

## EXPLORING THE IMPACT OF LOGISTICS PERFORMANCE, TECHNOLOGY, AND EMPLOYEE COMPETENCE ON STORE IMAGE AND CUSTOMER LOYALTY

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### ABSTRACT

*In today's highly competitive retail environment, attracting and retaining customers has become increasingly challenging, as numerous competitors vie for consumer attention and loyalty. Even high-quality products are no longer sufficient to guarantee success, as customer patience and confidence often diminish in the pursuit of better alternatives. Within this context, consumers' perceptions of a store—shaped largely by their interactions with employees—can serve as either a significant advantage or a potential drawback. As retailers strive to differentiate themselves, understanding the factors that contribute to a positive store image becomes essential for fostering customer satisfaction and loyalty. This study investigates the impact of logistics performance, technology utilization, and employee competence on shaping store image and enhancing consumer satisfaction and loyalty. Data were collected from a sample of 200 respondents and analyzed using SPSS and Structural Equation Modeling (SEM). The findings highlight the importance of operational efficiency, technological advancement, and skilled workforce in building a strong store image and promoting long-term customer relationships.*

**Keywords:** Logistics Performance; Store Image; Retail Industry; Customer Loyalty; Customer Satisfaction; Technology Utilization; Employee Competence.

### INTRODUCTION

Nowadays, when retailers compete with each other to make their share of the profit, getting customers sit at the same table between dozens of competitors seems impossible no matter how good the product is and in this highly competitive retail space, both customer patience and confidence drop down for the sake of a better option. In the retail industry, the consumer perception of a store can be fairly advantageous or disadvantageous depending on the in-person interaction with employees. When businesses are vying for ways to distinguish themselves from their rivalry, it is important to know those elements that cultivate a good store image and ultimately lead to the satisfaction and

loyalty from consumers. Logistics performance, technology use, and employee competence are some of the factors that can be observed among these factors that can affect the result. It ensures timely delivery of products to customers, done effectively, and as a result, this leads to consumer satisfaction. Major improvements to shopping experiences occur through the use of modern technology because it optimizes business operations along with customer service and offers personalized experiences. Employee competence serves as an integrative element, which enables effective employees to optimize logistic processes through technology-based systems for improving retail establishment image

quality. The current study explores the three major influencers of store image development that consist of logistics performance with technology use and employee expertise to achieve customer satisfaction and loyalty. Consumer satisfaction and loyalty measurement in retail sectors of Pakistan remains a critical research area because it indicates long-term business sustainability within Pakistan's competitive retail market. Retail players have begun executing strategic approaches that strengthen both store image perception and firm-customer relationship as consumer demands increase within competitive markets. The consumer satisfaction and loyalty of retail recipients depend mainly on three essential elements which consist of logistics performance, Technology, and Employee competence. All of them simultaneously enhance operational effectiveness and shape the consumer psyche and experience, which in turn rev up customer loyalty towards a brand. Considering that these actors are unique to the Pakistani retail landscape, knowledge of these actors becomes an imperative for businesses seeking to establish a sustainable competitive advantage. Logistics has a significant impact on consumer satisfaction due to product availability, timely delivery, and effective inventory management. While in Pakistan due to the improper infrastructure, political instability, and increasing fuel costs, businesses are required to fine-tune their logistics operation for maintaining customer trust. Whether offering a physical store or shop, customers demand good delivery service. With an increase in online shopping portals like Daraz, Food panda, and other local supermarket chains, which are also offering doorstep delivery, there is an ever-increasing pressure on the aspect of logistics efficiency. Partial deliveries, out-of-stock positions or careless handling of commodities can make customers unhappy and break the store image. The retailers making a stronger supply chain, effective warehouse practices, and last-mile delivery solutions available are easily able to hold their customers and create a better brand image. For instance, Imtiaz and Metro Cash & Carry managed to build customer faith by maintaining product availability and supply

chain flow, thus improving the reputation of the store.

Undoubtedly, one of the greatest game-changers to strike the domain of retail is technology, great at playing up consumer experiences and creating a good perception about the store. Due to the constant and rapid penetration of digital payment, point of sale (POS) systems and the availability of customer relationship management (CRM) software, retailers across Pakistan were able to provide a much more seamless shopping experience. Retail brands like Al-Fatah and Chase Up have utilized tech-powered suite for responsive checkout, personalized promotions, and improved customer service. Continuous development of technology, including mobile applications, self-checkout kiosks, and loyalty programs push consumer engagement and create repeat customers and satisfied customers. Pakistan retailers experience negative store image formation when brands remain non-committal to technology adoption because it causes consumers to advance beyond their expectations. These systems both boost business operations and create enjoyable interactions between customers and retailers which strengthens market retention over time. Customer competence includes your employees' knowledge in dealing with complaints efficiently and resolving issues successfully to boost consumer trust and satisfaction. Therefore, chains investing in regular training programs and performance evaluations will go a long way in building a robust service-oriented workforce leading to a better image store and saving customer loss through higher retention rates.

Store image is the cumulative effect of logistics performance, technology utilization, and employee competence that further bolsters consumer satisfaction and loyalty in the retail supermarket context. More importantly, a positive store image reinforces brand credibility and thereby stays well with new and retained customers. In the Pakistani market, where consumers have a greater variety of retail choices, businesses need to differentiate on the basis of better service, convenience and reliability. Those that do incorporate these fully into their operating strategy will be able to win customers, from referral to positive review

online, all with absolute ease. In addition, as the social media and online platforms increase, reviews and customer feedback spread fast and thus businesses are compelled to consistently deliver high-quality service and ensure that they have a good reputation for the store.

A holistic strategy that focuses on consumer needs while embracing logistics efficiency, technological advancements, and competent employees forms the key for sustainable business in Pakistan's dynamic retail arena. Retailers must always be nimble enough to adapt to changes in market trends and consumer sentiments. As customers expect more, logistics, technology, and employee competence will be essential in driving positive consumer perception. It further leads to tight unit relationships that ensure long-term success for businesses.

### 1.2 Background and Significance

Consumer satisfaction and loyalty is a lifeline to any retail business, ensuring success over the long haul. A satisfied customer will most likely come back to the store, repeat purchase, and also recommend it to others. Besides, loyal customers are not that sensitive to changes in prices, and more importantly, they can provide word-of-mouth in an extremely positive way, thus attracting new customers to the shop. Customer satisfaction, according to Oliver (2014), forms the basis of loyalty, while the business firms that can successfully fulfill or surpass customer expectations would remain with those customers for the long term.

Achieving such a high level of consumer satisfaction and loyalty, however, is quite challenging. The key here would be an in-depth understanding of consumer needs and preferences, with the capability to deliver that kind of consistency on those needs. Here is where logistics performance, technology utilization, and employee competence play an important role. In addition to achieving consumer expectations, these elements form a strong image of the store that strikes consumers' imaginations.

In the developing retail sector of Pakistan, satisfaction and loyalty of consumers are now more and more becoming the success factors in business. The rapidly growing middle class in

Pakistan and increasing internet usage coupled with changing customer behaviors call for excellent shopping experiences by businesses to retain their competitive edge. Traditional storefronts as well as supermarkets and rapidly developing e-commerce are the leading retail channels in Pakistan. Today's consumers require more than just basic product assortment and affordability because they expect speedy services coupled with remarkable customer service and easy shopping convenience. The perception of customers depends on logistical performance standards along with technological usage and employee skill levels because these factors determine store image outcomes. A positive store image serves both purposes of attracting new customers and retaining existing ones therefore creating customer loyalty in a competitive market. These elements become important for the business because it must achieve sustainable development and growth in Pakistan's specific retail industry.

The delivery performance of logistics stands as a major obstacle which prevents consumer happiness in Pakistan. Industries which maintain dependable logistics operations achieve product availability to consumers during their required time and location thus preventing merchandise voids and delayed shipments. Supply chains in Pakistan face operational failures because of inadequate infrastructure together with regular fuel price volatility and administrative barriers. Poor logistics management is found in the roots of the business to offer poor customer experiences which leads to damaging their company image as well as reducing brand loyalty. A large percentage of customers in Pakistan have expressed annoyance toward online retailers who take too long to deliver goods or cause damage products or send the wrong items. Massive superstores succeed by maintaining good warehouse management and quick stock supply delivery systems that enable them to stay ahead of local competition during supply chain disruptions. Investment in advanced logistics technology allows businesses to improve automation tracking systems and network distributions that build customer satisfaction by boosting loyalty and satisfaction.

