

An Empirical Analysis of Consumer Perception towards Supermarket and Online Shopping

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Abstract

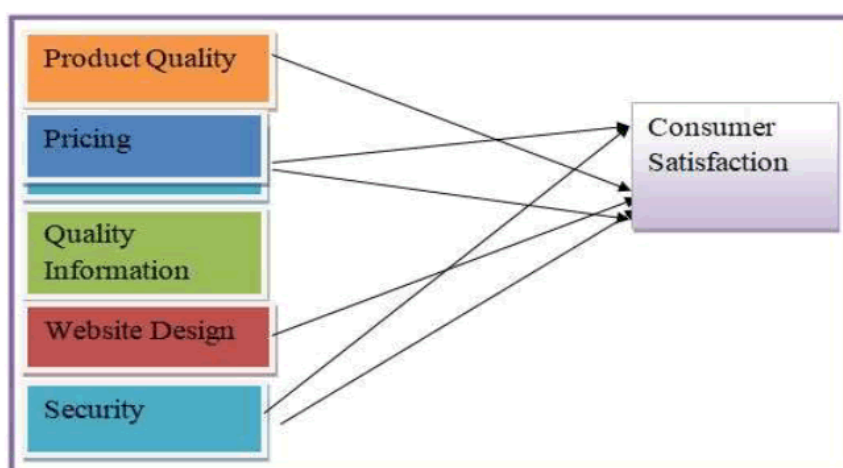
The retail sector has experienced a substantial upheaval due to the emergence of internet shopping, impacting customer perceptions and preferences. This study seeks to evaluate and contrast customer perceptions of supermarkets and online shopping by investigating critical criteria like cost, variety of goods, convenience, trust, technology adoption, and logistics. An empirical methodology was employed to gather data from 100 respondents, classified according to their educational attainment, to evaluate the influence of these parameters on consumer decisions. The results demonstrate that trust, security, product diversity, and availability substantially influence consumer perception, underscoring notable distinctions between supermarkets and online buying experiences. Moreover, challenges such as overcrowded settings and payment delays are significant difficulties in supermarkets, whereas internet purchasing is affected by variables such as cost and delivery efficiency. The research indicates that educational attainment influences customer choices, especially regarding trust and product choice. This research enhances comprehension of contemporary customer evaluation of buying alternatives, aiding merchants in refining their techniques. Supermarkets may augment their in-store experience by optimizing checkout efficiency and customer service, whereas internet merchants must bolster trust and security protocols. Subsequent research may investigate geographical or demographic disparities in customer preferences for a more thorough understanding.

Keywords: Consumer perception, supermarket shopping, online shopping, trust and security, pricing, convenience, product variety, empirical analysis, retail industry.

