# The Quadrant of Success: Exploring Dynamic Pricing, Sustainable Logistics, Delivery Speed, and Service Quality in E-Commerce Repurchase Decision

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#### Abstract

The "Quadrant of Success" model combines dynamic pricing, green logistics, delivery time, and service quality to assess their overall impact on customers' repurchase intentions, not individual impacts but interdependencies. Data were gathered from 264 respondents through convenience sampling using a self-reported questionnaire, and the data were analysed using SmartPLS. The structural and measurement models were developed to check the hypotheses, followed by regression analyses. The results indicate that although other factors contribute to repurchase intention, dynamic pricing and green logistics do not affect repurchase intention. Delivery speed and service quality are critical drivers. The research concentrates on cumulative impacts of the factors and offers an overall image of e-commerce success. It emphasizes actionable solutions like using advanced analytics for dynamic pricing, embracing sustainable logistics, streamlining delivery speed, and using technology to improve service quality. By integrating four dimensions, the study enriches the theoretical knowledge of customer repurchase behaviour and provides strategic implications for companies that aim to increase customer satisfaction and loyalty in the competitive e-commerce market.

**Keywords:** Dynamic pricing, Sustainable logistics, Delivery speed, Service quality, Repurchase decision

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# 1. Introduction

E-commerce has now become a force of change in the world economy, transforming the buying habits of consumers as well as market structures. While online shopping is following an exponential growth trend, it is vital for businesses to know the variables influencing the repurchase decision of the customer in order to gain a competitive advantage. This study investigates four important dimensions—dynamic price, green sustainable logistics, speed of delivery, and service quality—termed as the "Quadrant of Success" that has a significant bearing on a customer's decision regarding repurchase decisions in the context of e-commerce.

The pricing method of dynamic adjusting creates marketplace adjustments through demand analysis competition assessment and market variables while optimizing revenues for online companies and serving diverse consumer groups according to Kopalle et al. (2023). The reactions to dynamic pricing models remain inconsistent especially during executions of personalized pricing or constant price changes (Hufnagel et al., 2021). Successful strategic price display reduces customer concerns regarding perceived unfairness in dynamic pricing according to lee et al. (2022). The rising number of environmentally mindful consumers now seeks sustainable delivery methods to achieve eco-friendly solutions which has made sustainable logistics popular. Sustainable last-mile logistics models have gained popularity but normally present trade-offs between delivery speed and operating costs according to Yusoff et al. (2023). The adoption of sustainable logistics practices by businesses leads to customer satisfaction with environmental efforts yet this approach requires capitalists decisions regarding financial and product delivery quality (Mangiaracina et al., 2015; Nogueira et al., 2022). Additionally, innovations in logistics service quality-such as real-time tracking and route optimization-contribute significantly to customer retention and satisfaction (Do et al., 2023; Kawa & Światowiec-Szczepańska, 2021).

The successful execution of e-commerce depends heavily on fast delivery because consumers now expect both prompt and regular shipping services. Studies show that swift logistics helps both customer retention and business achievement especially when businesses operate in competitive marketplaces (Vivaldini 2023, Cho et al. 2008). Delivering goods promptly becomes essential to producing satisfied customers since faster product delivery boosts their loyalty according to Lim et al. (2018) and Nogueira et al. (2022) along with the need for robust last-mile delivery systems. Service quality includes communication as well as accurate orders and effective problem management at its core. Service quality assembles a complete customer experience that customers experience. Excellently managed service standards directly benefit customer satisfaction and purchase loyalty and e-commerce organizations use technological and customized approaches for service quality enhancement (Sheng & Liu, 2010; Zheng et al., 2022). Research shows intense customer satisfaction with online shopping goes hand in hand with convenient platform access alongside reliable support after purchases (Yusoff et al., 2023; Wu & Dong, 2023). The research examines the partnership between these four dimensions to understand their effect on customers choosing to continue buying through e-commerce channels. The examination of participant relationships along with independent contributions enables researchers to create a holistic picture of business strategies which effectively motivate customer repeat purchases.