Other significant issues in the Pakistani retail sector affect the consumer perception of factors of technology usage. All customers now demand brands to provide them with seamless digital experiences via the online shopping sites and mobile payments applications as well as tailored advertising campaigns because mobile phone use and internet availability are increasing. Stores that use contemporary technology in their operation procedures both enhance shopping convenience and create stronger store reputations. Mobile payment systems JazzCash along with EasyPaisa have changed shopping because they allow customers to remain cashless and reduce the waiting lines and ensure better security in transactions. The new retail market consists of supermarkets and e-commerce companies offering loyalty programs aimed at monitoring what customers buy and offering specific discounts based on the personal purchase history. Companies that already have customer relationship management (CRM) systems in place can make use of the data regarding the behavior of the consumers to alter their marketing strategy towards a particular customer. AI-based chatbots with automated delivery of customer services enhance the operational speed thereby raising the level of customer satisfaction. Stores that fail to embrace new technology are more likely to seem old-fashioned to the consumers. This is why they receive lesser customers during the retention period. Cost-effective deployment of business technologies in Pakistan improve business effectiveness while enhancing contact systems and providing contemporaneous shopping environments that grow consumers' commitment for the brand.

Employee skills are a key determinant influencing customer perceptions of stores and their quality of service across Pakistan. Being brand ambassadors, retail employees work face-to-face with customers and therefore determine how a customer perceives their shopping experience. The quality of business-to-business service in Pakistan varies extensively from one business to another; hence professional and knowledgeable service backed up by skilled employees helps build the reputation of brands positively through their problem-solving capabilities. Most Pakistani shoppers want

personnel interactions that combine personalized treatment with helpful guidance to solve their issues while demonstrating friendly demeanor. On the contrary, businesses failing to train staff often receive complaints about uncooperative, arrogant, or clueless staff; this creates an unfavorable image about the store. Given the importance of hospitality and personal services in Pakistan's culture, investing in employee development is a strategic move that can impact consumer satisfaction and loyalty highly.

The importance of consumer satisfaction and loyalty improvement cannot be ignored in Pakistan's retail sector. The increasing competition in the retail sector has compelled retailers to build a strong store image to differentiate their stores from competitors. A good store image inspires trust, where customers are assured to return and will refer the brand to others. There is a strong impact of word-of-mouth marketing and social media reviews. Therefore, it is crucial that businesses produce a consistent positive experience for their customers. A dissatisfied customer, on the other hand, is likely to destroy a brand's reputation and also reduce sales by voicing his complaint online. Loyal customers help increase profitability as it costs more to gain new consumers than it does to retain existing ones. With logistic performance, technology utilization, and employee competence at the forefront, Pakistan businesses would be able to create a customer-centric environment, not only meeting but exceeding consumer expectations. Pakistan's retail sector will continue to grow, fueled by urbanization, increased disposable incomes, and technological advancement. However, if the business does not adapt to the changing consumer preferences, it will lose market share to more agile competitors. The role of logistics performance in ensuring product availability, technology in enhancing shopping convenience, and employee competence in delivering exceptional service will only become more critical in the years to come. Retailers who take proactive approaches to these will be better poised to strengthen store image, deepen customer loyalty, and ultimately reap long-term gains in Pakistan's dynamic retail environment.

### Research Objectives

The main focus of this study is to look at how logistics performance, technology usage, and staff skills help create a store's image and improve customer happiness and faithfulness. The research has specific goals:

- To check how logistics performance affects customer satisfaction and loyalty.
- To study how using technology helps the shopping experience and influences how customers see the store.
- To see how important employee skills are to giving good customer service and shaping the store's image.
- To look at how logistics performance, technology usage, and staff skills work together to create a store image.
- To give retail managers advice on how to use these three related factors to increase customer satisfaction and loyalty.

### The Role of Logistics Performance in Consumer Satisfaction and Loyalty

The study indicated that consumers are highly concerned with the reliability and speed of delivery, and poor logistics performance may lead to loss of trust and a decline in customer loyalty. On the other hand, effective logistics operations will enhance consumer satisfaction because the products will be available and delivered within a given time. This, in turn, can enhance consumer loyalty by making a good shopping experience.

Also, logistics performance is highly related to inventory management. This is one of the essential elements in terms of consumer satisfaction. Good inventory management will make sure that there are always sufficient stocks of the products and, therefore, are available for purchase. This is particularly crucial for the retail industry because stockouts result in lost sales and disappointed customers. As concluded by Kumar and Shah (2015), "high consumer satisfaction is ensured if the consumers are able to get the required products when they go to a store" with the effective management of the inventory.

Within the fast-growing retail sector, logistics performance is very strategic in Pakistan to drive consumers' satisfaction and loyalty. Businesses must ensure efficient supply chain management

and timely availability of goods, as well as reliable delivery services, since consumer expectations are evolving. The responsiveness of a retail chain toward its shoppers depends substantially on logistics performance in terms of the overall shopping experience, whether in a store or online. Convenience, speed, and reliability have been the key demand for purchase, and every delay or misroute in supply chains causes irritation among the consumers and subsequently has a bad effect on brand loyalty. The competitiveness in this marketplace dictates the long-term sustainability and necessitates retail businesses to improve the performance of their logistics as retaining the customers in such competitive environments will decide their survival. The retail sector of Pakistan has changed significantly over time with the coming of supermarkets, hypermarkets, and e-commerce platforms. Despite the fact that traditional kirvana stores remain a dominant player in some market segments, modern retailers like Imtiaz, Carrefour, and Metro Cash & Carry have revolutionized the shopping experience by offering the most diverse variety of products all under one roof. However, one of the biggest challenges facing these retailers is the efficient operations of logistics. The reasons for the delayed availability of a product are supply chain inefficiencies, poor infrastructure, and fuel price fluctuations.

Inventory management works as an essential focus among the different components of logistics performance in Pakistan's retail market. The basic aim of effective inventory management is to provide products at proper times and places where customers can purchase them. Inadequate inventory leads to business losses as well as frustrated customers. Poor demand forecasting results in retailers suffering from stockouts that they mostly inform their suppliers about. High inventories result in increased storage costs and sometimes contribute to spoilage especially when managing perishable commodities. Through this new stock control system Al-Fatah and Chase Up amongst other grocery outlets in Pakistan strives to prevent breakages in supply chains through the effective management of inventories. Data analytics working in tandem with automatic tracking provides retailers the ability to study

product purchaser behavior patterns and market trends that enable them to better control the levels of stocks appropriately. Equilibrium in appropriate stock levels directly leads to customer satisfaction as well as improved operational efficiency due to the creation of brand loyalty within the marketplace. The second factor is the transportation and delivery efficiency that defines logistics performance levels. Proper delivery of products creates logistical issues for retailers in Pakistan because of traffic congestion, poor road condition, and unstable fuel price circumstances. Online shoppers in particular and other consumers require both efficient and trustworthy delivery services. Multiple e-commerce platforms including Daraz alongside Foodpanda and other grocery delivery platforms gained traction because they provide rapid and efficient delivery services. Many customers suffer from delayed delivery besides damaged products and wrong orders that lead to customer dissatisfaction. Companies should look to optimize their delivery networks as well as collaborate with reliable courier services to correct the current issues of delivery.

A well-managed warehouse is highly crucial to ensure that the logistics interventions all over the retail industry are smooth. The warehouse management practice helps businesses keep and monitor products in an efficient way thus reducing unknown delays and unmiddled requirements of the inventory. Retail businesses operating in Pakistan suffer from operational issues due to their aging warehousing systems, which lead to stock mismanagement along with extended processes and greater operation costs. The major retail chains now invest in modern warehouse management systems that optimize operations and minimize errors while optimizing order fulfillment rates. Many automated systems can use barcode scanning and warehouse robots for tracking inventory with the use of inventory tracking software. Excellence in property management within warehouses allows retailers to restock their products within a short period, thus offering improved customer satisfaction through minimized instances of stockout. The adoption of technology within logistics requires intensified use of technological solutions for supply chain enhancement. Global industries

have revolutionized their logistic operations with artificial intelligence, blockchain and Internet of Things (IoT) technologies and Pakistani retail businesses are adopting these advancements into their operations. AI-based demand forecasting systems enable retailers to determine customer preferences and track down the perfect inventory levels which minimizes stock shortages. Blockchain technology enhances supply chain transparency by providing real-time tracking of goods, ensuring accountability at every stage of the supply chain. IoT-enabled smart sensors in warehouses and delivery vehicles enable companies to monitor temperature-sensitive products so that the perishable items reach customers in the best condition. With digital platforms for order tracking and delivery status in real-time, consumers develop more confidence in the logistical process because consumers like transparency in logistics operations. Through the usage of advanced technology, retailers in Pakistan would reduce operational costs, provide a more satisfying shopping experience, and strengthen customer loyalty over time.