Introduction

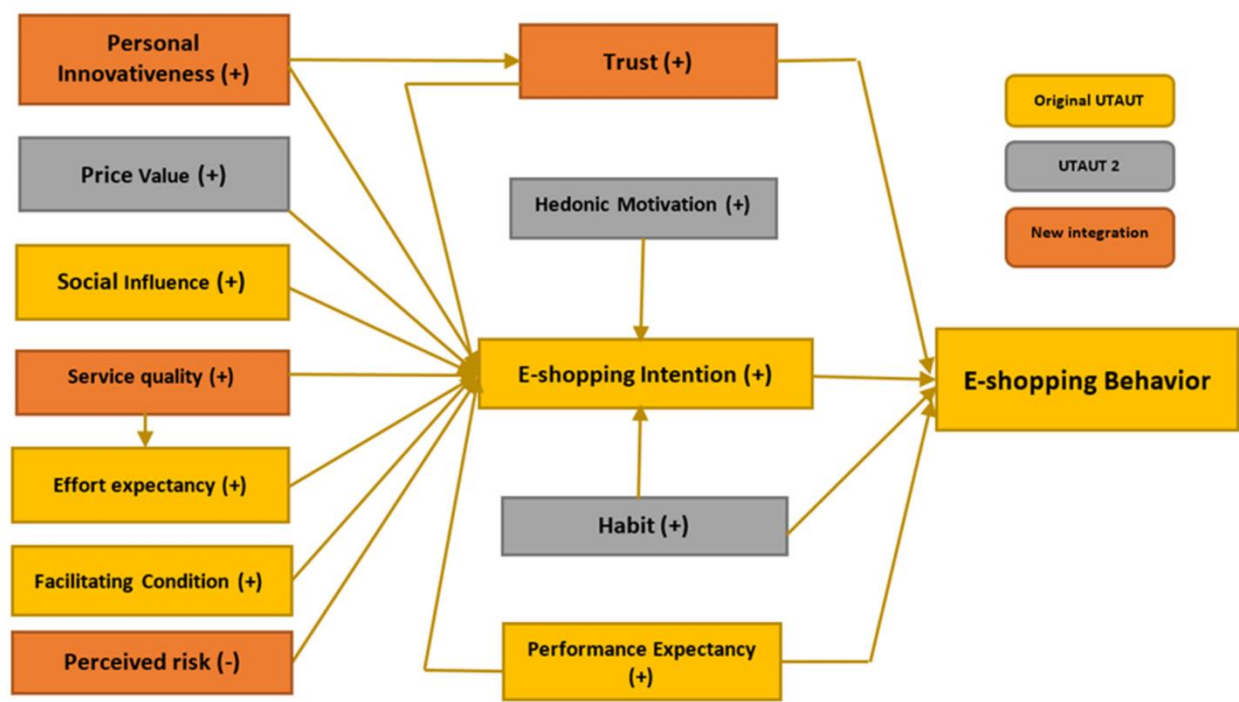
Consumer buying behavior has undergone substantial evolution over the past decade, with supermarkets and online shopping platforms vying for client engagement. The emergence of internet commerce has offered customers alternate shopping methods, altering conventional retail dynamics. Supermarkets, once the preeminent entities in the retail sector, today contend with e-commerce platforms that provide convenience, competitive price, and a vast array of products. The determinants affecting customer preferences between supermarkets and online shopping are intricate and varied, encompassing cost, convenience, trust, technology adoption, and logistics. Comprehending consumer perceptions of both shopping ways is essential for merchants to modify and enhance their strategy. Supermarkets offer physical shopping experiences that allow people to examine things before to purchase, whereas internet shopping provides convenience, home delivery, and frequently reduced rates. Nonetheless, issues such as confidence in online transactions, security, and delivery delays influence customer choices. The study seeks to examine and contrast customer opinions of supermarkets and online shopping, finding significant influencing factors and the impact of demographic characteristics, such as education, on these impressions.

Figure: 1



The retail sector has experienced significant transformations owing to technology innovations and evolving consumer expectations. Historically, supermarkets have been the favored option for food and home shopping owing to their extensive product variety, in-store promotions, and capacity to provide an engaging shopping experience. The advent of e-commerce has transformed customer purchasing behavior, incorporating features such as one-click buying, tailored suggestions, and expedited delivery options. Prior study indicates that consumer choices are influenced by characteristics such as convenience, cost, product diversity, and perceived confidence in the purchasing platform. Despite the increasing popularity of online purchasing, issues such as delayed delivery, fraud concerns, and the absence of actual product connection continue to affect customer confidence. Research indicates that demographics, including age, educational attainment, and technical proficiency, significantly influence consumer buying patterns. Empirical study on this subject is crucial to close the knowledge gap and offer insights into how merchants may improve consumer pleasure. By comprehending these patterns, supermarkets and online merchants may customize their offerings to address changing customer needs.

