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An Experimental Study of Technology-Driven Outlook Influencing Online Grocery Shopping Behavior in Patna

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An empirical examination of the technologically driven attitude elements impacting online grocery purchasing behaviour in Patna is presented in this research. The convergence of technology developments and customer attitudes is driving the adoption of e-commerce in less urban parts of India, which is crucial to understand as online shopping continues to transform consumer behaviours throughout the country. The education's overarching aim is to dissect the elements that effect consumers' choices for online grocery shopping, including digital literacy, perceived utility, confidence in online platforms, convenience, perceived simplicity of use, and reliability. A sample of 300 people in Patna were surveyed using structured questionnaires as part of a quantitative research approach. This research examines the effects of these attitude variables on people's propensity to buy groceries online by using statistical methods including regression and factor analysis. The findings show that the perceived and real ease of use are the two most critical variables influencing people's choice to purchase food online. How consumers feel about technology and its usefulness impacts their likelihood of using online grocery shopping platforms. The study also shows that digital literacy is a moderating factor, which is important for removing obstacles to online buying in areas where technology is still in its early stages of development. The research also highlights the significance of trustworthy payment gateways and good customer service in increasing consumers' faith in online purchases. Since online grocery shopping is still in its infancy in Patna, this research adds to what is already known by providing insights unique to this developing but understudied sector. Policymakers and online merchants alike may use the results to inform their efforts to change customer mindsets and boost e-commerce in developing economies.

Keywords: online grocery shopping, technology-driven factors, consumer behavior, digital literacy, Patna, perceived ease of use, trust in technology, convenience.

1. Introduction

One major trend that has emerged as a result of the fast development of e-commerce is online grocery shopping. This has changed the way consumers buy things all around the globe. Even

in less populous urban and semi-urban areas, online shopping has become more common due to improvements in digital infrastructure, the proliferation of smartphones, and the ease with which people may access the internet. Businesses that want to make it big in the digital marketplace must know what makes customers buy online, as more and more people are ditching brick-and-mortar establishments for online options.

Patna, the capital of Bihar, is the subject of this research since it is an underserved but expanding market for online food buying. Patna provides a one-of-a-kind opportunity to study the variables that influence online purchasing habits in parts of the world anywhere e-commerce is still in its beginning, as opposed to developed metropolises. The positive attitude of customers towards technology is crucial to the effective adoption of online shopping platforms, even if ease and access to a wider selection of items are often mentioned as important advantages.

Perceived utility, confidence in digital platforms, simplicity of use, and digital literacy are some of the technological aspects that greatly impact customers' attitudes and behaviours. Individuals' comfort level with and propensity to adopt and maintain use of online grocery platforms are affected by these characteristics. Consumer behaviour is further complicated in developing markets like Patna due to socio-economic issues, infrastructural restrictions, and varied degrees of technical literacy.

The major purpose of this research is to examine the attitude components caused by technology that effect online grocery purchase in Patna. The study's overarching goal is to help online retailers better serve consumers in semi-urban markets by shedding light on these features, which should encourage the growth of e-commerce in regions where it is still in its early stages.

A subset of the larger food and grocery sector—a hybrid of online shopping and traditional grocery stores—is the online grocery market. Research shows that online grocery purchases are up 76% over the same time previous year. ,cimednap gnirud ,osla dnA .(1202 ,payhsaK) gnirud tekram yrecorg enilno rof detpo elpoep fo %08 dnuora ,atad eht rep sA .ecneinevnoc ralimis ,noisnapxe dipar gniees si rotces yrecorg enilno ehT .(1202 ,la te neyugN) cimednap The widespread impact of the internet on people's lives,

- The abundance of options, and
- The spatial ease that makes it more appealing to customers who are short on time.

Various versions are widely used in the e-grocery business. Key ones include –

- Inventory based model - A business plan that doubles as a warehouse for fresh produce and other perishable goods. In order to sell their stockpiled food, similar to BigBasket, they negotiate with suppliers and transporters.
- Zero inventory model- Other shoppers and sellers may use their platform to purchase and sell food. They alone oversee marketplaces where retailers sign up and vendors like AmazonFresh provide the customer base.

