95. statista.com (2022). *Tesco online stock-outs UK 2021*. [online] Statista. Available at: <https://www.statista.com/statistics/1272948/tesco-out-of-stock-rate-online/>.
96. Tesco (2024). *End to End Supply Chain Efficiencies. Home (Domestic) suppliers We will be starting shortly*. [online] Available at: <https://digitalcontent.api.tesco.com/v2/media/email-mktg/50d884c6-2db2-4b39-aaab-52fdecee0491/E2E+Supply+Chain+Efficiencies+-+Home+Domestic+130923.pdf> [Accessed 2024].
97. Thomas, L. (2020). *Cross-Sectional Study | Definitions, Uses & Examples*. [online] Scribbr. Available at: <https://www.scribbr.com/methodology/cross-sectional-study/#:~:text=A%20cross%2Dsectional%20study%20is>.
98. Tian, X., Wang, H. and Erjiang, E., 2021. Forecasting intermittent demand for inventory management by retailers: A new approach. *Journal of Retailing and Consumer Services*, 62, p.102662.
99. Valaskova, K., Durana, P. and Adamko, P., 2021. Changes in consumers' purchase patterns as a consequence of the COVID-19 pandemic. *Mathematics*, 9(15), p.1788. <https://www.mdpi.com/2227-7390/9/15/1788>
100. World Economic Forum (2024). *Tesco*. [online] World Economic Forum. Available at: <https://www.weforum.org/organizations/tesco/#:~:text=Tesco%20is%20a%20multinational%20grocery>.

Appendix :

Questionnaire 1: Based on employees.

Company Name:

Company Size:

Primary Focus of the Company (e. g. , groceries, electronics, apparel):
Primary Focus of the Company (e. g. , groceries, electronics, apparel):

Short answer text

Current Inventory Management Practices

To what extent does Tesco contemplate inventory management in its strategic developments when addressing specific subject of the customer satisfaction?
(Select one)

Not at all important

Slightly important

Neutral

Important

Very important

Does Tesco have a documented policy or even a strategy on inventory management for supermarket business? (Yes/No)

If yes, please discuss the outline of the Tesco inventory management policy/program.

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It is necessary to characterize the current inventory management practices in Tesco's supermarket activities. These are the best practices that were selected and each one of them described:

Inventory accuracy techniques

Stock availability monitoring

Product variety management

Order fulfilment efficiency

Others.

In what way has Tesco determined the return on investment (ROI) on the use of inventory management practices? (Select all that apply)

Reduced stockouts

Reduced overstocking

Improved sales

Enhanced customer satisfaction

Others.

In what ways do inventory management practices affect Tesco's total operating cost in the management of supermarkets? (Select one)

Increased costs significantly

Increased costs slightly

No change in costs

Reduced costs slightly

Reduced costs significantly

On what extent do you agree that good inventory control can help sustain its customers' satisfaction in Tesco?

Not confident

Slightly confident

Somewhat confident

Fairly confident

Completely confident

What are the main difficulties facing Tesco to implement the main concepts of inventory management in supermarkets and improve the corresponding processes? (Open ended)

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According to your analysis, what do you think are the major opportunities that exist for further improvement and expansion of the inventory management techniques in Tesco?

Short answer text

What type of incentive or policy will likely be most effective for increasing the extent of adherence to proper inventory management in the supermarket setting?

Short answer text

Kindly give any other discussions or recommendations that you may have concerning the inventory management practices and its effect on the customer satisfaction in Tesco.

Short answer text

Questionnaire 2: Based on customers.

Survey Questionaries:

1 On a scale of 1-5, how satisfied are you with your shopping experience at the TESCO supermarket?

1. Very Dissatisfied
2. Dissatisfied
3. No Response
4. Satisfied
5. Very Satisfied

2 How often do you find the products you're looking for in stock at the TESCO supermarket?

- a) Always
- b) Usually
- c) Sometimes
- d) Rarely
- e) Never

3 Rate your agreement with this statement: "TESCO offers a wide variety of products."

1. Strongly Disagree

2. Disagree
3. No Response
4. Agree
5. Strongly Agree

4 How would you rate the accuracy of product information (e.g., prices, locations) in TESCO?

1. Very Poor
2. Poor
3. Average
4. Good
5. Excellent

5 How often do you encounter empty shelves or out-of-stock items at the TESCO?

- a) Very Often
- b) Often
- c) Sometimes
- d) Rarely
- e) Never

6 Rate your satisfaction with the freshness of perishable items (e.g., produce, meats, dairy) at TESCO.

1. Very Dissatisfied
2. Dissatisfied
3. No Response
4. Satisfied

5. Very Satisfied

7 How would you rate the efficiency of the checkout process at TESCO.

1. Very Inefficient

2. Inefficient

3. Average

4. Efficient

5. Very Efficient

8 How likely are you to recommend TESCO to friends or family?

1. Not at all

2. Sometimes

3. No Response

4. Extremely Likely

9 Rate your agreement: "I can easily find alternative products when my preferred item is out of stock."

1. Strongly Disagree

2. Disagree

3. No Response

4. Agree

5. Strongly Agree

10 How satisfied are you with the availability of your favourite brands at TESCO?

1. Very Dissatisfied

2. Dissatisfied

3. No Response

4. Satisfied

5. Very Satisfied

11 How often do you find discrepancies between the displayed price and the price charged at checkout?

a) Very Often

b) Often

c) Sometimes

d) Rarely

e) Never

12 Rate your satisfaction with the organization and layout of products at TESCO:

1. Very Dissatisfied

2. Dissatisfied

3. No Response

4. Satisfied

5. Very Satisfied

13 How would you rate the value for money of products at TESCO?

1. Poor Value

2. Average Value

3. Good Value

4. Excellent Value

14 14. How often do you shop at TESCO compared to others?

- a) This is my primary supermarket.
- b) I shop here often but also use other supermarkets.
- c) I occasionally shop here.
- d) This is my first time shopping here.

15 What is the primary reason you choose to shop at TESCO? (Select one)

- a) Product availability
- b) Product variety
- c) Competitive prices
- d) Convenient location
- e) Store cleanliness and organization
- f) Customer service
- g) Other (specify): _____