Figure: 2



Literary Agenda and contributions

Jain et al. (2024) examined the evolution of customer behaviors influenced by technical progress, convenience, price, and trust. It analyzes the benefits and drawbacks of both shopping modalities, highlighting that supermarkets give a tactile experience, immediate product accessibility, and social engagement, whilst internet shopping affords flexibility, a wider range of products, and tailored recommendations. The analysis highlights significant issues encountered by consumers on each platform. Supermarket patrons frequently encounter congested conditions, protracted checkout times, insufficient parking, and erratic product availability. Conversely, internet consumers have issues pertaining to trust, security, delivery delays, and product authenticity. Pricing and discount tactics are essential, since consumers anticipate competitive prices and clear promotional offers in both channels. The research emphasizes that trust and security issues, especially related to payment safety and product quality, profoundly influence online purchasing choices. The introduction of technology has transformed customer expectations, as digital payments, AI-generated suggestions, and effortless navigation improve the shopping experience. Logistical efficiency is a crucial determinant of consumer satisfaction in both physical and online retail environments. The survey reveals that customer preferences are becoming hybrid, with many individuals choosing omni-channel shopping—utilizing both supermarkets and online platforms for various purposes. Retailers must prioritize the optimization of ease, security, and product availability to align with changing consumer expectations and guarantee sustained client retention.

Jain et al. (2023) investigated critical determinants affecting customer decisions, such as convenience, cost, product availability, trust, and technology adoption. The survey underscores the shifting tastes of Indian customers as they transition between conventional grocery shopping and the increasing prevalence of e-commerce platforms. The study indicates that supermarkets retain popularity owing to their tactile shopping experience, rapid product accessibility, and social interaction. Consumers like supermarkets for fresh products, spontaneous purchases, and tactile product assessment. Nonetheless, obstacles such as congested spaces, protracted checkout lines, and parking complications frequently result in discontent. Conversely, internet shopping provides ease, a broader selection of products, and tailored suggestions, although it raises issues related to trust, security, delayed shipments, and product authenticity. Pricing tactics and discounts profoundly affect purchase decisions, since buyers anticipate competitive prices in both retail formats. The research highlights the significance of technology, including AI-driven suggestions, digital payment methods, and

intuitive interfaces, in influencing online shopping experiences. The results indicate an increasing tendency for hybrid buying behavior, wherein customers engage with online and physical channels based on their requirements. The report indicates that merchants must implement an omni-channel strategy, enabling seamless connectivity between supermarkets and e-commerce platforms to improve consumer happiness and retention in the changing Indian retail environment.

Picot-Coupey (2009) ascertain that hypermarkets continue to be the predominant option for grocery shopping owing to their extensive product assortment, competitive price, and the opportunity for consumers to physically evaluate items before to purchase. Consumers like the in-store shopping experience, promotional incentives, and the social dimension of hypermarkets. Nonetheless, obstacles such as congested aisles, protracted checkout lines, and lengthy excursions result in exasperation. Conversely, cyber markets provide convenience, home delivery, and effective time management, appealing to consumers who value effortless shopping. Nevertheless, apprehensions regarding product freshness, the lack of personal selection for goods, and the dependability of delivery engender reluctance among consumers. Concerns related to trust and security, especially around payment methods and data protection, significantly affects customer opinions. The study suggests that each format possesses unique benefits and disadvantages, resulting in the emergence of hybrid buying habits in which customers utilize both hypermarkets and online markets based on their requirements. Retailers must refine their omni-channel strategy, guaranteeing cohesive integration between physical and digital shopping experiences to address changing consumer expectations and improve satisfaction in the grocery retail industry.