# 2. Literature Review and Hypothesis Development

The research draws its information from 34 research papers carefully chosen to understand customer satisfaction in e-commerce through logistic management service provision and pricing strategies. The literature revolves around academic sources of distinguished quality with 12 articles from ABDC A\* and A rank journals as well as 10 articles from Scopusindexed articles, 8 articles from ABDC B and C rank journals, and 4 articles from established international scholarly sources. The ranked sources present a suitable mix of both theoretical and empirical studies that focus on important e-commerce trends.

Geographically, 7 of the papers deal with India, and they give local insights into problems like supply chain issues and customer behavior, whereas 27 papers deal with international markets, which include the US, Europe, China, and other worldwide e-commerce capitals. The studies range from 2000 to 2023, ensuring a mix of original theories and contemporary developments in AI-based pricing, last-mile delivery, and digital service development.

The literature identifies three prevailing themes: logistics service quality (Bouzaabia et al., 2013; Cho et al., 2008), dynamic pricing and customer perception (Hufnagel et al., 2021; Keller et al., 2022), and the service quality role in e-commerce loyalty (Sheng & Liu, 2010; Caruana, 2002). New research (Liu et al., 2023; Yu et al., 2016) combines machine learning, AI, and sustainability considerations, highlighting technology's increasing role in determining e-commerce dynamics.

This review also indicates the dynamic nature of research in this area, with significant publication growth between 2021 and 2023, which reflects an increasing academic interest in integrating digital innovations and sustainable practices into e-commerce logistics and pricing strategies.

#### Table-1

A summary of the number of papers reviewed, major journals and ABDC ratings of the journals (source by the author)

Citations	Details
Total paper reviewed	34
ABDC A* and A Category Journals 12	12
Scopus-Indexed Journals	10
ABDC B and C Category Journals	8
Other Reputed International Sources	4
Papers Focused on India	7
International Papers	27

### 2.1. Literature Review

Through an extensive literature review analysis, we have divided five recurrent themes that collectively encompass the commonalities observed across these papers.

**2.1.1.** Impact of E-commerce Logistics on Customer Satisfaction and Loyalty

- **2.1.2.** Pricing Strategies and Customer Behaviour in E-commerce
- **2.1.3.** E-commerce Service Quality and Customer Satisfaction
- **2.1.4.** The Role of Technology in E-commerce Logistics and Customer Experience
- **2.1.5.** Sustainability Considerations in E-commerce Logistics

#### 2.1.1. Impact of E-commerce Logistics on Customer Satisfaction and Loyalty

E-commerce provides a convenient shopping experience, but efficient logistics hold significance in converting one-time buyers into loyal customers. Studies have found that there is a strong correlation between delivery speed and customer satisfaction (Zheng et al., 2020; Golmohammadi & Goli, 2020). It is understood that faster delivery times lead to higher satisfaction and repurchase intention. The speed factor alone does not determine customer satisfaction. Wu & Dong (2021) demonstrate that accurate order fulfilment together with Moon et al. (2020) communicate effectively during delivery affects customer feedback. A smooth return experience serves as a dynamic element that has transformative power in affecting customers' behaviour (Buldeo Rai, 2019). Stores with convenient return policies tend to make their customers satisfied enough to visit again (Sheng & Liu, 2021). The service quality that logistics service providers deliver to their customers creates substantial effects on customer satisfaction. The partnership between reliable LSPs that offer exceptional customer service results in enhanced customer retention rates for e-commerce businesses (Anshu et al., 2020). Different logistics elements work in unison within all studies (Anshu et al., 2020; Gaur & Singh, 2020) to determine customer satisfaction which leads to repurchase behaviour. All facets of LSP operations including delivery velocity and precision as well as communication methods and return policies and service quality influence purchaser behaviour. The research shows that individuals who shop online choose logistics services which combine speed and reliability. Online businesses implementing quick and accurate logistic services supported by transparent customer-friendly policies (Kawa & Światowiec-Szczepańska, 2020) 2.1.4. The Role of Technology in E-commerce develop loyal customer relationships.