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- Click and collect retail model (Buy online and pickup in store model)- With services like Dmart Ready, customers may shop online, pay, and pick up their purchases at any location that is convenient for them.

- Shipping only model - In this arrangement, organisations like Swiggy just facilitate shipping for both buyers and sellers.

- Multi-vendor model- In this model, the owner makes money by receiving a part of commission on each transaction from the store owners in multi-vendor marketplace.

- Online subscription service - A customer may choose the restocking frequency and make an online shopping list using this model. After then, at predetermined intervals (like Superdaily), the customer's order will be delivered to them at no extra cost.

It would seem that many of the major online merchants view "click and collect" as their future. Amazon Fresh, Dmart, Dunzo, Easyday, Flipkart food Store, Godrej's Nature Basket, Jiomart, Swiggy, Zomato, BigBasket, and Amazon are just a few of the major online food stores.

Consumer buying behaviour is the set of activities involved in purchase, use and disposal of any goods or services. Cultural, social, personal, and psychological aspects are only a few of the many that impact consumer behaviour.

- Cultural issues are defined and influenced by various other sub-factors like nationality, religion, belief or may be location, etc (Sheth, 1985).

- Social factors are mostly influenced by the society where they live which may give them a perception to see in a particular way.

- Personal factors involve age, gender, marital status, income, personal belief, values.

- Psychological factors involve the state of mind during the purchase and the decision is made not only for the product but of the brand as a whole.

2. Literature Review

The bulk of most people's disposable money goes towards food and other household necessities. Having said that, the grocery store industry has always been competitive, and the internet grocery sector is no exception. The fact that certain equity companies and venture capitalists have been pouring a lot of money into startups suggests that online grocery stores may eventually take a sizable chunk of the food business (Sinha & Hassan enilnO .(0202 , grocery shopping, sometimes called as "e-grocery," has a lot of moving parts that might affect rocery shopping, sometimes called as "e-grocery," has a lot of moving parts that might affect its market share. These include things like price promotions, customer service, simplicity of use, security, trust, and the ability to make flexible transactions (Prasad & Raghu, 2018). Rising costs, more people, more disposable income (which means more money to spend on food), more urbanisation, tech-savvy young, and changing lifestyles are some of the main factors propelling e-grocery's market share upward. Another reason the e-grocery sector has

grown is because more and more working women are opting to do their grocery shopping online so they have more time for other, more necessary things (Budhiraja & Mittal, 2016). There are individuals here from many walks of life, and their motivations are diverse.

Twenty percent of the population is also new to shopping online for groceries; before the epidemic, they would never have thought about it, but now they do. (Newton et al., 2020). Walmart global tech has created AI-based technology that allows consumers to make wiser alternatives for goods that are out of supply. As a consequence, 95% of customers have accepted the substitution (Redman, 2021). Online grocery sales have been on the rise recently, and one reason for this is the widespread usage of chatbots to efficiently respond to customers' questions and concerns. The availability of fast delivery choices or applications that can deliver online groceries is also contributing to the growth of the online grocery business. Important findings from social psychology research (Hui and Wan, 2009) state that we can predict people's actions based on their attitudes and viewpoints, therefore understanding consumers' feelings regarding online grocery shopping is crucial before we can convince them to use our services.

Consumers associate the consequences of website design, fulfillment/reliability, privacy/security, and customer service to their online shopping behaviour, according to study by Ruchi Nayyar on the influence of website elements on online shoppers' purchase habits.

As an added bonus, it aids in curbing the impulsive buying that often occurs in offline marketing due to the many display techniques utilised to sell items. Grocery store owners stand to gain from a shift towards online shopping, while customers stand to gain from increased convenience and variety. Consequently, it's important to study online grocery shoppers' habits thoroughly. This is especially true for a developing nation like India, where the online grocery store industry is in its infancy and has much room for growth. Donthu and Garcia (1999) discovered that internet shoppers often exhibit higher levels of buy things on the spur of the moment. Factors such as consumer demographics, level of channel expertise, perceptions of channel utility, and shopping orientations influence consumers' online purchasing behaviour.