Lee and Lin (2005) analyzed essential elements affecting e-service quality, such as website design, dependability, responsiveness, trust, and customization. The study emphasizes that online businesses should prioritize effortless user experiences to foster consumer trust and promote repeat purchases. The research finds website design as a pivotal factor influencing e-service quality, as straightforward navigation, visual appeal, and user-friendly interfaces augment client involvement. The reliability of correct order fulfillment and consistent service performance profoundly impacts trust in online buying. Responsiveness, defined as the capacity of e-commerce platforms to effectively respond customer concerns and resolve difficulties, is crucial in influencing consumer views. The study highlighted that trust is an essential element, with secure payment methods, transparent rules, and reputable corporate practices influencing purchasing decisions. Personalization, including bespoke product recommendations and individualized shopping experiences, significantly augments client pleasure. The results indicate that enhancing e-service quality positively increases customer loyalty and favorable word-of-mouth. Online merchants must prioritize establishing confidence via safe transactions, delivering effective customer service, and utilizing technology to customize shopping experiences. The research indicates that a well-structured, dependable, and adaptive e-commerce platform enhances consumer happiness and promotes sustained engagement, positioning e-service quality as a crucial competitive edge in the digital retail arena.

Research Gap

Despite substantial study on customer behavior in supermarket and online buying environments, notable gaps persist. A significant deficiency is the scarcity of empirical research that systematically compares customer perceptions across both platforms. Numerous previous research concentrate solely on either supermarkets or internet shopping, overlooking how customers assess both alternatives concurrently. Moreover, although research has examined general characteristics like convenience and cost, there is a paucity of studies investigating the influence of education level on customer choices. A significant deficiency is the absence of region-specific research that accounts for cultural, economic, and technical variations in consumer purchasing behavior. Issues regarding trust and security in online buying have been extensively examined; nevertheless, there is a lack of empirical information regarding the variation of these issues among different demographic groups. Furthermore, research has inadequately explored how supermarket operators might utilize digital technologies to improve the in-store shopping experience, therefore establishing a hybrid model that competes effectively with online platforms. Rectifying these deficiencies is crucial for cultivating a thorough comprehension of contemporary consumer behavior.

Importance of the Research

This study is crucial for several stakeholders, including merchants, politicians, and consumers. As customer tastes evolve, comprehending the determinants that influence their purchasing choices may assist firms in enhancing their marketing strategy and operational effectiveness. This research offers supermarkets information into areas necessitating enhancement, including checkout efficiency, product variety, and customer service. The study elucidates trust and security issues that affect customer confidence for online shops. Furthermore, authorities might utilize this data to formulate rules for consumer protection and equitable trading practices. The study assists customers by elucidating critical elements that affect their purchasing experiences, so empowering them to make educated selections. Moreover, the results enhance the scholarly discourse on customer perception, retail management, and internet commerce. The study analyzes the impact of education levels on buying choices, providing a detailed insight into customer behavior, which aids in the development of focused marketing strategies and enhanced service delivery. This research facilitates the integration of traditional and digital retail experiences, promoting a more consumer-focused approach to retail advancement.

Research problem

Notwithstanding the swift expansion of internet shopping, supermarkets continue to be a significant force in consumer retail experiences. Nonetheless, several difficulties remain, impacting customer satisfaction and purchasing behavior. Consumers frequently encounter challenges including prolonged checkout lines, restricted product availability, and parking complications in supermarkets. Simultaneously, internet buying poses difficulties such as postponed delivery, trust issues, and absence of tactile product engagement. The issue pertains to comprehending how these factors affect customer decisions and which elements of shopping experiences are most significant in their decision-making process. Moreover, demographic factors like educational attainment may influence customer views variably, warranting additional investigation. Although many studies have investigated customer behavior in retail, there is a paucity of empirical research systematically comparing views of supermarket versus internet shopping. This study aims to bridge this gap by examining customer apprehensions, preferences, and anticipations in both purchasing contexts. The research seeks to discover the key elements influencing consumer decisions, so offering practical insights for retailers to elevate service quality, bolster consumer trust, and facilitate a smooth shopping experience for all customers.

Objectives

1. To analyze consumer perception towards supermarkets and online shopping.
2. To compare key influencing factors such as pricing, convenience, trust, and product variety.
3. To assess the impact of education level on consumer shopping preferences.
4. To identify challenges faced by consumers in both supermarket and online shopping environments.