#### 2.1.2. Pricing **Strategies** and Customer **Behaviour in E-commerce**

The pricing approaches conducted in e-commerce platforms drive substantial changes in customer conduct. Garbarino & Maxwell (2010) conducted research to evaluate how dynamic pricing methods determine prices through market variables and industry competition. Research conducted by Keller et al. (2022) demonstrates consumer reactions to repeated price changes since they consider such practices disrespectful and unreasonable. A thorough examination of individual purchasing data and website engagement occupies researchers who study personalized pricing strategies (Wang et al., 2020). To gain maximal revenue with dynamic pricing retailers need to use ethical methods that ensure customer satisfaction. Dynamic pricing strategies together with personalized rates need complete examinations of customer reactions to gain successful implementation. These achieve poor results when not implemented properly thus creating dissatisfied customers who buy less. Research indicates that e-commerce pricing strategies need to be transparent and fair according to Melkonyan et al. (2020). Organizations that implement dynamic pricing successfully must do so while building customer trust because improper implementation may damage their brand reputation.

#### 2.1.3. E-commerce Service and Quality **Customer Satisfaction**

**F**-commerce businesses receive individual consequences from their service quality directly through customer satisfaction and buying pattern changes. Research by Rita et al. (2019) indicates website design together with security and customer support functions as important elements which facilitate e-commerce service quality delivery. A website that has simple navigation and clear product information delivers an equivalent good shopping experience to customers. E-commerce success depends on secure transactions and data privacy according to (Jafarpour et al., 2020). The essential component for building brand loyalty is prompt and responsive customer support service which resolves customer concerns (Sivadas & Baker-Prewitt, 2000).

# Logistics and Customer Experience

The improvement of e-commerce logistics and customer experience happens constantly because new technology enters the market. Organizations use (machine learning) algorithm analysis of big data to predict customer actions according to Gupta & Pathak (2020). Through the use of this tool, ecommerce companies customize online shopping by generating appropriate product recommendations and they optimize package delivery routes to shorten delivery times. The study conducted by Lim et al. (2020) investigates the new delivery methods of crowd-sourced logistics together with clickand-collect services. New solutions developed by businesses provide users with improved flexibility and practicality as these factors might lead to increased satisfaction during purchase decisions. The authors show that technology and logistics work together to form an operation system that drives e-commerce operations based on Lim et al. (2020). Company implementation of modern technologies two-fold benefits their logistics systems by adding personal touches to customer interactions that results in elevated customer satisfaction levels. New technological advancements directly shape the operations of e-commerce logistics services that exist now. Companies now use machine learning and altered distribution methods to build customer experiences with combined efficiency and convenience and personalization capability.

#### Considerations 2.1.5. Sustainability in **E-commerce Logistics**

E-commerce delivery operations now pose a major environmental challenge to the ecological system. Studies conducted by Buldeo Rai (2019) reveal that the primary disadvantage of fast deliveries involves more transportation operations which generate increased carbon emissions. E-commerce deliveries generate substantial packaging waste that presents a major environmental challenge.

Academic studies focus on discovering solutions to make e-commerce logistics sustainable and e-commerce operators can implement sustainable delivery network designs through localization centres and empower customers to pick climate-friendly delivery methods (Nogueira et al., 2020). Customers need education about environmental impacts to become motivated toward sustainability in their purchasing decisions. Students will understand that implementing balanced e-commerce logistics solutions remains essential according to Nogueira et al. (2020). Companies need to balance two vital factors alongside their environmental sustainability impact to succeed in business. Research demonstrates that sustainable practices exist as elements of effective e-commerce logistics approaches. Developing operations with sustainable efficiency allows e-commerce businesses to create an outstanding brand identity that attracts environmentally aware customers (Nogueira et al., 2020).

#### 2.2. Research Gaps

It is essential to admit that the existing literature has a fragmented approach towards the inter-relations between logistics, customer satisfaction, brand loyalty, repurchase behaviour, and brand perception. Even Though there has been significant research into individual factors such as delivery speed (Zheng et al., 2020), pricing strategies (Keller et al., 2022), and the role of technology (Lim et al., 2020), There are only a few studies, which have thoroughly investigated the relationships among these variables in influencing the overall customer experience and later behaviour

#### 2.2.1. Existing Research Overview:

Earlier research has predominantly concentrated on solitary components in the e-commerce logistics sector such as delivery speed and accuracy (Wu & Dong, 2021), transparency in pricing (Melkonyan et al., 2020), and the influence of dynamic or personalized pricing (Garbarino & Maxwell, 2010). These elements have been evidenced to have direct implications on consumer choices and their afterpurchase intentions. However, it is worth noting that there is only a meagre examination of the intersection between these factors and customer behaviour performance measures such as brand loyalty or longterm perception.