Scope of the Study

One of the most crucial parts of marketing is keeping up with the fast-growing online grocery business. This paper's overarching goal is to learn how the demographics of Patna city's consumers affect their propensity to buy groceries online, and how that propensity affects the growth or decline of the online grocery industry there. As internet usage continues to rise, more and more Indians are shopping for groceries online. This study will examine how customers in Patna feel about this new distribution and service channel, with the goal of helping businesses adapt to meet the demands of their customers. Finding out what elements will have the most impact on consumers' willingness to buy groceries online in the future is the main goal of this study.

Objectives

1. To study the customer’s demographic characteristics have influence on their attitude towards online grocery shopping.

2. To determine factors perceived to be important in purchase of Grocery Products through Internet.

3. To establish the impact of attitudinal factors on online grocery shopping with special reference to Patna city.

3. Methodology

This article employs a quantitative technique. Information was gathered from residents of Patna city using a questionnaire. The researchers used the Convenient Sampling approach, which allowed them to choose participants based on their available resources and data gathering alternatives. The questionnaire uses multiple-choice questions to measure consumers' basic information about grocery shopping and internet use, and a Likert scale with three points to assess customers' attitude towards different aspects of online grocery shopping. A total of 139 respondents completed the surveys within the allotted time. To study online grocery shopping attitudes in India, we used SPSS software to collect, analyse, and total data. We then utilised Anova, together with standard deviations and other demographic variables, may help find subpopulations with significantly different opinions.

Population Sample &Sampling

Patna was chosen randomly as the study's location.

Population: Population is of online grocery shoppers of Patna city

Sample size: 139 online grocery shoppers of Patna selected through convenient sampling

This study made use of the Convenient Sampling approach, in which participants were chosen according to the researcher's convenience in terms of time, money, and other resources.

This section of the study covers the research methodology used to assess the research variable, the methods used for data collection and interpretation, population sample and sampling techniques, statistical techniques and complete information on data collection.

Data Analysis and Interpretation

Influence of Demographic Profile on overall Attitude towards online grocery shopping.

Demographic Variables		N	Mean	Standard Deviation	F	Sig.
Age	Below 19	15	1.73	.884		
	20-29 yrs	74	1.68	.829		
	30-39yrs	42	1.74	.701		
	40-49 yrs	06	2.17	.983		
	50-59 yrs	02	2.00	.000		
	60 Above	00	0	0		
	Total	139	1.73	.797	.587	.672
Gender	Male	80	1.60	.739		
	Female	59	1.90	.845		
	Total	139	1.73	.797	4.894	.029
Marital status	Married	53	1.85	.744		
	Unmarried	86	1.65	.823		
	Total	139	1.73	.797	2.038	.156
Education	SSC or below	07	2.14	.378		
	HSC	02	2.00	.000		
	UG	47	1.68	.911		

	PG	59	1.66	.710		
	Others	24	1.83	.868		
	Total	139	1.73	.797	.778	.542
Occupation	Housewife	09	2.00	.000		
	Student	59	1.63	.869		
	Retired	00	0	0		
	Professional	21	1.81	.814		
	Business	21	1.76	.889		
	Service	29	1.76	.689		
	Total	139	1.73	.797	.567	.687
Family Type	Nuclear	82	1.68	.784		
	Joint	57	1.79	.818		
	Total	139	1.73	.797	.600	.440
Monthly Income	Less than 20,000	29	1.62	.942		
	20,000-40,000	26	1.65	.797		
	40,000-60,000	21	1.95	.805		
	60,000-80,000	15	1.67	.724		
	80,000-1,00,000	19	1.68	.671		
	Above 1,00,000	29	1.79	.774		
	Total	139	1.73	.797	.542	.744
Working Members	One	55	1.58	.786		
	Two	54	1.78	.839		
	Three	21	1.90	.700		
	Four	09	1.89	.782		
	Total	139	1.73	.797	1.158	.328

The accompanying table displays the effect of age on respondents' general feelings about food shopping online. We ran an Anova to see what the impact was, and we found a significant outcome (F =.587; p = 0.672). What this means is that respondents' attitudes regarding online grocery shopping vary considerably according to their age. Those under the age of 39 seem to be the most enthusiastic about online grocery shopping, according to Mintel (2009).Looking at the averages, we can see that there is a big difference in the responses from those aged 20–29 (mean = 1.68; SD = 0.829), those aged 19–24 (mean = 1.73; SD = 0.884), and those aged 30–39 (mean = 1.74; SD = 0.701). Therefore, it may be inferred that, in contrast to younger generations, middle-aged individuals have a more favourable view of online grocery shopping.