Methodology

A structured survey will be distributed to 100 respondents across various demographic groups to collect data on their shopping preferences, challenges, and expectations. The survey will include Likert-scale questions to measure consumer perceptions on factors such as pricing, convenience, trust, and technological adoption. Additionally, semi-structured interviews will be conducted with industry experts and consumers to gain deeper insights into shopping behavior. The data will be analyzed using statistical methods such as the Kruskal-Wallis test to assess differences across education levels. Qualitative responses will be thematically analyzed to identify key trends and patterns. The study aims to provide a balanced, evidence-based analysis of consumer perception towards supermarkets and online shopping.

Analysis and Results

Consumers pursue competitive pricing and appealing discounts while shopping. Exorbitant prices or deceptive advertising may result in discontent. Clear pricing, seasonal promotions, and loyalty initiatives foster repeat transactions. Supermarkets must equilibrate affordability and profitability to retain customers while guaranteeing equitable pricing and authentic promotions to improve shopping happiness. A varied product assortment guarantees that buyers locate their requirements. Inventory shortages, restricted selections, or erratic availability can exasperate consumers. Supermarkets must uphold effective inventory management, assess consumer demand, and provide alternatives. Broadening product offerings, encompassing both local and worldwide brands, accommodates diverse tastes and improves the shopping experience. Consumers prioritize reliability, particularly regarding product quality and payment security. Problems such as outdated products, deceptive promotions, or corrupted payment methods can undermine confidence. Supermarkets must guarantee product authenticity, safeguard digital transactions, and maintain clear regulations. Transparent return and refund procedures enhance customer trust and foster enduring brand loyalty.

Null Hypothesis: There is no significant difference in the mean rank of the Consumer Perception towards Supermarket and Online Shopping.

Table-1:
Educational qualification and Consumer Perception-Kruskal-Wallis test

Factors	Education	N	Mean Rank	Test	Result P value
Pricing and Discounts	UG	18	38.67	Chi-Square	3.157
	PG	54	48.07	df	2
	Others	28	62.79	Sig.	0.121
	Total	100			
Product Variety and Availability	UG	18	58.47	Chi-Square	6.084
	PG	54	46.35	df	2
	Others	28	53.38	Sig.	0.039
	Total	100			
Trust and Security	UG	18	54.36	Chi-Square	8.567
	PG	54	45.50	df	2
	Others	28	57.66	Sig.	0.008
	Total	100			
Technological Adoption	UG	18	54.00	Chi-Square	.532
	PG	54	50.35	df	2
	Others	28	48.54	Sig.	0.510
	Total	100			
Delivery and Logistics	UG	18	45.86	Chi-Square	3.216
	PG	54	48.31	df	2
	Others	28	57.71	Sig.	0.152
	Total	100			
Convenience	UG	18	47.64	Chi-Square	5.238
	PG	54	49.80	df	2
	Others	28	53.70	Sig.	0.059

	Total	100			
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This table presents the results of a Kruskal-Wallis test, used to compare differences in consumer perception factors (such as pricing, trust, and convenience) across different education levels (UG, PG, and Others). Contemporary customers anticipate seamless technological integration within supermarkets. Self-checkout kiosks, smartphone payment methods, and digital coupons augment convenience. Nonetheless, technological malfunctions and cumbersome interfaces may induce dissatisfaction. Supermarkets have to invest in intuitive technology, furnish staff support, and present digital alternatives such as shopping applications to enhance productivity and consumer happiness. Prompt and effective delivery services are essential for online supermarket consumers. Delays, damaged merchandise, or elevated shipping costs adversely affect consumer satisfaction. Supermarkets must enhance logistics, collaborate with dependable carriers, and provide real-time tracking. Adaptable delivery windows, expedited shipping, and effective order management improve consumer happiness and brand allegiance. Consumers emphasize accessibility, expedited transactions, and effective shop layouts. Prolonged lines, congested passages, or absence of proximate retailers diminish convenience. Supermarkets have to prioritize systematic design, electronic payment methods, home delivery, and curbside pickup services. Improving convenience guarantees a seamless shopping experience, therefore attracting and maintaining a greater number of customers.