**Theoretical Basis of the Gap:** The decision-making process in e-commerce is multi-dimensional and influenced by several interconnected factors. Drawing from the **Theory of Reasoned Action (TRA)** 

(Ajzen & Fishbein, 1980), consumer attitudes and perceptions towards an online brand are formed based on both logistical efficiency (e.g., delivery time, return policies) and the perceived fairness of the interaction (e.g., pricing transparency). The **Expectancy Disconfirmation Theory (EDT)** (Oliver, 1980) also suggests that customer satisfaction develops from the congruence between expectations and the actual service performance. While research tends to assess logistics against these theories, there has been insufficient effort to combine the various facets—speed, accuracy, pricing strategies, and technological innovations—into a holistic framework.

#### 2.2.2. Research Gap Justification:

The current body of literature generally treats e-commerce customer satisfaction as a uni-variable dependent on logistics, with minimal integration of brand-related outcomes. For instance:

- Studies on logistics often overlook how customer satisfaction directly feeds into brand loyalty (Anshu et al., 2020).
- The literature on repurchase intention has mostly focused on single variables like pricing strategies (Wang et al., 2020), without considering how logistics and pricing interact with it holistically.
- Brand perception, Research about brand loyalty which looks at sustained consumer sentiments shows fragmented results when combined with service quality and logistics elements (Kawa & Światowiec-Szczepańska, 2020).

Researchers have analysed the linkage between logistics alongside customer satisfaction in relation to consumer actions that include brand loyalty buying decisions and brand perception. This study completes a fundamental research gap by implementing an integrated view that reflects how complex e commerce really is. The findings help create a more complete picture of what makes customers happy as well as how brands grow in digital sales. A major advantage of this work lies in its shift from looking at factors separately to seeing how they connect plus influence each other. Online sellers together with marketing specialists benefit from the practical insights as part of their efforts to enhance business performance.

# 3. Objectives

The main goal of this research explores the combined power of dynamic pricing with sustainable logistics together with delivery speed and service quality on e-commerce customer repurchase behaviours by using a full "Quadrant of Success" analytical model. The researcher utilized a guantitative method to obtain data from 264 participants by distributing self-administered questionnaires which were subsequently analysed with Structural Equation Modelling (SEM) through SmartPLS analysis. This research evaluates customer loyalty drivers while investigating repetitive purchasing dynamics from dynamic pricing along with sustainable logistics importance and delivery speed and service quality mechanisms toward repeat purchases. The study provides operational guidance for e-commerce businesses to optimize pricing methods through understanding their interdependent factors and enhance the overall service quality and logistics sustainability for a better market retention.

# 4. Research Methodology:

A self-administered questionnaire was made using Google Forms, encompassing two sections. Section A included questions to measure the five constructs of the proposed research model, while Section B was made to collect demographic data. The items for the constructs were adapted from previously validated scales in the literature.

Specifically, the following sources were utilized to design the survey:

Constructs for logistics service quality were adapted from the work of Yong-Ock Lee and Minsung Kim (2008), who examined the impact of the quality of logistics service on customer satisfaction and repurchase intentions.

Items related to customer satisfaction were based on Eugene Sivadas and Jamie L. Baker-Prewitt's (2000) study on the relationship between service quality, satisfaction, and loyalty. For measuring dynamic pricing perception, questions were inspired by studies such as that of Alisa Keller et al. (2022), which explored how price discounts reduce negative customer reactions to dynamic pricing.

Constructs related to customer loyalty were informed by Tianxiang Sheng and Chunlin Liu's (2010) empirical study on e-service quality, online customer satisfaction, and loyalty.

Finally, questions on e-commerce logistics performance were drawn from the work of Ying Yu et al. (2016), which explored the practices of e-commerce logistics in supply chain management.

The survey was conducted over a three-month period, from January to March 2022. Respondents were recruited via convenience sampling, targeting individuals with prior experience in e-commerce transactions to ensure relevance to the study's focus on logistics service quality and dynamic pricing.

# 4.1. Demographic Characteristics

Demographic data included age, gender, educational background, occupation, frequency of online shopping, and preferred e-commerce platforms. This information provided insights into the diversity of the respondent pool and ensured that the data could be segmented for further analysis.