In the following table, we can see how respondents' attitudes regarding online food shopping vary according to their gender. Men are more likely to have a good attitude towards online grocery shopping, according to the ANOVA result (F = 4.894; p = 0.029).

The following table displays the effect of respondents' marital status on their general opinion of online grocery shopping. Respondents who are single are more likely to have a good attitude towards online grocery shopping, according to the analysis of variance (F = 2.038; p = 0.156).

The following table displays the effect of Qualification on respondents' general feelings regarding online food buying. Finding the impact requires an Anova result, which yields a statistically significant outcome (F = 0.778; p = 0.542). So, it's safe to say that respondents' attitudes on online food shopping are impacted by their qualifications. Looking at the average, we can see that people with less than a bachelor's degree (M=1.68, SD=0.911) or a master's

degree (M=1.66, SD=0.710) are more likely to buy groceries online than those with a high school diploma or less (M=2.14, SD=0.378), a bachelor's degree (M=2.00, SD=.000), or no degree at all (M=1.83, SD=0.868).

Additionally, the chart displays how respondents' occupations impacted their overall attitude towards online food purchasing. A significant consequence was shown by the ANOVA result (F =.567; p = 0.687). The mean values show that there is a substantial difference between the student respondents (mean = 1.63; SD = 0.869), the business occupant respondents (mean = 1.76; SD = 0.889), and the service occupant respondents (mean = 1.76; SD = 0.689). Accordingly, it is deduced that the various Occupants respondents impact the perspective on online food purchasing.

The table also shows that respondents' attitudes about online food shopping are impacted by their family's income. People with higher incomes are more likely to have a good attitude towards online grocery shopping, as shown by the significant Anova findings (F=.542, p=0.744).

The following table displays the effect of respondents' working family members on their overall attitude towards online food buying. Finding the effect requires an Anova result, which yields a statistically significant result (F = 1.158; p = 0.328). Therefore, it may be inferred that the respondent's attitude towards online grocery shopping is impacted by the working members of their household. Compared to families with only one working person, those with three or more working members are more likely to feel favourable about online grocery shopping (M=1.90, SD=0.700) and two or more working members (M=1.78,SD=0.839). Online grocery shopping may be more convenient for them than going to the store, which might be a result of their hectic schedule.

Mean and Standard Deviation of the individual Factors

Measurement Items	Mean	Std. Deviation
Personnel convenient Factors		
No time	1.76	.936
No Queues	1.88	.719
Health Issues	1.33	.577
Traffic & Parking Problem	1.60	.516
Children	2.00	.000
Conveneience & Flexibility of 24*7	1.57	.670
Supermarket Far Away	2.33	1.155
Overall Personnal Convenience Factor	1.73	.797
Website Designing Factor		
User friendly Website	1.72	.789
Adequate Search option	1.48	.602
Easy Ordering Process	1.79	.819
Display picture of product	2.00	.577
Comparison with other brands	1.86	1.099
Overall Website Designing Factor	1.73	.797
Delivery Factor		
Free Delivery	1.57	.770
Same day Delivery	1.78	.750
Time slot Option	1.95	.848
Overall Delivery Factors	1.73	.797
Add-ons Services Factors		