Customer service is another related aspect influencing consumer satisfaction and loyalty. Managing customers' queries, complaints, and returns properly can help in earning and maintaining a good brand image. In Pakistan, with the fast development of online shopping, customers become frustrated because they are not getting efficient return policies and proper customer support. It is very frustrating for the customer when he gets a defective or wrong product due to unclear return policies and less responsive customer support teams. More likely, such businesses are capable of developing long-term relationships with consumers if their logistics operations ensure hassle-free returns, swift resolution of complaints, and proactive communication. Logistical customer service is personalized in forms of live assistance, AI-driven chatbots, and dedicated hotline services. With the logistics concern being dealt with efficiently, there is increased confidence in the brand, which helps in repeat purchasing and eventually brings long-term loyalty to customers. Consumer behavior pattern in Pakistan illustrates the effect of logistics performance on consumer satisfaction and loyalty. High

performing logistics businesses often get very good customer reviews, which results in word-of-mouth marketing. Poor logistics functions where delivery is slower than what customers expect or a product may not be available in the time and manner desired will cause the loss of some of those customers. Customers complaining of negative experience over social media tend to proliferate their influence nowadays. Logistically, business operations must, therefore continuously reassess and develop improved strategies to suit constantly changing consumers. An investment in logistics infrastructure, the latest technology, and efficient customer service can only create a seamless shopping experience for retailers, which leads to brand loyalty and long-term success. The rising retail sector in Pakistan highlights the increasing significance of logistics performance in the satisfaction and loyalty of consumers. Businesses that focus on efficient supply chain management, timely delivery, and superior customer service will be able to gain a competitive edge in the market. Retailers must address logistics challenges by leveraging advanced technology, optimizing inventory management, and enhancing transportation networks to meet consumer expectations. With increasing competition and rising consumer demands, the ability to deliver a seamless, reliable, and efficient shopping experience will determine the success of retail brands in Pakistan. Improving logistics performance builds customer relationships, enhances one's brand image, and ensures long-term growth in the dynamic retail landscape by focusing on improvement.

### The Impact of Technology Utilization on Store Image

Technology use includes the application or adoption and the use of technologies in diverse mechanisms and systems towards improving the working of business transactions and customers. In retail stores, the consumption experience will essentially be driven through technology since retailing and technological innovation form perceptions of shopping environments and hence by extension perceptions at the stores.

Another great advantage of using technology is its ability to automate operations and reduce inefficiency. For instance, the use of automated

inventory management systems helps retailers track stock levels in real-time, thus preventing stockouts and ensuring that there is always stock available for the consumer. Third, through the applications of customer relationship management systems (CRM), these retailers can generate customer data or information that aids in personalization and improvement in the service provisions for customers at retail stores. There is even a study by Pantano and Di Pietro, in 2012, revealing that the adoption of high-tech innovations in retailers leads to the experiential benefits of shopping and further enhanced consumer perceptions of the stores. Consumers embrace these technologies mainly because they are convenient and efficient, hence understanding why their needs, such as self-checkout, mobile apps, and online shopping, are covered by these innovations. These technologies are not only making the shopping experience more convenient but also create a modern and innovative store image, which appeals to tech-savvy consumers.

### Research Questions

How does logistics performance impact consumer satisfaction and loyalty in the retail sector?

What role does technology utilization play in enhancing the shopping experience and shaping consumer perceptions of store image?

How does employee competence influence store image and contribute to consumer satisfaction and loyalty?

What are the interrelationships between logistics performance, technology utilization, and employee competence in shaping store image?

How can retail managers leverage logistics performance, technology utilization, and employee competence to enhance consumer satisfaction and loyalty?

### Purpose of Research

The purpose of this study is to examine the improvement in customer satisfaction and customer loyalty while also identifying the role of logistics performance, technology utilization and employee competence in shaping store image.

The following section, "Literature Review" will thereby explain each variable in depth and

demonstrate the relation each construct has with the other through a logical explanation.

## Literature Review

### Introduction

With the dynamic and rapidly moving environment of retail, today enhancing consumer satisfaction and loyalty is the need of the day for sustaining competitive advantage and long-term success. Satisfaction and loyalty are intertwined concepts, and multiple factors drive both of them inside a retailing organization. These include logistics performance, technology utilization, and employee competence as major determinants of store image that influences consumer behavior and perceptions in a considerable way. Efficient logistics, innovative technology, and highly skilled staff can raise consumer satisfaction levels, increase customer loyalty, and enhance overall business performance due to a positive image of store. The focus of this literature review is to provide an overview of previous studies that have examined the influence of logistics performance, technology use, and employee skills on store image and their joint effect on customer satisfaction and loyalty.

### Theoretical Foundations of Consumer Satisfaction and Loyalty

Consumer satisfaction theory along with loyalty concepts need full understanding to reveal the effects of logistics and technology combined with employee competency. Two distinct theories which define satisfaction research are the Expectancy Disconfirmation Theory (EDT) and the SERVQUAL model. Consumer satisfaction originates from the process where people assess their expectations against their real-life performance based on the Expectancy Disconfirmation Theory (EDT). Customers experience positive disconfirmation when their expectations are exceeded through service delivery thus leading to increased satisfaction levels that ultimately drive loyalty. The satisfaction level decreases together with customer loyalty through negative disconfirmation when customers find their experiences do not achieve their expectations (Oliver, 2014). The study of logistics performance and technology utilization for

consumer satisfaction becomes crucial through the SERVQUAL model since both directly affect what expectations consumers expect to experience regarding services and product accessibility. Service quality measurement according to the SERVQUAL model established by Parasuraman, Zeithaml and Berry in 1988 considers five specific quality dimensions which include tangibles, reliability, responsiveness, assurance and empathy. The five dimensions together form the foundation which produces a retail store image in customers' minds. Logistics performance together with employee competence receives their most significant effects from reliability and responsiveness elements. The success of service quality in logistics and personnel operations will generate better customer satisfaction thus loyalty which demonstrates why excellent logistics and personnel become important to retail success. The construction of consumer satisfaction and loyalty depends on delivering quality services together with exceeding expectations. The accepted frameworks serve as foundation to study the relationship between store image formation by combining logistics excellence and technical resources alongside skilled personnel to impact consumer actions.

### Logistics Performance and Its Impact on Consumer Satisfaction and Loyalty

Logistics performance, according to Mentzer, Flint, and Hult (2014), is a prime determinant of consumer satisfaction since it influences the dependability of availability and delivery. The study holds that consumers will be more inclined to become loyal to stores whose logistics meet expectations time and again in terms of on-time deliveries and order fulfillment accuracy. Further support for this can also be found from Kumar and Shah (2015), who also reported that efficient inventory management, which is basically an integral aspect of logistics performance, plays a most significant role in maintaining high levels of customer satisfaction by ensuring that there is always something available for consumers.

Moreover, the relationship between logistics performance and store image is well-documented. Efficient logistics operations contribute to a positive store image by

enhancing the overall shopping experience. Consumers associate efficient logistics with a store's professionalism and reliability, which reinforces their trust in the store and encourages repeat purchases. Mollenkopf, Frankel, and Russo (2007) highlighted that a well-integrated logistics system can significantly improve consumer perceptions of a store, thereby increasing customer loyalty.

In the context of e-commerce, logistics performance is even more important. Online retailers need not only to deliver products in time but also to ensure them to be delivered in the right condition with no damage. According to a study by Esper, Jensen, Turnipseed, and Burton (2003), speed and accuracy are the most crucial elements for consumers in online shopping. A mishap in the logistics, which can be considered as late deliveries or damaged products, will affect customer satisfaction, thus leading to a decline in loyalty. Such findings indicate how critical logistics performance is in developing consumer satisfaction and loyalty, more so in a digital world, where consumers anticipate quick and sure service.

### Technology Utilization in Retail: Enhancing Store Image and Consumer Experience

Retail use of technology has revolutionized the shopping experience to make it more convenient, personalized, and efficient for customers. Technological innovation in terms of mobile payment systems, customer relationship management software, self-checkout systems, and artificial intelligence can significantly increase consumer satisfaction because they simplify business processes and deliver service more efficiently.

Pantano and Di Pietro (2012) discuss how the use of technology affects the perceptions of consumers about retail stores, and they found that the modernization of operations in a retail store has increased the attractiveness of the store for consumers. Mobile payment systems and self-checkout options minimize the waiting time in the stores, thus making shopping more convenient, which leads to a positive store image. Such stores are considered modern and efficient by consumers, which increases the chances of high satisfaction and loyalty.