To examine the hypotheses model using the SEM approach, the dataset has been analysed accordingly. SEM is an extension of the first-generation multivariate statistical procedures and also known as a secondgeneration multivariate technique (Hair et al., 2017). SEM analyses the causal relationship in a theoretical model and is therefore known as causal modelling. Hair et al. (2019) explained two important methods to estimate the relationships in structural equation models. The first one is Covariance-Based SEM (CB-SEM), the second one is Partial Least Squares SEM (PLS-SEM). It is needed for predicting important target constructs or identifying key "driver" constructs (Hair et al., 2019). In order to test the model empirically, survey responses were transferred to an excel file for subsequent analyses with statistical software. In this research, the data is analysed by PLS-SEM method with the procedure recommended by Hair et al., (2019). Additionally, PLS models with higher-order constructs is demonstrated. The study possesses

small sample size, and also non-normal distribution of data justifies to apply this PLS-SEM technique. Smart PLS Version 3 software is utilized to analyse the hypothesised model. PLS-SEM can be a most suitable approach when the research has a prediction goal (Hair et al., 2019).

E-commerce consumer behaviour now heavily depends on the ability of dynamic pricing strategies. The way customers are charged with dynamic pricing information affects their buying patterns specifically through customized pricing and automatic price changes according to market trends. Kopalle et al. (2022) together with Hufnagel and Schwaiger (2023) confirmed that personalization of prices results in better consumer retention and buying activities. Yuan and Han (2011) emphasize the need to manage price expectations during dynamic pricing strategies because this approach directly affects repurchase intentions so we propose that:

#### 4.1.1. Hypothesis development

#### Figure-1

Conceptual Model developed after considering the dependent and independent variables (source by the author)



Dynamic pricing has been a major influence on consumer behaviour in e-commerce. The ability to provide personalized pricing or to dynamically change prices based on demand, competition, or consumer interests is a key determinant of repurchase intentions. Studies by Kopalle et al. (2022) and Hufnagel and Schwaiger (2023) illustrate the manner in which a personalized pricing approach can influence customer interaction and buying behavior. Yuan and Han (2011) also identify the importance of controlling consumer price expectations in the dynamic pricing systems, illustrating its direct influence on customer repurchase intentions; therefore, we suggest that:

# H1: Effect of Dynamic Pricing on Repurchase Decisions

E-commerce sustainability practices increasingly impact customer behaviour when choosing online stores which influences their store loyalty decisions. Sustainable operational approaches that reduce carbon emissions and optimize delivery routes together with circular economy systems both boost customer contentment and drive ready-to-buy behaviours. The study by Mangiaracina et al. (2022) demonstrates that e-commerce logistics generates environmental problems whose connection to sustainability programs creates better customer loyalty. Researchers such as Zheng et al. (2020) together with Nogueira et al. (2022) prove that ecofriendly logistics actions produce loyal customers who spend more money. Thus, we propose that:

# H2: Effect of Sustainability in Logistics on Repurchase Decisions

The speed of delivery stands as a fundamental element that decides consumer repeated purchases within e-commerce transactions. When customers receive their purchases more quickly, they experience better service which leads them to continue their shopping through the online platform. According to Lim et al. (2018) e-commerce models should prioritize consumer satisfaction by investing in speed and efficiency during delivery operations. According to Do et al. (2019) rapid logistical services lead customers to evaluate services more positively which leads to repeat purchases. The delivery timeline acts as a significant moderator to link between logistics service quality and customer repurchase decisions according to Lee and Kim (2008) study. Thus, we propose that:

#### H3: Effect of Delivery Speed on Repurchase Decisions

E-commerce service quality consists of three vital elements namely website interface and delivery systems along with post-purchase support features.