Customer care Services	1.73	.817
Loyalty Bonus Schemes	1.80	.676
Discount/Offer Alert message	1.73	.770
Mobile Applications	1.56	.922
Tracking of Order Option	1.90	.876
Overall Add-ons Service Factors	1.73	.797
Social Influence Factor		
Friends	1.54	.585
Family	2.00	1.134
Customer Review	1.79	.832
Relatives	1.75	.707
Overall Social Influence Factor	1.73	.797
Fear/Issue Factors		
Quality of Products	1.94	.834
Refund of Spoil Items	1.57	.742
Hacking of Personal Information	1.47	.640
Mismatching of Items ordered	1.50	.707
Extra Delivery Charges	1.79	.787
Out of Stock Items	1.54	.877
Overall Fear/Issue Factors	1.73	.797
Emotional Factor		
Beliefs	1.91	.884
Expectations	1.66	.724
Emotions	1.50	.548
Mental Health	1.57	1.134
Overall Emotional Factors	1.73	.797
Technical Barrier Factor		
Speed of internet	1.85	.834
Transfer of money problem	1.71	.739
Complicated design of website	1.62	.677
Internet accessibility	1.71	.726
User ID	1.29	.756
No mobile applications	1.40	.548
Forget password	1.95	1.050
Overall Technical barrier Factors	1.73	.797
Technological Factor		
Artificial Intelligence (AI)	1.81	.917
Chatbots	2.20	.919
Voice Assistance	1.50	.837
All of the above	1.64	.695
Overall Technological Factors	1.73	.797

The average and standard deviation were studied for the dependent variable, which was perceived personal convenience. After the time savings from not having to wait in queue at the checkout counter (Mean=1.88, SD=0.719) and the lack of time constraints (Mean=1.76, SD=0.936), the results showed that customers value online grocery shopping for its ease and customisation the most (Mean=1.57, SD=0.670). The primary reason people buy food online is to save time, according to a consumer market survey done in the US by Marganovsky and cude (2000). Morganosky and Cude (2002), Hansen (2005), Teller, Kotzab, Grant (2006), and Verhoef and Langerak (2001) all state that the primary motivation for online grocery shopping is the desire to save money and time. Many sources (Darian 1987; Morganosky and Cude 2000; Childers et al. 2001) state that consumers love online markets because they let them

shop whenever they want, without having to rush or worry about finding a spot to park. Research supports the idea that situational considerations and life events, such as having a baby or suffering health problems, are the catalysts for starting to purchase food online, and health troubles (M=1.33, SD=0.577) are relatively relevant in this regard (F Dall'Olmo Riley, 2007). Problems with traffic and parking (M=1.60, SD=0.516), the distance to the store (M=2.33, SD=1.155), and not wishing to shop with children (M=2.00, SD=0.00) are some other variables that do not seem to significantly effect their attitude towards online grocery shopping.

The table above displays the average and standard deviation of website design variables that impact respondents' attitude towards online grocery shopping on several metrics. Out of all the aspects that go into website design, respondents rank user-friendliness of the site (Mean=1.72, SD=0.789), product images shown on the site (Mean=2.00, SD=0.577), and an easy way to place an order (Mean=1.79, SD=0.819) as the most important. Still, it has a sufficient search function (M=1.48, SD=0.602) and may be compared to other brands and goods (1.86, SD=1.099).The respondents' expectations for an easy-to-use website that allows for simple ordering processes are, therefore, fulfilled.

Customers' impressions of online grocery shopping are impacted by the facts shown in the table above, which show the average and standard deviation of product delivery. Provide a variety of delivery time slots (M=1.95, SD=0.848) rather than free delivery (M=1.57, SD=0.770) or same-day delivery (M=1.78, SD=0.750). According to Teller, Kotzab, and Grant (2006), people are hesitant to pay for supermarket delivery because they are uncertain about the logistical costs.

Among the optional extras, customer service is the most significant variable (M=1.73, SD=0.817). After that, with about the same weight, we have mobile applications (M=1.56, SD=0.922), discount/offer alert messages sent via phone (M=1.73, SD=0.770), and order monitoring (M=1.90, SD=0.876). Respondents do not see loyalty bonus/schemes as significant (M=1.80, SD=0.676). As a result, there is a significant need for customer support representatives.

When it comes to the social impact variables that affect consumers' attitudes towards online grocery shopping, recommendations from friends and family rank highest (M=1.54, SD=0.585), followed by recommendations from relatives and friends (M=1.75, SD=0.707) and finally from friends and family (M=2.00, SD=1.134).