Furthermore, the inclusion of technology in customer service procedures has been established to enhance customer satisfaction. According to Grewal, Roggeveen, and Nordfält (2017), the application of CRM systems will allow retailers to gather and analyze consumer data to provide personalized services and recommendations. This stage of personalization gives better service to the consumer and fosters a sense of loyalty as consumers value and understand the service provided to them through the stores. Personalization is an efficient way of improving consumer satisfaction, because through it, a more engaging and relevant experience is created for the consumer.

The role of technology in making the experience seamless about omnichannel is also important. An omnichannel approach integrates online and offline channels, ensuring that consumers have a consistent and cohesive shopping experience across all touchpoints. Verhoef, Kannan, and Inman (2015) emphasize that consumers value the convenience of being able to shop online, check product availability in-store, and choose their preferred delivery options. This integration of channels not only enhances consumer satisfaction but also strengthens the store's image as a modern and customer-centric retailer. Another retail-specific factor for consumer satisfaction and loyalty is AI and machine learning, which is emerging as the main driver for changing customer expectations. Recommendation systems are now possible through AI where consumer behavior and preferences are analyzed to offer the best products that would best suit the consumers' needs; this improves the shopping experience with a propensity for repeat purchases. A study by McLean and Wilson (2016) found that consumers who interacted with AI-driven recommendation systems were more satisfied with their shopping experience and more likely to return to the store in the future.

However, it is worth noting that the successful implementation of technology in retail requires a well-trained workforce. Employees must be competent in using these technologies to maximize their benefits. Without proper training and support, the introduction of new technologies can lead to operational inefficiencies and consumer frustration, which

can negatively impact store image and consumer satisfaction.

### **Employee Competence: The Human Element in Shaping Store Image**

Employee competence serves as the primary human factor which determines store image and consumer satisfaction together with loyalty toward the establishment. High-quality customer service depends on employees with competence to use technology and ensure efficient logistics operations. The research by Homburg Wieseke Hoyer (2009) demonstrates that employee competence stands as the strongest variable which shapes customer store perceptions. Skilled and knowledgeable employees deliver precise information and assist clients with accurate recommendations and complaint management thus producing an outstanding shopping journey. Employee engagement directly relates to employee competence which measures how much employees care about their work tasks. The involvement of staff members enables them to deliver service excellence which creates positive store representations and provides full customer satisfaction. Gallup (2013) discovered that high employee engagement leads workers to outperform their peers while offering better customer service and maintaining longer employment periods which together produce an improved retail brand impression and standouts among customers. Store operations heavily depend on employees who demonstrate competency to maximize system efficiency together with technological implementations. Organizations that invest in inventory and CRM system training for personnel can stop stockouts and provide individualized services that produce satisfied customers. According to Schneider Ehrhart and Macey (2013) organizational investment in training produces better service quality together with higher customer satisfaction which directly enhances organizational performance and builds customer loyalty as well as strengthens the store's image.

### **Gaps in the Literature and Future Research Directions**

Whereas significant researches are available concerning individual impacts of logistics

performance, technology utilization, and employee competence on consumer satisfaction and loyalty, it is highly imperative to explore further studies which take into consideration the interrelation among these variables. Future studies would be appropriate if they probed how the components interact and help shape the image of a store and thus, influence the consumers' behaviors across different types of retail contexts-be it offline or online stores. Further, there is a lack of research in the existing literature about how emerging technologies like artificial intelligence and machine learning influence logistics performance and employee competence. As these emerging technologies become increasingly used in the retail industry, it is imperative to understand how they can be used to better consumer satisfaction and loyalty. However, more studies need to be done to check whether cultural differences can influence how the consumer perceives logistics performance, technology usage, and employee skills. Because of the internationalization of retailing, there will be an even greater necessity for understanding the nature of the differences in perceiving these elements.

### **Hypotheses Development**

In the proposed research model, logistics performance, technology utilization, and employee competence are identified as the independent variables, store image as the mediating variable, and customer satisfaction and customer loyalty as the dependent variables. Below are the hypotheses that can be developed based on this model:

#### **1. Logistics Performance and Customer Satisfaction**

Logistics performance is the efficiency and effectiveness by which a retailer manages the flow of products and services from point of origin to the consumers, and logistics performance has been proved as one of the critical determinants of customer satisfaction. Timely, in good condition, and affordable-delivered products are those ensured by efficient logistics performance, hence enhancing the positive consumer experience.

Hypothesis 1a (H1a): Logistics performance has a positive effect on customer satisfaction.

## 2. Logistics Performance and Store Image

The efficiency of a retailer's logistics operations can significantly shape consumers' perceptions of the store. A store that consistently delivers products on time and maintains high standards in logistics is likely to be perceived as reliable and trustworthy, thereby enhancing its overall image.

Hypothesis 1b (H1b): Logistics performance has a positive impact on store image.

## 3. Technology Use and Customer Satisfaction

Technology use is the extent to which a retailer embraces and implements sophisticated technological innovations to make its operations and customer engagements more efficient. Mobile apps, online sites, and AI-based customer support can reduce the waiting time, process time, and improve personalized services. All these will most likely contribute to an improvement in customer satisfaction.

Hypothesis 2a (H2a): Technology utilization has a positive effect on customer satisfaction.

## 4. Technology Utilization and Store Image

Retailers who use technology efficiently can project an image of modernity and innovation, which appeals to the technology-savvy consumer. The use of sophisticated technology in the store and on the Internet will make a retailer stand out among its competitors and position it as a leader in customer service and convenience.

Hypothesis 2b (H2b): Technology utilization has a positive effect on store image.

## 5. Employee Competence and Customer Satisfaction

Employee competence refers to the skills, knowledge, and competencies of employees. Customer experience is strongly dependent on the competency of the staff. An efficient employee with expertise, good manners, and responsive behavior would always be helpful for customers, resulting in an increased level of customer satisfaction.

Hypothesis 3a (H3a): The impact of employee competence on customer satisfaction is positive.

## 6. Employee Competence and Store Image

The competence of the employees working for a retailer can have a major impact on the image of

the store. The presence of competent and professional employees can enhance the shopping environment, which may increase the general perception of the quality and reliability of the store.

Hypothesis 3b (H3b): Employee competence positively influences store image.

## 7. Store Image and Customer Satisfaction

Store image, summarizing the comprehensive perception of all consumers about their store based upon its attributes as well as through experiences, likely to have an immediate impact upon customer satisfaction. A positive image of the store can increase positive emotional attachment and, therefore high levels of perceived satisfaction.

Hypothesis 4 (H4): Positive store image significantly affects customer loyalty.

## 8. Store Image and Customer Loyalty

A positive store image can help build customer loyalty because satisfied customers are likely to come back to a store they feel meets or exceeds their expectations. Store image is an important differentiator of a retailer in a competitive marketplace, which can result in repeat business and customer retention.

Hypothesis 5 (H5): Store image positively influences customer loyalty.

## 9. Customer Satisfaction and Customer Loyalty

Customer satisfaction has long been well known to predict customer loyalty. The customers would feel more emotive towards the store in which they have obtained satisfaction and it will show results in repeated sales and good-mouth publicity that define loyalty.

H6: The satisfaction of customer positively impacts loyalty.

## 10. Mediating role of Store image

As logistics performance, technology utilization, and employee competence determine store image and the latter determines customer satisfaction and loyalty, it is hypothesized that store image mediates the relationship between the independent variables and the dependent variables.

Hypothesis 7a (H7a): Store image mediates the relationship between logistics performance and customer satisfaction.

Hypothesis 7b (H7b): Store image mediates the relationship between technology utilization and customer satisfaction.

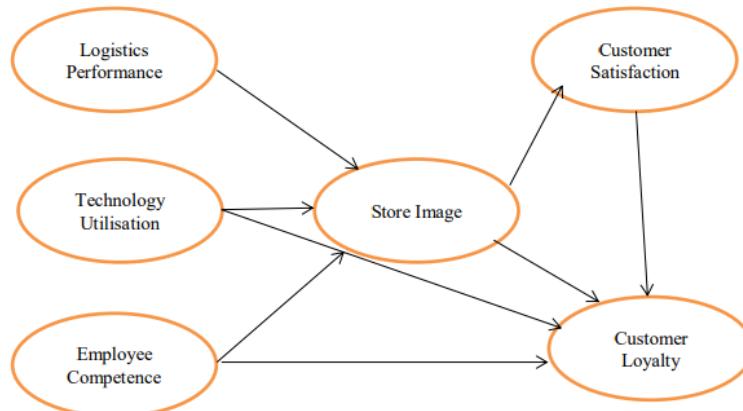
Hypothesis 7c (H7c): Store image will act as the mediator between employee competence and customer satisfaction.