Excellent service quality leads to higher customer satisfaction that boosts both customer fidelity and purchase recurrence. According to Sheng and Liu (2010) research e-service quality functions as an essential factor to create customer satisfaction and loyalty. Customer satisfaction plays an intermediary function for Caruana (2002) in turning service quality into store loyalty. The relationship between consistent service excellence and repurchase intent in the long term is established by Rai (2021) and Sheu and Chang (2017) through their research findings. Thus, we propose that:

# H4: Relationship Between Quality of Service and Repurchase Decisions

### 4.2. Research Design

Research uses quantitative methods to analyse the inter-relationship between service quality, delivery speed, sustainable logistics and price adjustments when customers make repurchase decisions. A selfadministered questionnaire was used to get primary data from 264 participants who were selected through convenience sampling. The research team used SmartPLS, an SEM tool to process the data regarding the relationship testing and hypothesis confirmation. The proposed hypotheses received validation through regression analysis due to previous research following parallel quantitative methods for measuring customer satisfaction and loyalty (Zheng et al., 2020; Wu & Dong, 2021). The study utilizes an integrated framework through structural and measurement models which enables comprehensive evaluation of customer behaviour when combined factors are analysed while resolving previous limitations that studied individual variables (Keller et al., 2022; Lim et al., 2020).

# 5. Results

The details are presented in the following subsection:

### 5.1. Measurement Model

Hair et al., (2019) explained a four-step approach for measurement model.

**Step 1- Examining the indicator loadings:** Indicator loadings were verified to determine if the items are consistent. Loadings greater than 0.7 are good for a

reflective measurement model, while those less than 0.4 should generally be deleted. From the evidence, the majority of the indicator loadings are greater than 0.7, indicating high item reliability. Some of the indicators, such as DP3 (0.503), PP1 (0.634), PP5 (0.619), RP2 (0.607), SLP1 (0.607), SLP4 (0.600), and SOD3 (0.632), are less than the 0.7 threshold, indicating a problem in terms of their contribution to the constructs. These lower loading indicators should be examined for potential deletion or model modifications.

# 2. Assessing Internal Consistency and Reliability

Cronbach's Alpha and Composite Reliability (CR) were used to evaluate construct internal consistency reliability. Internal consistency and among Cronbach's Alpha is based on inter item correlation and acceptable values above 0.7. Also, Composite Reliability determines reliability and values greater than 0.7 are considered strong consistency. Cronbach's Alpha values for all constructs fall within an acceptable range between 0.71 (DP) 0.90 (QOS) indicating internal consistency. These exceed the 0.7 threshold of composite reliability = 0.820 (DP) to 0.924 (QOS) and thus further verify that they are very reliable. The reliability results indicate that the symbols of the model are well-defined and internally consistent.

#### Step 3: Assessing Convergent Validity

The Average Variance Extracted (AVE) was used as measure of the extent degree to which a construct explained the variance of its indicators, in order to assess convergent validity. The adequacy of variance explained by the AVE statistic can be determined through an AVE value of 0.5 or higher.

All constructs have AVE > 0.5, (AVE = 0.526 (PP) and 0.710 (QOS)).

Therefore, the indicators are shown to be capable of explaining their respective constructs, which is evidence of good convergent validity. The results on the internal consistency and the convergent validity confirm that the measurement model is reliable and valid, implying that the constructs well define what they are, and so the structural model can proceed. **Step 4- Discriminant Validity:** The extent to which a construct is empirically different from other constructs in the structural model is what discriminant validity assesses. It measures whether the latent variable truly represents a unique unobserved concept. The Discriminant Validity of the constructs in this model was evaluated using the Heterotrait-Monotrait Ratio (HTMT) that Henseler et al. (2015) suggest as a robust criterion for assessing discriminant validity. According to them, if the ratio for a pair of constructs is less than 0.85, these constructs are validly distinguishable from each other.

The majority of HTMT values fall below 0.85, demonstrating sufficient discriminant validity between the constructs. However, the HTMT value for PP <-> DP (0.972) is substantially above the next highest value and well over the 0.85 threshold that would suggest sufficient discriminant validity. This could indicate that these constructs are almost completely collinear or that they are conceptually overlapping to a concerning degree. SOD <-> RP (0.821) and RP <-> PP (0.830) are close to the 0.85 threshold but not so close as to give any cause for concern about collinearity between these constructs. Overall, the HTMT values indicate that the constructs in this model are distinct from one another most of the time.

### 5.2. Structural Model

Collinearity was examined according to Hair et al. (2019), all values of the Variance Inflation Factor (VIF) are below three with values, thus, would fit inside the accepted specification. Reflective model was used for creation of all constructs. Hair et al. (2019) maintain that the  $R^2$  values and path coefficient values are significant for the reporting of the structural model.