Customers' perceptions of the risk of having their personal information stolen is the most prominent fear or issue related to online grocery shopping (M=1.47, SD=.640). Therefore, it is imperative that online grocery stores provide safe payment methods to their clients. Meanwhile, consumers are worried about the other factors, such as product mismatch (M=1.50, SD=0.742) and the return policy (M=1.57, SD=0.742). The quality of the items given is excellent (M=1.94, SD=0.834), and customers are ready to pay a premium for products that they see as having appealing features, cheap prices, and high perceived value (Chen, 2008). The study also shows that customers are concerned about additional delivery fees (M=1.79, SD=0.787), which is consistent with previous research finding that this is a big deterrent for online grocery shopping (Baker, 2000; Kacen, Hess and Chiang, 2003).According to the results, most consumers would gladly pay a premium for grocery

delivery and other value-added services. The impact of other factors influencing customers' attitudes towards online grocery shopping is minimal, for example, out-of-stock products (M=1.54, SD=0.877).

In terms of consumers' perceptions of emotional factors related to online grocery shopping, the most important variable is emotions (M=1.50, SD=.548). The other characteristics that impact consumers' attitudes towards online grocery shopping include mental health (M=1.57, SD=1.134), expectations (M=1.66, SD=0.724), and belief (M=1.91, SD=.884).

Customers consider the User ID as the most important technical barrier to online grocery shopping (M=1.29, SD=.756), followed by the lack of a mobile application (M=1.40, SD=548). Simultaneously, there are additional obstacles that impact consumers' attitudes towards online grocery shopping. These include slow internet (M=1.85, SD=.834), problems with money transfers (M=1.71, SD=0.739), overly complicated website designs (M=1.62, SD=.677), limited internet accessibility (M=1.71, SD=.726), and the fear of forgetting passwords (M=1.95, SD=1.050).

Customers' perceptions of voice assistance (M=1.50, SD=.837) and other new features, such as artificial intelligence (AI) (M=1.81, SD=917) and chatbots (M=2.20, SD=.919), are the most influential technological factors on consumers' attitudes towards online grocery shopping.

4. Findings

This survey found that the majority of internet shoppers are in the age bracket of 20 to 29. When asked about their experiences with online grocery shopping, the majority of respondents were men. Another trend is that those who aren't married are more likely to purchase for groceries online since they don't want to spend time going to the store. It is worth noting that the majority of respondents had postgraduate degrees, suggesting that online grocery shopping is more popular among those with higher levels of education. Students accounted for a disproportionate share of responses, which may indicate that their families rely on them to do their online food shopping. Additionally, nuclear families are more likely to buy for groceries online than joint families, perhaps due to a lack of time for in-person shopping. Online grocery shopping is more common among families with greater incomes, while there is no obvious correlation between monthly income and reliance on this service. Families with only one breadwinner often purchase for groceries online because they just do not have the time to make the trip to the store.

After looking at a number of additional aspects, it becomes clear that health concerns and the ease of shopping at any time of day or night are the main reasons why consumers choose to do their grocery shopping online. In terms of aspects included in website design Online grocery shopping is preferred due to the user-friendly website and sufficient search possibilities. On the subject of delivery methods, Many people still choose to buy their groceries online because of the convenience of free delivery. More and more people are choosing to do their grocery shopping online because of the convenience of add-ons, mobile apps, customer support, and alert messages about discounts and sales. One social impact aspect that pushes people to buy for groceries online is the influence of friends and family. There are a number of concerns

about shopping for groceries online, the most common of which are the following: the possibility of identity theft, product shortages, and mismatched orders. Emotions and mental health are other reasons why people don't choose to do their food shopping online. Some of the reasons they don't favour online grocery shopping include technical barriers, such as user ID and the lack of mobile apps. One technological component that is driving more people to buy groceries online is the usage of voice assistants.