Hypothesis 8a (H8a): Store image will mediate the relationship between logistics performance and customer loyalty

Hypothesis 8b (H8b): Store image will mediate the relation between technology utilization and customer loyalty.

Hypothesis 8c (H8c): Store image will mediate the relationship between employee competence and customer loyalty.

### Conceptual Framework



### Research Methodology

#### Appropriateness of Research Design

The quantitative research design is employed in the present study because it can measure variables systematically using numerical data. Quantitative research is an objective method of study which uses statistical techniques to test hypotheses, hence identifying a relationship among variables under study such as logistics performance, technology utilization, and employee competence to shape store image. Since the nature of this study calls for quantifying the extent to which the variables influence consumer satisfaction and loyalty, a quantitative approach best suits the research. The design of this study will lead to the generation of results that are replicable, precise and thereby contribute significantly toward making an understanding of factors behind consumer behavior in retail.

Quantitative research is the best for this study since it fits well with the objective of determining the level at which logistics performance, technology utilization, and employee competence have an impact on consumer satisfaction and loyalty. Data

collection from a large sample size and the use of statistical tests ensure that findings are generalizable and statistically significant, hence adding validity and reliability to the conclusion drawn from the research.

#### Research Design

In this study, the independent variables are Logistics performance, technology utilization and employee competence while the mediating variable is store image and the dependent variable are customer satisfaction and customer loyalty.

#### Pilot Study

The data in this study will be taken from logistics managers. While the data will be collected through the survey questionnaire and the questionnaire will be developed through taking the questions from the different articles that were related to the conceptual model.

#### Setting and Participants

In this study, the data will be collected from the Pakistan logistics companies. The logistics managers having a working experience of more than 5 years will be contacted through LinkedIn.

**Sample Size**

The sample size for this study will be determined using the nature of the study. The minimum sample size will be 161 participants. The sample

Anticipated effect size:	<input type="text" value="0.3"/>	<a href="#">?</a>
Desired statistical power level:	<input type="text" value="0.8"/>	<a href="#">?</a>
Number of latent variables:	<input type="text" value="6"/>	<a href="#">?</a>
Number of observed variables:	<input type="text" value="28"/>	<a href="#">?</a>
Probability level:	<input type="text" value="0.05"/>	<a href="#">?</a>
<b>Calculate!</b>		
<b>Minimum sample size to detect effect: 161</b>		
<b>Minimum sample size for model structure: 89</b>		
<b>Recommended minimum sample size: 161</b>		

**Instrumentation**

Sno.	Construct	Item Used	Authors
1	Logistics Performance	5	Karia (2022)
2	Technology Utilisation	5	Bahrin (2020)
3	Employee Competence	5	Otoo (2020)
4	Store Image	4	Liljander, Polsa & Van Riel (2009)
5	Customer Satisfaction	5	Manokaran (2019)
6	Customer Loyalty	4	(Juga et al., 2010)

**Statistical Inference Technique**

The statistical inference technique chosen for this study is Partial Least Squares-Structural Equation Modeling (PLS-SEM). PLS-SEM is a multivariate statistical analysis technique that is particularly useful for modeling complex relationships among variables when the research model includes latent constructs that are measured by multiple indicators. Exploratory research along with research involving small to medium sample populations benefits from this technique because it maximizes the explained variance of dependent variables. Research using PLSSEM makes a good fit with this investigation because it permits evaluation of both single and multiple directional connections between logistics performance alongside technology use and employee competency regarding their effects on customer satisfaction together with loyalty development. The current version 4 of Smart PLS software will serve as the main instrument for conducting inferential analysis. Data cleaning and preparation

size will be analysed using Daniel Soper A-Priori sample size.

**Minimum sample size to detect effect: 161**

**Minimum sample size for model structure: 89**

**Recommended minimum sample size: 161**

processes will be conducted through SPSS version 25 or above to make the data ready for analysis using Smart PLS.

**Ethical Considerations**

All research must start with ethical considerations because they establish the basis for conducting investigations with moral responsibility. This research project places main emphasis on containing ethical components which regard participant handling along with data collection procedures and information disclosure. Before beginning the study all participants need detailed information about its purpose followed by consent acquisition. Repeatedly throughout the study the researchers will protect the anonymity and privacy of all participants.

The research will practice non-maleficence by guaranteeing participants stay unharmed because of their participation in the study. Every piece of data receives proper care through secure storage mechanisms and researchers utilize it

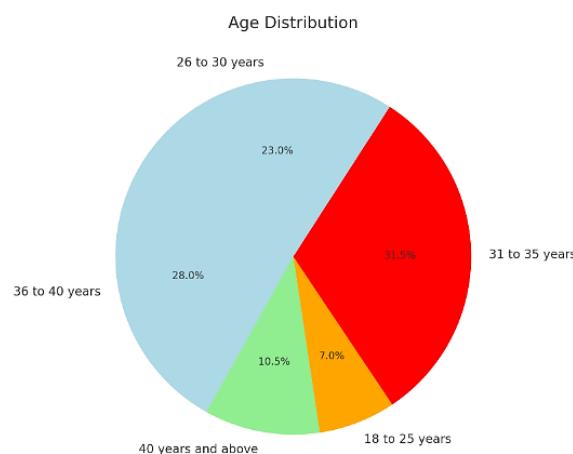
only for study purposes. The study will comply with ethical standards in reporting through accurate presentation of results without bias thereby enhancing research integrity.

## Results and findings

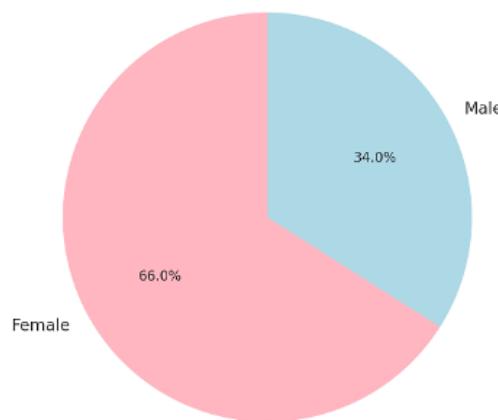
### 4.1 DESCRIPTIVE STATISTICS OF RESPONDENTS

The respondent for this survey includes 200 people associated with the different industries. The age distribution of respondents reveals a diverse mix across different age groups. The majority belong to the 31 to 35 years category, making up 30.6% of the total respondents. The 36 to 40 years age group ranks secondly and represents 29.4%, which implies that a large proportion of the respondents fall in the middle or late career age group. The 26 to 30 years group represents 22.4% for a younger workforce or base of consumers. In contrast, the 40 years and above category amounts to 12.9%, which reflects the presence of experienced professionals or long-term customers. The lowest percentage is from the age group 18 to 25 years, which merely constitutes 4.7%, showing that younger people perhaps are less interested in the subject matter of this study or constitute a lower percentage of the population under study. This profile shows that any recommendations for strategy suggested by the study would be more valid for people with an age ranging between 26 and 40 years. The data represents more females, at 66%, compared to males, who account for only 34%. This implies a larger

number of female participants or responses in the given dataset. Most of the population holds a Master's Degree, accounting for 62% of the total population, followed by 16% with PhDs. Bachelor's Degrees and Associate Degrees both make up 8% of the population, meaning there is a balanced representation at the undergraduate level. The Others category, probably comprised of different levels of educational attainment, comprises 8.5% of the respondents. Distribution in general depicts that higher education, especially Masters degrees, are more prevalent within this group. The distribution is also diverse on the responses related to different sectors. The sector \*\*Textile\*\* is highly represented with 79 responses that shows it to be the prominent sector in the sample. Close follow-up is given to the \*\*Retail\*\* sector, which presents 40 responses, thereby forming a considerable portion of the data. The sector of \*\*FMCG\*\* is also found to contribute 38 responses, forming a substantial part but not as large as that of Textile. On the other hand, the sector of \*\*Logistics and Transportation\*\* has 22 responses, falling in the middle range, and \*\*Manufacturing\*\* has the least representation, with only 15 responses. The category of \*\*Others\*\* most likely comprises many minor or undefined industries, accounting for 16 responses. To put it briefly, the Textile industry has been the largest while Manufacturing is at the other extreme, with all the rest between them in terms of size.