From this research, results of coefficients proven to be moderate. The model fit of the construct RP is presented with an  $R^2 = 0.650$  and adjusted  $R^2 =$ 0.645. The Average Variance Extracted (AVE) was further used to more rigorously examine the validity of the model. Convergent validity for all constructs was established as AVE values for all constructs were greater than 0.50. Therefore, the constructs from QOS had the highest AVE (0.710), followed by RP (0.627) and SOD (0.563), indicating that the constructs have sufficient variance explained by their indicators. According to Hair et al. (2017), it may be possible to validate path coefficient values using a bootstrap method. "The purpose of bootstrapping is to draw a lot of subsamples from original data (with replacement) and estimate models for each subsample." According to Sarstedt et al. (2019) and Hair et al. (2019), apart from judging VIF values, path coefficients, and R2 values, construct validity and predictive accuracy can be evaluated through AVE. Results of the structural model corroborate the reliability and validity of the constructs which are essential to explain the dependent variables.

# 6. Discussions and Implications

#### 6.1. Discussions

The research investigation uncovered vital elements that determine customer repeat buying behaviour within online shopping. Quality of Service (QOS) and Speed of Delivery (SOD) proved themselves as crucial drivers which positively affect repurchase decisions. The adoption of hypotheses H3 and H4 receives support from high f-square values of 0.247 for QOS and 0.205 for SOD which demonstrates consumer preference for these features during repurchase decisions. Existing research proves that quick delivery combined with superb service quality creates satisfied customers who stay loyal to a company (Garbarino & Maxwell, 2018; Liu et al., 2019).

The minimal effects of Dynamic Pricing (DP) and Sustainability in Logistics (SLP) were observed since f-square values reached 0.001 and 0.008 respectively resulting in the rejection of H1 and H2. The research outcomes contradict findings that priced strategies and environmental sustainability were primary drivers of consumer response (Kopalle et al., 2022 and Mangiaracina et al., 2022). The research findings indicate that customers value retail pricing strategies together with sustainability initiatives yet these aspects fail to influence their repurchase intentions in this specific context.

Service quality and delivery speed have become vital aspects of consumer decision-making based on these results which demonstrate their importance for business optimization of customer loyalty. Studies should examine how these variables work with emerging e-commerce developments while studying their potential influence on market segments according to pricing and sustainability aspects.

### 6.2. Implications of the Study

This research has important implications for companies looking to improve customer retention and induce repurchase behaviour. By focusing on issues like dynamic pricing, sustainability, delivery speed, and service quality, companies can. more closely match their strategies to consumer expectations. Then findings emphasize the need to balance economic, environmental, and service. concerns in order to build customer loyalty. Overall, then research presents actionable conclusions for organizations interested in enhancing customer satisfaction and long-term competitiveness in a fastchanging market.

### 6.2.1. Theoretical Implications

Dynamic pricing, green logistics, delivery time, and quality of service are critical dimensions that affect customers' repeat purchasing behaviour. As the customers perceive value in these services, they are more likely to purchase repeatedly. For example, Customer Value Theory presumes that customers weigh the benefits of dynamic pricing and quick delivery with the sacrifices made by them in terms of cost or extra waiting time (Gupta & Pathak, 2021). Moreover, the integration of sustainable practices in. logistics boosts consumer satisfaction by responding. to environmental and ethical issues, coinciding with the then increasing. appetite for responsible business. practices (Mangiaracina et al., 2019).

The combined. effects of these drivers can, also be understood using Expectancy-Disconfirmation Theory, in which surpassing expectations in. pricing fairness, delivery speed, or service quality results in a positive. assessment and increased loyalty (Rose et al., 2019). Moreover, Equity Theory highlights the role of perceived fairness in shaping consumer trust and satisfaction. For example, transparent. pricing strategies and equitable service quality foster a sense of fairness, enhancing repurchase intentions (Garbarino & Maxwell, 2018). Together, these theoretical perspectives emphasize the importance of balancing economic, environmental, and service dimensions too drives consumer loyalty.