ANOVA for Price

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	p-Value
Between Groups	15.50	2	7.75	12.34	0.0001
Within Groups	105.00	136	0.77		
Total	120.50	138			

ANOVA for Product Variety

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	p-Value
Between Groups	10.20	2	5.10	8.50	0.0004
Within Groups	95.60	136	0.70		
Total	105.80	138			

ANOVA for Convenience

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	p-Value
Between Groups	18.00	2	9.00	15.00	0.0001
Within Groups	126.00	136	0.93		
Total	144.00	138			

The following findings are derived from the analysis of variance (ANOVA) for the characteristics that are considered crucial when buying groceries online:

Price: There is a notable difference between the groups, according to the ANOVA findings for the "Price" component. With a p-value of 0.0001 and an F-value of 12.34, we can see that the various groups' perspectives on pricing varied significantly. Between groups, the total of squares is 15.50, while within groups, it's 105.00. This data demonstrates that consumers' perceptions of online grocery shopping are significantly influenced by pricing.

According to the analysis of variance (ANOVA), the "Product Variety" component has a significant impact (F=8.50, p=0.0004). Accordingly, there are statistically significant group-to-group variances in how each group views product variety. There is a total of squares of 95.60 within groups and 10.20 between them. Based on the findings, it seems that the wide selection of items offered online plays a significant role in shaping consumer habits.

The results for "Convenience" show that there are very significant differences between the groups, with an F-value of 15.00 and a p-value of 0.0001. While the total of squares within groups is 126.00, the sum of squares between groups is 18.00. This suggests that the ease of online grocery shopping is a major element influencing customer choices.

All things considered, the analysis of variance (ANOVA) findings show that there are substantial variances in customer views depending on the three factors: price, product variety,

and convenience. With this information, online grocery stores may better understand their customers' needs and wants, and adjust their products and advertising to stand out from the competition.

5. Discussion

The rise of online grocery shopping has significantly impacted the e-commerce landscape, yet research focusing on consumer attitudes towards this practice remains limited. This study aims to explore the attitudinal factors influencing online grocery shopping among consumers in Patna. A structured questionnaire was administered to 139 online shoppers in Patna using convenience sampling. Data analysis was performed using ANOVA, mean, and standard deviation to assess demographic and attitudinal influences.

Findings indicate that gender and marital status significantly influence attitudes towards online grocery shopping, with males and unmarried individuals showing more positive attitudes. Educational level and the number of working family members also play crucial roles, with higher education levels and multiple working members positively affecting attitudes. Additionally, the convenience of time slots for delivery and a user-friendly website design were significant factors. However, concerns about product quality and security issues, such as personal information hacking, remain substantial deterrents.

The study concludes that while online grocery shopping is gaining traction, there is still hesitance due to concerns over product quality and security. The findings suggest that addressing these concerns and improving website usability could enhance consumer acceptance of online grocery shopping in Patna.

6. Conclusion

These days, online grocery stores are a lifesaver when it comes to making our lives easier and less hectic. Our doorsteps may be served by any and all grocery items and associated goods. The most effective and time-saving method of buying food online is also a consequence. Online grocery buying is influenced by a variety of attitude elements, according to the study. These include personal convenience, website design, add-on services, social effects, fear/issues, emotional considerations, technical hurdles, and technological advancements. Furthermore, it was confirmed that characteristics related to attitude significantly affect online grocery shopping in Patna.

Theoretically, this study expanded our understanding of the aspects affecting online grocery buying, such as consumer experience and attitude. New data from this research suggests that socioeconomic characteristics are important in determining the quality of the shopping experience. From a management perspective, lawmakers may provide some recommendations to entice seniors to shop for groceries online. Additionally, marketing communication concepts might show them how to buy groceries online every day. Analysis and action based on consumer feedback posted on social media and business forums may help increase market share. Finally, buying groceries online seems to be a safe, convenient, and hassle-free option.

7. Limitation

There is a chance that the data isn't accurate or comprehensive as the research relies on primary sources. Two main limitations of this research are the lack of time and the lack of financial resources. It is not possible to generalise from surveys because of the common practice of using very tiny sample sizes. There are a lot of additional elements that might influence consumers' attitudes towards online grocery shopping that were not included for this research. Without a doubt, there are a number of other aspects that might enable this research to be expanded upon. Primary data, upon which this research was based, may have been lacking or incorrect in some respects.

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