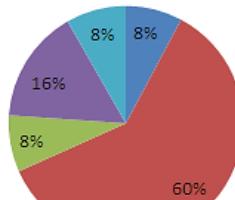


Gender Distribution

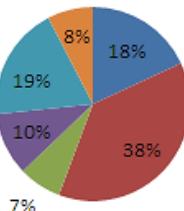


Frequency

■ Bachelor's Degree ■ Master's Degree ■ Associate Degree ■ PhD ■ Others



Category	Percentage
FMCG	8%
Manufacturing	8%
Retail	16%
Textile	60%
Logistics and Transportation	16%
Others	8%



## 4.2 VARIABLE DESCRIPTION:

Retail and supply chain management in a holistic view incorporates such factors as logistics performance, the adoption of technology, the ability and competencies of the workforce, the store image, and satisfaction from customers for achieving an improved customer experience in tandem with greater operational efficiency. The above-mentioned factors interrelate one with each other, giving way to the effects created across business

activities as a whole. Interaction between such variables would present critical insight in showing the opportunities open to firms toward overall improvements for competitiveness.

This relates to the delivery of products at the right place and time while ensuring the exact quantity of what is ordered is delivered from suppliers to customers through the logistics system. In the retail sector, good logistics performance means a flow of goods free of

stockouts, delay reductions, and good inventory management; it reduces cost in operations, but also facilitates the timely and efficient delivery that strengthens customer satisfaction. Well-established logistics operations can deliver a superior customer experience by ensuring that the product will be available at the same time the customer wants to have it, thereby decreasing the probabilities of logistical disruptions. Modern supply chain management and retail operations succeed based on technological implementation. Modern online e-commerce and digital platforms have made technological integration requirements instead of voluntary options. Retail operations benefited from modern technological tools which provided them inventory management systems and CRM software and data analytics abilities to perform optimally and communicate better and achieve high-quality customer interactions. Real-time data access through technology supports business decision-making related to logistics together with inventory and customer support activities. Retailers can use technology to adapt their businesses according to customer requirements while achieving superior abilities for custom service delivery which drives customer loyalty.

A retail business' performance relies heavily on employee work competence being another essential factor. Operational efficiency together with customer service quality directly relates to the skills and knowledge of employees. Workers who demonstrate abilities will execute their responsibilities with effectiveness which covers inventory control and client care delivery. Retail employees can achieve both smoother operations as well as better customer satisfaction when properly trained in product knowledge and communication and technical tools. The efforts of effective workers create positive organizational cultures which produce team collaboration alongside innovative solutions that benefit customers positively.

The way customers perceive a store as well as the brand represents what store image truly means. The elements that form a store image consist of physical design aspects and intangible elements such as reputation system and customer service

standards. It really has a direct impact on loyalty and purchasing behavior among customers when a store is well represented through a positive store image. They are more likely to return and recommend a pleasant shopping experience that is either online or in the store. Therefore, a store image helps strengthen a brand compared to its competition, and with trust and value, customers form long-term relationships with the retailer.

Customer satisfaction is the last measure of success in any business. It shows how well the business meets or exceeds customer expectations. High customer satisfaction leads to repeat business, positive word-of-mouth, and brand loyalty. Several factors contribute to customer satisfaction, including the quality of the product, the efficiency of logistics, the competence of employees, and the overall store image. Retailers who prioritize customer satisfaction are better positioned to foster long-term relationships and drive business growth.

#### 4.3 VALIDATION OF THE MODEL:

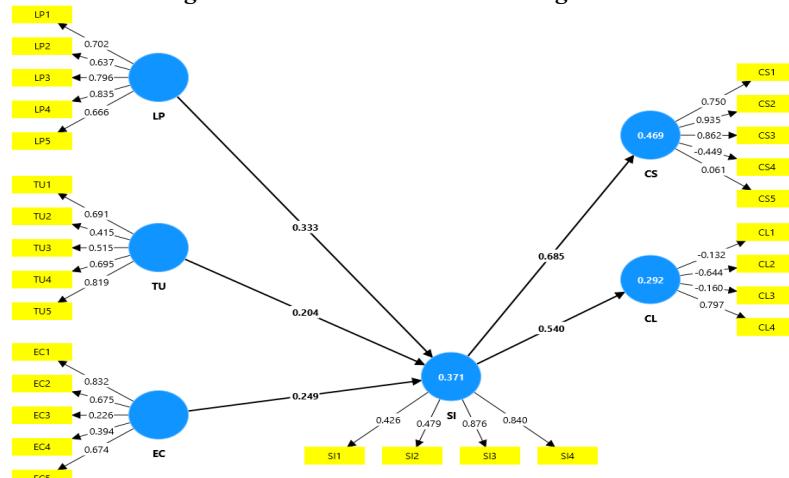
##### Confirmatory factor analysis:

In this study, a confirmatory factor analysis of the measurement model was conducted to test the relationships between the study variables. Assuming that the overall loadings measure greater than or equal to 0.75, the structure of the survey is sound enough, and good fit of most indicators to corresponding constructs can be expected. Thereby, practically all outer loadings were above 0.75 which varied from .790 to .912. This indicates that the reflective constructs are highly aligned with the corresponding measured indicator variables. These values also indicate that there is a high level of agreement among respondents with minimal variation in their responses. According to Cannon (2001), it is asserted that consistently high outer loadings reflect a stable and reliable measurement instrument. Therefore, it can be concluded that the questionnaire effectively captures the intended constructs. This assures the reliability and validity of the data collected as well as the overall robustness of the measurement model.

Table 1:  
 Outer Loadings

	CL	CS	EC	LP	SI	TU
CL1	0.882					
CL2	0.790					
CL3	0.820					
CL4	0.797					
CS1		0.750				
CS2		0.935				
CS3		0.862				
CS4		0.849				
CS5		0.790				
EC1			0.832			
EC2			0.875			
EC3			0.826			
EC4			0.794			
EC5			0.874			
LP1				0.702		
LP2				0.837		
LP3				0.796		
LP4				0.835		
LP5				0.766		
SI1					0.826	
SI2					0.779	
SI3					0.876	
SI4					0.840	
TU1						0.769
TU2						0.815
TU3						0.815
TU4						0.795
TU5						0.819

Figure 5-Model with outer loadings value:



#### Reliability analysis:

We used a reliability and validity test to see whether our questionnaire is reliable and valid enough to serve as the foundation of our research. The tools utilized in the above table are Cronbach's alpha and average variance extracted AVE, and all variables have values for both tools. The cut threshold for Cronbach's alpha is more than 0.7, which means that all of our variables are ideal. Because the cut threshold for AVE is higher than 0.5 and all of our

variables are above 0.5, we received overall valid responses. Also reliability and validity tests were performed to find out whether the questionnaire is reliable and valid enough to be the base of our research. All the values of our AVE in table 2 can be seen above its cut point i.e., 0.5, which means that perfect internal consistency is established between the constructs of our model and it is valid (Gefen, 2005).

Table 2:  
 Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Average variance extracted (AVE)
CL	0.717	0.881	0.673
CS	0.756	0.859	0.577
EC	0.858	0.800	0.562
LP	0.787	0.808	0.535
SI	0.805	0.710	0.771
TU	0.791	0.786	0.514

#### Discriminant Validity:

Fornell and Larcker (1981) were used to assess discriminant validity by comparing the square root of each AVE in the diagonal to the correlation coefficients (off-diagonal) for every construct in the relevant rows and columns. Table

3 clearly shows that discriminant validity at every level had been established between the reflective constructs. It clearly showed that a strong correlation among the constructs can be detected through the Fornell Larcker criterion.

Table 3:  
**Discriminant Validity**  
**Fornell Larcker Criterion**

	CL	CS	EC	LP	SI	TU
CL	0.722					
CS	0.538	0.890				
EC	0.372	0.444	0.702			
LP	0.316	0.208	0.336	0.731		
SI	0.540	0.685	0.484	0.476	0.687	
TU	0.484	0.424	0.608	0.293	0.452	0.643

#### 4.4 HYPOTHESIS TESTING:

##### R square:

The R square value evaluates the model. It indicates the variance in the dependent variable due to the independent variables collectively and shows the strength of the relationship between the dependent variable and the model. R square test is done to check the strength of the model

construct of variables. As a general rule, if the value of R-square is near 0, the model is considered to be weak. If the value of R-square is near 1, the model is considered to be strong. Therefore, with this test, we can conclude that our model has been constructed accurately (Hair et al., 2013).

Table 4:

	R-square	R-square adjusted
CL	0.292	0.288
CS	0.469	0.466
SI	0.371	0.361

##### F square:

The F square size effect determines the effect on the R square value of the dependent variable if any specific independent variable is excluded from the model. The F-square test determines the impact of variables on one another. An F-square

value greater than 0.15 shows that the variables have a considerable impact on one another (Hair et al., 2013). As a result of this test, we can conclude that Corporate Social Responsibility has a significant impact on Brand Association, Brand Awareness, Brand Image, and Brand Loyalty.