Key Insights

Pricing and Discounts ($p = 0.121$, not significant)

No significant difference among education levels in how they perceive pricing and discounts.

A statistically significant difference exists, indicating that education level influences consumer perception of product variety and availability.

The "Others" group (Mean Rank: 53.38) perceives this factor more strongly than PG and UG groups.

A highly significant difference among education levels regarding trust and security in shopping.

The "Others" group (Mean Rank: 57.66) shows higher concerns compared to PG and UG.

No significant difference among education levels in how they perceive technological adoption in shopping.

No major difference in perception of delivery and logistics across education groups.

Convenience ($p = 0.059$, borderline significance)

The result is close to significance, suggesting a possible influence of education level on convenience perception, but not strong enough to confirm.

Problems faced by Consumer towards Supermarket

Consumers encounter several obstacles while shopping at supermarkets, affecting their whole experience. Prolonged checkout queues and sluggish payment processing sometimes induce dissatisfaction, particularly during busy periods. Restricted parking and accessibility challenges render retail visits problematic for numerous consumers. Inventory limitations and erratic product availability result in dissatisfaction and futile excursions. Congested aisles and inadequately conceived store layouts can render travel challenging and time-intensive. Moreover, ineffective or inadequately manned customer service counters exacerbate discontent. Elevated costs, deceptive marketing, and insufficient customized support exacerbate consumer discontent. Resolving these concerns is crucial for supermarkets to improve consumer happiness and loyalty.

Table: 2

Descriptive statistics- Problems faced by Consumer towards Supermarket

Relationship factor	Mean	SD
Payment and Checkout Delays	3.60	1.158
Parking and Accessibility Problems	3.23	1.039
Limited Product Availability	2.17	.959
Crowded Environment	3.67	.760
Poor Customer Service	3.21	.697
Store Layout and Navigation Issues	2.97	1.026

1. Consumers face frequent delays at checkout counters, with moderate variability in responses.
2. Parking and accessibility issues are moderately problematic, with slightly varied opinions.
3. Consumers do not perceive this as a major issue, as indicated by the low mean.
4. Crowding is one of the most significant problems, with relatively consistent opinions among respondents.
5. Customer service issues are present but not as severe, with low variability in responses.
6. Layout and navigation problems exist but are not as critical compared to other factors.

Crowded Environment (Mean = 3.67) and Payment & Checkout Delays (Mean = 3.60) are the most significant concerns among consumers.

Limited Product Availability (Mean = 2.17) is the least problematic factor.

Standard deviations for most factors are moderate, indicating some variation in consumer experiences.

Discussion

Payment and Checkout Delays

Prolonged waits and sluggish payment processing can exasperate clients and adversely affect their purchasing experience. Technical malfunctions, inadequate personnel at checkout stations, and ineffective billing systems result in delays. Self-checkout kiosks can be beneficial; nevertheless, technological malfunctions or lack of expertise may impede the procedure. Retailers must enhance point-of-sale technology, educate staff for efficiency, and provide various payment methods, including contactless and digital wallets, to facilitate transactions. Establishing express lanes for minor transactions and enhancing backend technology might decrease wait times. Streamlined checkout processes improve consumer happiness, promote recurring patronage, and mitigate the risk of cart abandonment caused by irritation.

Parking and Accessibility Problems

Scarce parking availability, ambiguous signage, and unsuitable store placements can render shopping burdensome for consumers. In metropolitan environments, elevated parking prices and congested lots deter consumers from patronizing brick-and-mortar establishments. Accessibility concerns, like insufficient ramps, constricted aisles, or absence of sitting places, provide difficulties for those with impairments or elderly patrons. Retailers have to allocate resources towards enhanced parking management, dedicated spaces for those with disabilities, and unambiguous navigational signage. Providing online bookings for parking or curbside pickup alternatives might improve convenience. Enhancing store accessibility promotes diversity and fosters a broader consumer base to shop with ease and regularity.