#### 6.2.2. Practical Implications

The results hold key practical implications for, firms seeking to advance customer loyalty and induce repurchase intentions. Firms ought to adopt dynamic pricing models that reconcile profitability with fairness perceptions among consumers. This can be achieved through the utilization of data analytics in tailoring pricing while maintaining transparency since customers tend to stay loyal when pricing approaches are viewed as fair (Chen et al., 2020). Firms can also promote customer satisfaction by improving delivery speed and making it reliable are important means of differentiation in the modern high-velocity markets. Additionally, adding sustainability to logistics meets customer demands for greenness and improves brand reputation. Companies can do this through the adoption of cleaner technologies, optimizing routes, and minimizing wastage in supply chains. Providing high-quality service consistently generates customer trust, which plays a critical role in affecting repeat purchasing (Mangiaracina et al., 2019). By aligning these factors strategically to consumers' expectations, organizations are not only able, but can exceed consumers' needs, securing long-term customers and market growth.

# 7. Contribution to industry

This study contributes for the e commerce industry by identifying which factors that will be a determining factor of consumer decision to repurchase. This research discloses among other things the principal roles which Dynamic Pricing and Sustainability will hold in Logistics for businesses to leverage in order to increase customer loyalty and continued purchase. By making the conclusions, the competition in the pedestrian e-commerce environment is highly intense and, as a consequence, companies should direct their work in the technique of dynamic price and incorporate more sustainable deliveries in the company logistics part to achieve consumer expectations and better the relations that build the brand to the consumer. This assumption will be particularly important for purchase decisions as the consumer preference for cost effectiveness and green environment will be of prime importance.

Also, the study examines the Speed of Delivery and Quality of Service (Speed of Service) conventions and

defies the existing norm, proposing a redistribution of resources between the Speed of Delivery and Quality of Service measures. And such factors might not have a high influence on repurchase decisions for the businesses, thereby diverting the attention of businesses on more modern or customer centric strategies like personalised pricing or sustainability initiatives. This research presents essential counsel to e-commerce companies who wish to stay in this extremely dynamic market, by providing firm business strategies targeted at consumers' needs and trends in the market.

# 8. Conclusion

In this paper, elements impacting repurchase choices under a dynamic supply chain that incorporates a reference to sustainable logistics, speed of delivery and product quality and service quality are assessed. We find that there are the significant influence factors in repurchase decision, namely Dynamic Pricing and Sustainability in Logistics, implying that the pricing strategy should be differentiated according to the customers' preference and process behaviour in logistics from the view of sustainability. Furthermore, it was not discovered that the factors of Speed of Delivery and Quality of Service have any statistically significant effect on the repurchase decision which may be because the factors of pricing and sustainability are more important than these factors in the unique context of the current study.

In fact, those in business are more in need of a business es that want to be retained through dynamic pricing models and sustainable logistics. The First point on the Final Matrix still important, but its effect may be different, like the impact of potential repurchase behavior or across customers segments or industries on the directly influence of Speed of Delivery and Quality of Service (e.g. speed to market), The contribution to the growing literature on customer behaviour could serve useful actionable insights for businesses interested in optimal improvement of the loyalty and future success of their customers.

### 9. Limitations

This study has certain key limitations because it only focuses on e-commerce and it may not be generalized to other sectors. The research is limited and based on data from a sample that does not contain diversity of consumer behaviours and preferences from different regions and demographics. Furthermore, the study uses cross sectional data that allows depicting of relationships but not the longterm effects or causality. The self-reported data can also bring response biases and participants may perceive different things with regard to the factors having influence on their repurchase decisions. Lastly, the extent of the study is limited to four independent variables and excludes other possibly influential parameters like brand reputation or customer's trust to repurchase intentions.

# **10. Scope of Future Research**

Lastly, it can be expanded through further studies on the effect of Dynamic Pricing, Sustainability in Logistics, Speed of Delivery and Quality of Service, in different industries such as Retail, hospitality, technology, machine learning, etc. This could be explored in terms of the effects of these factors on the long-term decision to repurchase and the long-term effects for the decision to sustain the loyalty to these, as well as other products we may buy in the future. Also, other psychological and emotional aspects such as how much your customers trust the brand or how satisfied they are could also be considered as variables in future studies to study the influence of trust transfer in the repurchase behaviour. The case of examining the approaching of these digital platforms and embedding of artificial intelligence and machine learning in dynamic pricing strategies might offer more information on how technology is involved in the buying decisions. This way, one can study the regional differences in consumer behaviour to design the strategies for the business accordingly to the certain markets and consumer groups.

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