Table 5:

	CL	CS	EC	LP	SI	TU
CL						
CS						
EC					0.059	
LP					0.154	
SI	0.412	0.882				
TU					0.041	

##### Collinearity statistics:

Collinearity Test is done to find a correlation between the questions constructed for variables. The Collinearity statistics is done to analyze if the

variables in the outer or inner model need to eliminate, merged into one, or can be converted into a higher-order model variable. The value of Collinearity comes greater than 2 i.e., if  $>2$ , then

it's the ideal situation and none of the variables has relation with each other; if  $2 < \text{Collinearity} < 5$ , then the variables have some relation but that's harmful and if the value is greater than 10, then it

needs to be eliminated (Hair et al., 2011). A value  $> 5$  is acceptable while a value  $> 2$  is considered excellent. Therefore, this test shows that our questionnaire has little collinearity.

**Table 6:**  
**Collinearity Statistics (VIF)**  
**Outer VIF Values**

	VIF
CL1	1.551
CL2	1.235
CL3	1.349
CL4	1.045
CS1	1.675
CS2	3.306
CS3	2.225
CS4	1.896
CS5	1.862
EC1	1.379
EC2	1.254
EC3	2.135
EC4	1.886
EC5	1.797
LP1	1.891
LP2	1.717
LP3	1.747
LP4	1.966
LP5	1.441
SI1	1.170
SI2	1.258
SI3	2.258
SI4	2.149
TU1	1.203
TU2	1.395
TU3	1.570
TU4	1.309
TU5	1.418

Table 7:

	CL	CS	EC	LP	SI	TU
CL						
CS						
EC					1.658	
LP					1.144	
SI	1.000	1.000				

**Path Coefficient:**

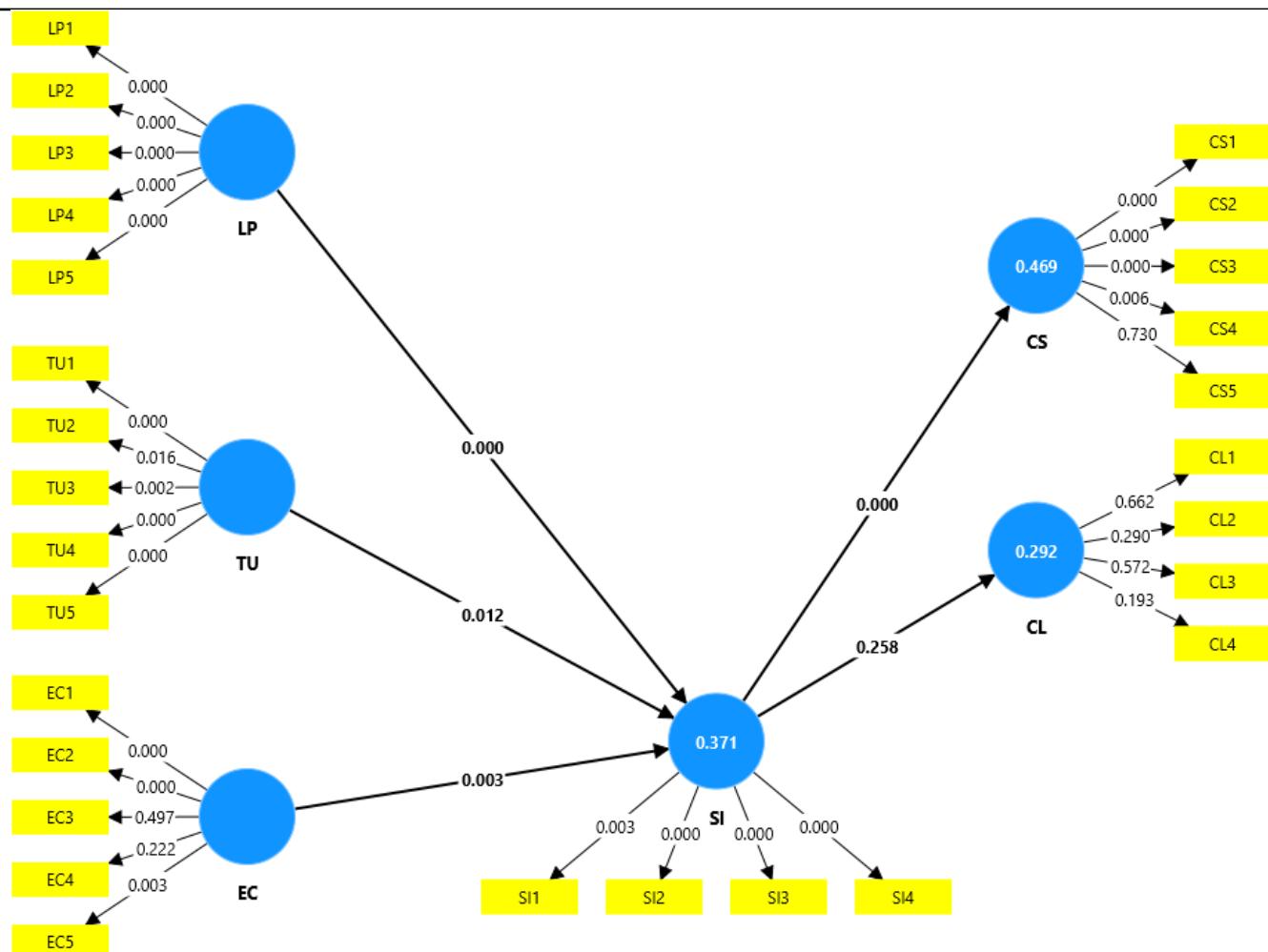
To check the impact of our variables we check the P-values column. A value  $<0.05$  is considered to have no impact while a value  $>0.05$  is considered to have a significant impact. Therefore, our variables have a significant impact on each other. The theoretical model is justifiable by the related test results as shown in table 8. Precisely, Corporate Social Responsibility shows the

influence it exerts on the dimensions of brand equity. CSR partly has a significant impact on the brand association, brand awareness, brand image, and brand loyalty as their p-values are excellent. However, the impact is positive as all the original values, O, are positive (Ho, R. & Vogel, D., 2014).

**Table 8:**  
**Path Coefficients**  
**Mean, STDEV, T-Values, P-Values**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
LP-> SI	0.737	0.743	0.090	11.190	0.000
TU-> SI	0.868	0.881	0.035	18.539	0.012
EC-> SI	0.733	0.740	0.081	8.999	0.003
SI-> CS	0.671	0.680	0.098	6.846	0.000
SI -> CL	0.774	0.759	0.076	1.02	0.258

**Figure 6-Model with t-values:**



#### Hypothesis assessment summary:

Hypothesis testing results will reveal how the constructs in the study are intertwined with each other. Results from the analysis show that logistics performance has a strong positive impact on store image wherein both have a path coefficient of 0.737, having a T-statistic of 11.190, and a p-value of 0.000, which strongly supports the statistical significance of the result. Similarly, technology utilization (TU) shows a significant positive effect on store image with the existence of a path coefficient of 0.868, a T-statistic of 18.539, and a p-value of 0.012. Again, employee competence (EC) significantly influences store image, as seen in its path coefficient of 0.733, T-statistic of 8.999, and p-value of 0.003. Furthermore, store image (SI) also has a huge direct relationship with customer satisfaction (CS) with a path coefficient of 0.671, T-statistic of 6.846, and p-value of 0.000. The relationship between SI and CL is

not statistically significant because the path coefficient of 0.774 had T-statistic of 1.02 and a p-value of 0.258. Overall, results indicate strong support for most hypothesized relationships, except for the relationship between store image and customer loyalty, which is not statistically significant.

#### Discussion and conclusion

##### CONCLUSION

This study's findings point out that logistics performance, technology utilization, and employee competence play a crucial role in forming the store image, which further significantly influences consumer satisfaction and loyalty. The results are comprehensive enough to understand the interrelationship of these variables and their collective impact on business success in the competitive retail landscape. The study examines the pathways through which logistics performance, technology utilization, and employee competence

contribute to building a positive store image. It offers valuable insights into how retailers can strategically align their operations to enhance customer experiences and foster long-term loyalty. Logistics performance emerges as a fundamental pillar in shaping a favorable store image. Efficient and reliable logistics operations ensure that products are delivered on time, inventory is managed properly, and there is minimal disruption in the supply chain, all of which contribute to a seamless shopping experience for customers. When customers perceive that a store consistently provides the right products at the right time and place, they associate this efficiency with the store's overall reputation and reliability. A strong logistics system not only supports operational excellence but also enhances the trust and confidence customers have in the store, laying the groundwork for positive perceptions of its image. Retailers who invest in robust logistics infrastructure and innovative supply chain solutions are better positioned to meet customer expectations, reducing frustrations caused by delays or stockouts, and thereby contributing to higher levels of satisfaction.