Limited Product Availability

Customers are most frustrated when they enter a store and discover that their preferred goods are unavailable. Disruptions in the supply chain, inadequate inventory management, and elevated demand might result in restricted product availability. When customers often experience supply deficiencies, they may seek alternatives from competitors or internet retailers. Retailers want to use real-time inventory management systems, enhance supply chain logistics, and employ data analytics to correctly forecast demand. Furthermore, providing pre-orders, back-in-stock alerts, or alternative product recommendations might aid in client retention. Maintaining a stable and varied product assortment enhances consumer loyalty and mitigates discontent resulting from stock shortages.

Crowded Environment

Store overcrowding can induce pain, restrict mobility, and prolong wait times, resulting in a frustrating shopping experience. During peak hours, overcrowded aisles and extended lines exasperate customers and diminish shopping efficiency. Inadequate crowd management can provide safety hazards, especially during emergencies. Retailers have to use crowd control measures, including allocated shopping hours for certain populations, smart product positioning, and digital queue management systems. Promoting online shopping, providing click-and-collect options, or enlarging store layouts might facilitate a more efficient distribution of client traffic. An effectively maintained retail environment guarantees comfort, safety, and a generally favorable in-store experience.

Poor Customer Service

Customer service is crucial in influencing consumers' views and experiences. Unhelpful or unaccommodating personnel, protracted response times, and insufficient product expertise might result in consumers feeling devalued. Subpar service deters repeat patronage and adversely affects brand perception. Retailers must concentrate employee training to guarantee that personnel are informed, polite, and proficient in managing queries and concerns. Implementing customer feedback systems, providing multilingual help, and utilizing AI chat bots for prompt assistance will improve service quality. A customer-centric strategy cultivates loyalty, enhances satisfaction, and distinguishes a firm in a competitive retail environment. Superb service results in enduring customer connections.

Store Layout and Navigation Issues

An inadequately planned store layout can disorient consumers, impede movement, and adversely impact sales. Congested aisles, ambiguous signage, and haphazard product arrangement hinder buyers from locating their desired items. A user-friendly design including spacious aisles, distinct category indicators, and thoughtfully positioned necessities improves the shopping experience. Retailers have to do shop mapping analyses to enhance spatial efficiency, augment product visibility, and mitigate client dissatisfaction. Digital maps, in-store kiosks, and mobile applications including real-time navigation can enhance the shopping experience. An ordered store enhances convenience, promotes browsing, and thus boosts sales and customer happiness.

Recommendations and Proposals

Retailers must prioritize enhancing customer service, optimizing checkout procedures, and using technology for fluid shopping experiences. Online purchasing platforms must augment confidence by implementing stringent return policies and secure payment channels. Future study ought to investigate regional variations in customer preferences and the feasibility of hybrid shopping models that include the optimal attributes of both supermarket and internet shopping.

Conclusion

The study offers an extensive examination of customer perceptions on supermarkets and online shopping, emphasizing the principal elements that affect shopping choices. The results underscore the necessity for both supermarket and online merchants to adjust to changing consumer expectations. Mitigating identified difficulties can improve the whole purchasing experience, hence assuring increased client pleasure and loyalty. Perceptions of product diversity and trust/security differ markedly across educational levels, with heightened worries observed in the "Others" category. The differences in pricing, technological adoption, delivery, and perceptions of convenience are not substantial across various education levels. Subsequent study might investigate why "Others" exhibit heightened perceptions of product diversity and trust/security concerns—potentially attributable to purchasing behaviors or prior experiences. The study's results have considerable ramifications for both conventional and digital shops. Supermarkets may leverage these information to refine the in-store experience by streamlining checkout procedures, optimizing shop layouts, and incorporating digital solutions. Online businesses may mitigate trust and security apprehensions by providing transparent policies, superior customer service, and fortified data protection. The study also educates politicians on changing consumer habits, facilitating the formulation of consumer protection policies.

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