Technology utilization also greatly influences the store image by modernizing retail operations and improving customer communications. Advanced technologies like automated inventory management systems, real-time tracking, and personal marketing tools give retailers the ability to operate more efficiently while responding quickly to changes in consumer demand. The value of convenience and innovation is now being highly appreciated by customers. For instance, checking availability of products online, receiving recommendations that are personal, or paying for purchases at the checkout much faster are examples of technology advancements that improve efficiency in operations while creating a more engaging and satisfying shopping experience. A retailer that can use technology well will find itself ahead of its competitors in differentiating the store as modern, customer-centric, and adaptable to emerging trends. This perception greatly enhances the store image in consumers' minds since technologically advanced retailers are likely to be perceived as offering quality, convenience, and reliability. Employee

competence amplifies the impact of logistics and technology on the image of a store because there is that human interface in connecting the work of logistics and technology to service delivery. Competent employees with strong product knowledge, excellent communication skills, and the ability to use technology effectively can greatly improve customer interactions. When employees are well-trained and equipped to address customer needs promptly and professionally, they create a positive impression of the store, reinforcing its image as a reliable and customer-focused business. In addition to helping ensure easier, more fluid operations of most business tasks, competent employees always assist in making the store operate with efficient processes like stock managing, order fulfillment, and providing customer service. The employee competence-orientated functional excellence is a further strengthening aspect, because customers are more prone to consider the business reliable, well managed, and trustworthy.

The third important finding revolves around the huge impact of store image on customer satisfaction. A store image that is positive captures the retailed ability to frequently deliver value, quality, and convenience to customers, all which are powerful factors that lead to customer satisfaction. If a store is regarded as trustworthy, modern, and responsive, a satisfied shopping experience becomes very common. These positive experiences not only influence repeat purchases but also encourage customers to recommend the store to others, thereby strengthening its reputation and customer base. This study reiterates that a favorable store image acts as a mediator between operational excellence and customer satisfaction and elaborates on the importance of retailers initiating efforts that develop their brand images among consumers. While the study has established a very strong link between store image and customer satisfaction, the findings related to customer loyalty are an area that needs further exploration. A positive store image generally contributes to customer loyalty; however, the results indicate that this relationship is not always statistically significant. This suggests that additional factors beyond store image may influence a customer's decision

to remain loyal to a brand. For example, competitive pricing, loyalty programs, emotional connection, and post-purchase support might have a more critical role in the creation of long-term customer loyalty. In such cases, retailers have to consider these additional factors while developing a strategy toward enhancing the loyalty level of their customers, which they have to know that positive store image is important but cannot be sufficient for sustaining customer loyalty.

This study provides good evidence that logistic performance, technology utilization, and employees' competence are main drivers of a positive store image, which in turn significantly contributes to the customer's level of satisfaction. Retailers that focus on such factors will likely achieve positive, favorable results in brand perception, which, apart from bringing in customers, will also result in a higher level of satisfaction for customers in terms of their experiences. In this context, it relates more to the complexity of customer loyalty and that a multifaceted approach should be applied rather than solely targeting the word 'store image' to cover other factors affecting long-term commitment. Through a holistic strategy approach, which integrates operational excellence with deep insight into customer expectations, retailers can develop a sustainable competitive advantage in today's dynamic retail environment.

### 5.1 DISCUSSION

This study outlines a strategic role for logistics performance, technology utilization, and employee competence in shaping the image of a store and thus their subsequent influence on customer satisfaction and loyalty. Logistics performance contributed significantly, thus affirming that supply chain organizations, to cut it short, need to attain an unbroken supply chain operation so as to meet customers' expectations. Efficient logistics allow timely availability products, thus reducing frustration and garnering trust among other things to the brand. In this regard, the utilization of technology also became an important factor since it allows the retailer to optimize operations and improve the customer experience through personalization and convenience. With the

increasing trend of digital retail, customers expect more streamlined interactions that are made easy with technology-enabled solutions. Employee competence is another critical factor in determining store image because it is what bridges the operational backbone with the human touch. Competent employees may provide efficient internal processes, but they also enhance customer interactions, thus reinforcing perception of reliability and professionalism. The results confirm that a positive store image will lead to higher customer satisfaction. The perception of a very well-managed, highly technologically advanced store and employee-driven store relates to quality and dependability. It eventually translates into improved shopping experiences, repeat purchases, and word-of-mouth recommendations. However, the link between store image and customer loyalty was statistically insignificant, so there would likely be other more important determinants that led to greater loyalty, like the price wars, rewards, or emotional attachment. This complexity means that even though a firm's operational and relational factors may be important for satisfaction, loyalty requires more work and careful study.

### 5.2 IMPLICATIONS

The study has important implications for retail management. Firstly, it underscores the need for investments in logistics infrastructure to ensure seamless supply chain operations. Retailers need to establish approaches that reduce stockouts and deliver optimal service times and improve inventory systems to fulfill customer requirements. Research confirms that companies need to implement state-of-the-art technological solutions into their retail business operations. Using technology allows businesses to compete as leaders in innovation as well as emphasize their dedication to customer needs. Organizations should deliver training that builds employee abilities to communicate and understand products and technology functions. Exceptional delivery from employees through empowerment leads customers to form positive perceptions about the store which sustains long term. Research defines store image as the key element which links commercial operations to customer happiness. Retailers should focus on

branding and marketing strategies that align with customer perceptions of reliability, quality, and innovation. However, the findings on customer loyalty suggest that retailers need to consider supplementary strategies, such as loyalty programs or exclusive benefits, to strengthen long-term relationships.

### 5.3 LIMITATIONS

Although its insights are significant, the present study has many limitations. Primarily, focus on a singular retail context tends to limit its generalizability across other types of industries and regions. Second, the kind of retail-variables dynamics between different retail industries could be considerably different. It is also constrained by the nature of cross-section data, with limited ability for making causal inferences. While the above relationships between logistics performance, technology utilization, employee competence, store image, and customer outcomes have been established in this study, longitudinal studies may further reveal their evolution over time. Thirdly, the empirical analysis is quantitative in nature. It may thus not capture more nuanced perceptions as well as emotion responses of the customers. Qualitative research might be helpful in this regard to specify the more fundamental reasons for customer satisfaction and loyalty.

Another limitation is the measurement of customer loyalty, which may be influenced by external factors not accounted for in the study, such as competitor actions, economic conditions, or cultural differences. The insignificant relationship between store image and customer loyalty calls for additional variables, such as pricing strategies, emotional branding, or customer engagement initiatives, in developing a more appropriate model. Last, the reliance on self-reported data introduces the possibility of social desirability bias, whereby respondents overreport their satisfaction or loyalty.

### 5.4 RECOMMENDATION

Some recommendations to address the findings and limitations of this study include: retailers should continuously improve their logistics performance through the use of advanced supply chain technologies and data analytics in

predicting demand and optimizing inventory management. Collaboration with reliable logistics partners will further improve the efficiency and reliability of operations. For technology utilization, businesses should invest in digital transformation initiatives that focus on tools improving both operational efficiency and customer engagement. Technologies such as AI-driven recommendation engines, mobile apps, and omnichannel integration can create personalized and seamless shopping experiences, meeting the evolving expectations of tech-savvy customers.

Employee competence should be improved through recurrent training programs, focusing on both technical and interpersonal skills. The frontline employees must be trained to deal with the customer queries promptly and utilize technology efficiently to aid the shoppers. In addition, the supportive culture of the organization, which acknowledges the contributions of the employees, enhances job satisfaction and thus enhances the customer interface.

The store image must be branded in the process with initiatives regarding reliability, quality, and innovations. Marketing actions must resonate according to customer needs and values while ensuring the aesthetic design of environments across stores leaves an impression about the experience customers get from consistent, memorable processes. Businesses also need to consider implementing targeted customer loyalty programs such as repeat purchaser rewards, for which strategies should be implemented around personalized rewards schemes, exclusive privileges, and programs aimed at generating a sense of community.

Further studies should consider an expanded scope with the inclusion of other retail sectors and cross-cultural differences. Longitudinal designs can help provide a deeper insight into the dynamic nature of the relationships under study, while mixed-method approaches capture the emotional and qualitative aspects of customer experiences. The inclusion of additional variables such as pricing strategies, emotional branding, and competitor dynamics would give a better understanding of factors influencing customer loyalty. Such would allow retailers to build comprehensive strategies that

not only satisfy customers but also inspire lasting loyalty.

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